

DECLARATION

**INVESTIGATING ATTITUDES TOWARDS OPAQUE BEER AND
THE FACTORS WHICH WOULD ENHANCE ITS SALES
PERFORMANCE: A CASE STUDY OF MATHIRA DIVISION**

BY

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENTS OF THE DEGREE OF
MASTER IN BUSINESS ADMINISTRATION OF KENYATTA
UNIVERSITY.**

Munene, J. Waweru
*Investigating
attitudes towards*



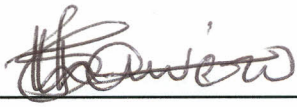
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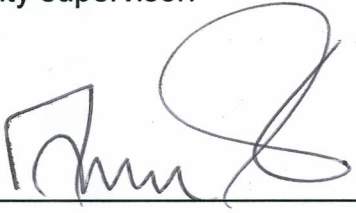
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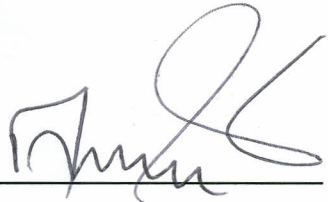
This research project has been submitted for examination with my approval as the university supervisor.



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Date: 2/8/2000

DEDICATION

To my parents Edwin Munene and Margaret Muthoni, to my wife Lucy and my daughter Lareen and to all my brothers and sisters who have been a source of great inspiration.

I would like to thank my colleagues, friends and family members who have supported me throughout my journey. Special thanks go to my wife Lucy and daughter Lareen for their unwavering support and encouragement.

My sincere thanks also go to the respondents who took time out of their busy schedules to complete the questionnaire.

I would like to extend my special thanks to my wife Lucy and daughter Lareen for their love, patience and understanding when I was busy with my work and family commitments. Special appreciation goes to my parents, Edwin Munene and Margaret Muthoni for their support and encouragement in my pursuit of education.

Finally, I thank all people who assisted me in any way but have not been mentioned above.

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My sincere thanks also go to the respondents who took time and patiently completed the questionnaire.

I would like to extend my special thanks to my wife Lucy and our daughter Lareen for showing great patience and understanding when my time for them was taken up by the MBA programme. Special appreciation go to my parents Edwin Munene and Margaret Munene for their support and encouragement in my pursuit of education.

Finally, I thank all people who assisted me in any way but have not been mentioned above.

ABSTRACT

The purpose of this research study was to investigate the attitudes of the general public towards opaque beer and which areas should be addressed to ensure safety and increased sales for the beer. The area of study was Mathira Division of Nyeri District. A hundred respondents participated in the study.

In carrying out the study, primary data was collected through personally administered questionnaires. They had both structured and unstructured questions. Data was analysed using descriptive statistics like percentages, frequencies, cross tabulations and tables. The Likert scale, the logit model and the statistical package for social scientists (SPSS) was utilized.

The study observed that, the general public had a negative attitude towards opaque beer. This is mainly due to the effects it has had on society like some consumers losing their lives after continued consumption of these brews. However there was a general feeling among the respondents both consumers and non-consumers that opaque beer should not be banned. This is because, it has offered a cheap alternative to clear beers for the ordinary 'mwananchi' who has been hit by the hard economic times.

It is in view of the above that the consumers suggested several measures which should be initiated by the brewers to make the beers more safe and acceptable to its consumers. This is in the face of the rising consumers awareness towards getting quality products.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

In the last decade or so, Kenyans have had to contend with hard economic conditions leading to increased levels of poverty and unemployment. For example, Agriculture which is the backbone of the Kenyan economy supporting the majority of the population has over the years been performing below its potential mainly because of low productivity due to unfavorable weather conditions, instability in major agricultural marketing organizations etc. Due to this, over the last two years preceding the 1999/2000 fiscal year, the sector registered a growth of 1% per annum. Overall, the economy has been experiencing a further slow down in growth. (Budget speech 1999/2000).

This had the implication that, the purchasing power of majority of the people was eroded.

Considering the period 1995 – 1999 fiscal years, it is evident that while the population continued to grow, the real GDP growth (%) continued to fall while per capita income (US\$) rose slightly and then fell. Table 1 below shows the population, population growth, real GDP growth (%) and per capita income (US\$) for each respective year.

	1995	1996	1997	1998	1999
People in millions	27.5	28.2	28.9	29.6	30.3
Growth	2.7	2.6	2.5	2.4	2.4
Real GDP Growth (%)	4.8	4.6	2.3	1.8	1.4
Per capita income (US\$)	279	284	283	279	278

(SOURCE: MONTHLY ECONOMIC REVIEW; JAN 2000)

In its efforts of economic recovery, the government adopted the Structural Adjustment Programs (SAP's) "Prescribed" by the International Monetary Fund. One of the recommendations was to initiate the process of Economic Liberalization. With it, the amount of government intervention in the economy was greatly minimized. This increased the level of competition in all sectors of the economy due to the entry of new players in the field. One of the affected area was the beer industry.

For a long time, Kenyans have had to contend with a narrow choice of alcoholic beverages. Apart from the local and foreign malted beers, wines and spirits, the only other choice lay on traditional liquors which were illicit. Therefore, locally, Kenya Breweries dealing with malted beers, for a long period of time, remained the major player in the beer industry.

Malted beer attracts a high excise duty in Kenya, thus making the beer expensive and unaffordable to most Kenyans. For example, it was only during the budget speech for the fiscal year 1999/2000 that its excise duty was dropped from 95% to 90%. However this had minimal effects on its affordability since the drop in

prices was very small.

It is against this background, that new breweries emerged. Their beer was targeted at the low income earners. In order to avoid high taxation, they came up with opaque beer which attracted lower-tax and hence was cheap. It also had high alcohol content, and was therefore an instant "hit" among the target group.

Considering the rate of entry, into this opaque beer industry, there is no doubt the business is lucrative. Industry analysts estimate the opaque beer market to be four times the size of the clear beer market. (Sokoni vol.6 1997). It is because of this, that, various brands of opaque beer from various breweries have hit the market after realizing that, it is wide enough.

However, some breweries in their endeavour to get a wider market share compromise on standards. This has resulted in some people losing their lives after consuming these brews. There is therefore a need for this industry to be closely monitored, so that standards can be maintained and consumers get quality products.

1.2 Definition and History of beer

Beer is a generic name for alcoholic beverages made by fermentation of extracts derived from cereal grains or other starchy materials.

Both beer and wine are fermented and undistilled. However wine is made from basic materials rich in natural sugar, while beer is made from materials high in starch content. Starches must be converted to sugar before fermentation can

occur. (Encyclopaedia Britannica, Micropaedia vol. 1)

Most of the beverages made from cereals over the past 8,000 years, especially those produced from malted barley would now be considered 'beers'. According to Egyptian legend, 'Osiris', the god of agriculture, taught humans to prepare beer. Apart from Egypt, other brewing operations took place in Babylon and Ur.

Originally barley was buried in pots to effect germination; the resulting malt, mixed with water, was allowed to ferment by the action of air borne yeast. Hops addition into beers dates back between the 10th and 7th centuries B.C.

There are also ancient references to millet beers 'in China and Japan and the similar South African Kaffir beer is a traditional beverage of the Congo.

Brewing probably reached western culture from Egypt via Greece. It readily took hold in areas of Northern and Western Europe where grape culture for wine making, was impractical. Hence beer was known in Mediterranean countries before viticulture became popular.(ibid)

In the Christian era, there are frequent references to malt beverages consumed by Germanic and Nordic tribes as well as by the saxons and celts. There was also the establishment of taverns.

Medieval monasteries improved the brewing techniques. In Great Britain "Home" brewing became important from about the 12th century A.D. This was closely followed with the growth of towns, by simple commercial operations with brewing

and selling taking place in the same establishment. Later breweries ceased to be the point of sale and were usually centrally located to facilitate distribution in the town or city.

Growth was slow, until the industrial revolution made the large commercial brewery possible. The modern practice of national and international beer distribution is mainly a 20th century development.

Although beer usually implies a beverage of western civilization, other cultures employ procedures similar to brewing – often without systematized technology e.g. sake, the Japanese rice beverage is produced by brewing methods, although the resulting beverage is sometimes considered closer to wine. Among African beers related to the western ones are Khadi (Botswana) brewed from honey and wild berries and Kaffir beer (South Africa) made from sorghum. (ibid)

1.2.1 Distinguishing characteristics of opaque beer from ordinary beer

There are various factors that distinguish opaque beers from the ordinary beers (Lagers and Stouts) consumed in Kenya.

- (a) The ordinary beers are made from malted barley, flavoured with hops while opaque beers are made from raw materials other than barley, e.g. millet.
- (b) While ordinary beers have an average alcohol content of 4 per cent, opaque beers have an average alcoholic content of 12 percent.
- (c) While ordinary beer is packaged in corked glass bottles, opaque beers are packed in plastic containers.
- (d) Ordinary beers cost more since they attract higher excise duty, while opaque

beers are cheap as they are categorized as traditional brews hence less excise duty.

- (e) Ordinary beers are brewed using systematized and advanced brewing techniques while opaque beer brewers employ procedures similar to brewing-often without systematized technology.

1.2.2 Types of opaque beers sold

The following are the types of opaque beers sold in Mathira. We have medusa, Uhuru, Vienna, Cheers, Vatican, Ngwareini, Chairman, Mezea, Honey wine, Kibuga and Kairasi (a general name for a variety of unbranded opaque beers sold in 20-litre jerry cans).

1.3 Scope of the study

This study covered Mathira division. It is one of the divisions of Nyeri District covering an area of 389 sq KM. (District statistical office, Nyeri, 1996).

It has seven (7) locations and forty-one (41) sub-locations. (District Commissioners Office, Nyeri, 1996).

The study targeted both males and females who are over eighteen (18) years of age to conform to the Kenyan legal requirement.

The population targeted will consist those who take the opaque beers, those who don't take them but take other beers and those who don't take any beer at all.

1.4 Statement of the problem

From the preceding discussion, it is evident that opaque beer was introduced to

cater for the low income earners who could not afford the ordinary clear beers (lagers and stouts), which were expensive. However a close scrutiny shows that all have minimum alcohol content of 12 per cent (Daily Nation, May 27, 1998) as compared with four percent in ordinary beer (lager).

The opaque beer is also packaged in suspect hygiene standards. The plastic containers and 20 litre jerricans do not meet health safety standards. Other brands are sold in glasses at between Sh. 10 to Sh. 15 and are drawn directly from the 20-litre jar. This poses a great danger to consumers and is a health risk.

The beer also, has had both economic and social effects. Most people stream into bars as early as 8.00 a.m., and after taking two glasses at a cost of less than Sh. 20, they are too drunk to do any work. Men have also been known, as draining all their earnings on the brews. This has left women shouldering all domestic responsibilities. Consequently children drop from school or go into child labour etc.

1.5 Objectives of the study

The broad objective of the study was to investigate the attitudes of the general public towards opaque beer and which areas should be addressed to ensure safety and increased sales for the beer. Specifically the study intends to:

- Establish the status of opaque beer consumption in the study area.
- Determine the factors which would enhance the sales performance of the beer.
- Document possible policy guidelines from the study as pertains to the quality

packaging and pricing of the beer.

1.6 Research Questions

It is from the above discussion that the study will try to pursue the following research questions.

- What is the population distribution of those who consume opaque beer in terms of Age, Sex, income and education background?
- What has been the economic and social effects of opaque beer?
- Which factors influence opaque beer preference?
- From the public view, what should be done to the beer in terms of quality, packaging, price etc, so that its sales performance can improve?

1.7 Theoretical Framework

Attitudes are mental states used by individuals to structure the way they perceive their environment and guide the way they respond to it. It is generally accepted that there are three related components that form an attitude; a cognitive or knowledge component, a liking or affective component, and an intentions or actions component. (David et al 1990). Each component provides a different insight into a person's attitude.

Attitudes are not directly observable and hence their strength and direction can only be inferred. Therefore if we are to compare individuals as groups and also to determine behavioural changes of individuals when they have experienced

attitude change, some attempt at quantifying attitudes is necessary (Williams 1994).

The attitudes towards complex objects e.g. automobiles, transportation modes etc. have many facets. It is thus often unrealistic to attempt to capture the full picture with one overall attitude question. While beliefs in any specific issue, aspect or characteristic are useful indicators of the overall attitude there may be unusual reasons that make the single belief unrepresentative of the general position (Moser et al 1974).

To cope with this problem a variety of methods have been developed to measure a sample of beliefs toward the attitude object (such as agreement or disagreement with a number of statements about the attitude object) and combine the set of answers into some form of average score. Of the most frequently employed of these methods is Likert scales.

In a Likert scale, a respondent is required to indicate a degree of agreement or disagreement with a variety of statements related to the attitude object. It is called a summated scale, for the scores on the individual items are summed to produce a total score for the respondent.

NB: It is assumed here, that each of the items (statements) measures some aspects of a single common factor; otherwise the items cannot legitimately be summed.

In developing a Likert scale, the first step is to generate a number of statements relevant to the attitude. They should be either clearly favourable or unfavourable.

Once the items are written their responses are scored by assigning values from 1 (strongly unfavourable response) to 5 (for strongly favourable responses) to each item.

A strongly favourable attitude would be either a "strongly disagree" response to a negative statement or a "strongly agree" response to a positive statement. For example

Agree	Agree	Neither	Disagree	Disagree
Strongly	Somewhat	agree or	Somewhat	Strongly
		disagree		

1. The alcohol content of opaque beers need to be reduced.

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The results when obtained are utilized first by examining the distribution of total scores, e.g. A maximum summated score for a 15-item Likert scale is $(15 \times 5) = 75$. Then the average score for all respondents would be a more appropriate standard than the maximum score.

1.7.1 The Choice Model

Assuming that individuals (the economic units that have to make a choice) are faced with a choice between two alternatives, and that the choice they make depends on the characteristics of the individuals. Then it is important to estimate

a model on the basis of information about the attributes of each of the individuals and the choices they make which could then enable one to make predictions about choices of individuals not in the original sample.

For the purposes of this study, the choice would be either to take opaque beer or the regular beer (Lagers, Stouts etc). The principal determinants (variables) here could be:

1. Income
2. Age
3. Occupation
4. Education background
5. Sex
6. Marital status

This can be represented as follows: -

Lets consider the Linear probability model (LPM)

$$y_i = \alpha_0 + \alpha_1 X_i + \epsilon_i \dots\dots\dots(1)$$

Where $X_i =$ X1 – Individuals income

X2 – Age

X3 – Occupation

X4 – Education Background

X5 – Sex

X6 – Marital status

$$y_i = \begin{cases} 1 & \text{if individual will buy opaque beer (1}^{\text{st}} \text{ option chosen)} \\ 0 & \text{if individual will not buy opaque beer (2}^{\text{nd}} \text{ option chosen)} \end{cases}$$

$\epsilon_i =$ Independently distributed random variable with the following characteristics

Handwritten notes:
 $y_i = \alpha_0 + \alpha_1 X_i + 20$
 $y_i = \alpha_0 + 4 + 20$
 $y_i = \alpha_0 + 20$

$$E(\epsilon_i) = 0$$

$$E(\epsilon_i \epsilon_j) = 0 \quad i \neq j$$

The conditional expectation of each dependant variable y_i given x_i is given by

$$E(y_i/x_i) = \alpha_0 + \alpha_1 x_i \dots\dots\dots(2)$$

Since the probability P_i must be between "0" and "1" we have

$$0 \leq E(y_i/x_i) = \alpha_0 + \alpha_1 x_i = P_i \leq 1 \dots\dots\dots(3)$$

The equation above (3) can be interpreted as describing the probability that an individual will buy opaque beer, given his income. The slope of the equation measures the effect of a unit change in the individuals income on the probability of his buying opaque beer.

Since LPM interprets the predicted values of Y as probabilities, its range is confined to the interval (0,1) i.e

$$0 \leq E(Y/X) \leq 1$$

Although this is true a priori, there is no guarantee that the estimated Y (i.e. Y_i) will necessary fulfil this restriction. To correct this situation a logit model can be used. This is based on the cumulative logistic probability function.

The logit model is defined by

$$P_i = \frac{1}{1 + e^z} \dots\dots\dots(4)$$

Where,

P_i = Probability of individual "i" buying opaque beer.

$$Z_i = \alpha_0 + \alpha_1 x_i$$

The Probability $(1 - P_1)$ of the individual "I" not buying opaque beer is given by

$$(1 - P_1) = \frac{1}{1 + e^{-z}} \dots\dots\dots(5)$$

Dividing 4 by 5 we get

$$\frac{P_1}{1 - P_1} = \frac{1 + e^z}{1 + e^{-z}} = \frac{1 + e^z}{(e^z + 1) e^{-z}} \dots\dots\dots 6$$

The term $P_1/(1 - P_1)$ is the odds ratio in favour of buying opaque beer.

Taking natural logarithms of (6) we have

$$L_1 = \ln \frac{P_1}{1 - P_1} = Z_1 = \alpha_0 + \alpha_1 X_1$$

L_1 , the logit, is the logarithm of the odds ratio, and is linear in X_i . The logit (L_i) is the dependent variable and is the logarithm of the odds ratio that a particular choice will be made.

Data collected from individual units cannot be used as such e.g. If $P_1 = 1$ when an individual buys opaque beer and $P_1 = 0$ when an individual does not buy opaque, the corresponding logits are then meaningless.

To overcome this difficulty, grouped data can be used to compute relative frequencies which are in turn used to approximate the probability "1" of individual buying opaque beer.

The procedure can be illustrated

X_i income	N_i no. of individuals with income X_i	n_i no. of individuals buying opaque beer	$P = \frac{n_i}{N_i}$ Relative frequency probability of buying opaque beer	$\frac{P}{1-p}$	$L_i = \ln \frac{P}{1-p}$
5	30	6	0.20	0.25	-1.38629

1.7.2 Operational definition of variables

- Income - Money which the respondent receives regularly usually as payment for ones work or interest from investments.
- Age - The period of time the respondent has lived.
- Occupation - A job or employment of the respondent.
- Education
- Background - The education qualification of the respondent.
- Sex - The condition of being either male or female.
- Marital status - The state of being either married or single.
- Price - Money for which a thing can be bought or sold.
- Package - Containers used for packing things in to ease transportation and prevent contamination.
- Alcohol content - The percentage level of alcohol contained in a beer, wine, whisky etc which causes these drinks to have an effect on people's minds and bodies.

1.8 Significance of the study

Opaque beer industry has a role to play in the economic and social well being of

this country e.g. by providing employment and taxes to the government.

The reports which have been written about the beers (Daily Nation 25/3/98, 27/5/98, 9/6/98, 16/1/99. 22/9/99 etc) have not been comprehensive enough.

This study is therefore important in that, it aims at providing an in-depth understanding of these beers and how people view them.

This study will also be important to the marketers of these beers in that, first hand information about the preferences of the people will be documented. This will go a long way in ensuring that consumers get a drink, which does not pose any danger to them.

Further, it will serve as a significant boost to the already existing body of knowledge and provide a basis for further research.

1.9 Limitations of the Study

The following limitations were envisaged in the course of the study:

- Hostility from some of the respondents
- Time limitations
- Economic limitations
- Lack of empirical studies of a similar nature so as to enable comparison of results.

CHAPTER TWO

2.0 LITERATURE REVIEW,

2.1 RULES PERTAINING TO THE USE OF BEER

There are no universal rules pertaining to the use of alcohol. Tribal groups throughout the world (except in Oceania and most of North American) knew alcohol (Encyclopaedia Britannica vol 5). In each case this led to the adoption of rules concerning its use.

Although a high intake of alcohol always has physiological effects, peoples' comportment is determined more by what their society tells them is the way to behave when consuming alcohol than by its toxic effects. In many societies, drinking is an established part of the total round of social activities.

Among the Kofyar of Northern Nigeria, " Making, drinking, talking and thinking about beer" is all part of life (Ibid). All social relations among them are accompanied by its consumption. Fines are levied in beer payments. Ostracism takes the form of exclusion from beer drinking. They believe that a man's way to god is with beer in hand. Their beer is however weak in alcoholic content and highly nutritious.

Among central and South American peasants, men are allowed or required to drink themselves into a state of stupefaction during religious celebrations (Fiestas). Though this drinking is frequent and heavy, it does not appear to result in addition. (Ibid).

There are other cultures, however, which prescribe moderation in drinking. In ancient Mesopotamia, beer played an important role in temple services and in the economy . However the code of Hammurabi--the monument of law named after the King of Babylon – strictly regulated tavern keepers and servants. (these places were supposed to be avoided by the social elite). Similar patterns obtained in ancient Egypt. (Ibid).

The use of wine was also quite general in Biblical times; It belonged to the list of indispensable provisions listed in the old Testament in the book of Judges (chapter 13) and the first book of Samuel (chapter 16:20 and 26 : 18). Wine is no less important in the New Testament times. In revelation to John (chapter 6), it is said that only wine and oil are to be protected from the apocalyptic famine, Wine is also used frequently in Biblical imagery in both Testaments, however wine is both praised and condemned.

Representatives of the other extreme are the Hopi and other Indian tribes of the U.S South-west. They have banned all alcoholic beverages. (and almost all narcotics) asserting that these substances threaten their way of life. (Encyclopaedia Britannica Vol. 5).

2.2 THE EVOLUTION OF PRESENT DAY OPAQUE BEERS IN KENYA

Beer drinking is a culture that cannot be divorced from our past and it has an important place in our society. It had such an important place in traditional society, that even with the exit of the white man, the independent Kenyan

government allowed people to enjoy their drink whenever they had a reason to brew it. This is especially when undertaking traditional rituals and all what was required was to seek a permit from the local chief.

When elders were arbitrating cases or even when they were imparting their wisdom to the young ones, they always did this when sipping beer from a gourd. Other events which were never complete without beer taking included marriage, dowry payment or even celebrating a good harvest.

Beer consumption was sanctioned and restricted to certain age groups. It was mainly taken by elders, for example beer made from honey and sugar cane was restricted to male elders while females took brews made from sorghum.

However with the onset of colonialism and later the emergence of urban communities, controls that the societal norm had put in place snapped. This made the brews more accessible to more people and was now consumed for other reasons not necessarily cultural ceremonies. Also in place of societal controls, law had taken over stipulating that anyone over 18 years can consume the brews.

It is due to the above reasons that, some people in their endeavour to make some money from the brews, decided to be hosting more rituals every week. This led to the brews becoming commercial. The problem was compounded further by chiefs, who looked the other way if their hand was greased and production of these traditional brews went full throttle. In this case Muratina became deeply entrenched in central Kenya while Busaa took root in Western Kenya. Chan'gaa was also distilled in different parts of the country, using different formulae.

Then came the ban on these brews. With their ban production and consumption went underground. Dirt was injected in the process. It was consumed in great secrecy and its producers gave little regard to the required hygienic standards. This had a devastating effects on consumers with some of them losing their lives. For example an illicit brew left a trail of deaths in Murang'a district in 1996 while many more were left blind. (Daily Nation 27/5/98).

Later there was the re-introduction of traditional brews as industrial products. While one would think that the industries would purify them, this did not happen. These brews came in different brand names eg. Medusa, sorghum sake, Kulta, Simba wine, Tornado etc and were mainly targeted to a certain strata of society, mainly low income earners. However the brewers did not conform to the required hygienic standards with the brews being packaged in 'suspect hygiene standards thus posing a great danger to customers,. There were cases where brewers were also accused of adding dry batteries into drinks (E.A standard June 9 1996) while other drinks were said to have methanol, cresols, (The people Daily sep 26 1999) which were harmful to human health.

It is due to this, that the government in its earnest to protect consumers declared them illegal. To be allowed to sell their products, the brewers had to comply with the standards set in the foods, drug and chemical substances Act. The ingredients used in Manufacturing the brews also had to be within the stipulated standards. Also these alcoholic beverages had to be re-tested by the Government Chemist to ensure their fitness for human consumption and be

certified. The factories also had to be visited by Public health officials from time to time to ensure they are clean. Only with the brewers, conforming with the above conditions, could the safety of the alcoholic drinks be ensured.

2.3 ATTITUDES AS A CONCEPT

The attitudes held by individuals have a direct influence on their purchasing decisions, and these decisions in turn may reinforce a particular attitude or lead to its modification. Therefore the concept of attitude has been of critical importance in attempts to explain man's social behaviour.

Attitude as a concept has no one absolute and correct meaning or definition. Various writers have come up with various definitions in their attempt to explain this concept.

Allport (1954) defines attitude as "a mental and neural state of readiness, organised through experience, exerting a directive or dynamic influence, upon the individual's response to all objects and situations with which it is related". Krech and Crutchfield (1948) on the other hand define attitude as "an enduring organisation of motivational, emotional, perceptual and cognitive processes with respect to some aspect of the individual's world".

Berkowitz E et al (1992) defines an attitude as a "learned predisposition to respond to an object or class of objects in a consistently favourable or unfavourable way"

These definitions and others state or imply the following main characteristics of attitudes.

- Attitudes are related to some person or object that forms part of the individual's environment.
- They form part of the way the individual perceives and reacts to his environment. They affect the way in which we extract information from the environment and as a result affect our perception of the goals for which we strive; in this sense they are motivational,
- They are learned and are relatively enduring. They may change but usually not very rapidly.
- They imply evaluation and feeling.

Attitudes have been viewed as having three components. Williams (1994) identifies these components as:

(i) The cognitive or knowledge component.

This refers to the belief or disbelief one has about objects or persons, and vary from one person to another. Such beliefs are about the desirable or undesirable, acceptable and unacceptable, good or bad qualities of the object.

(ii) The affective or emotional component.

This embodies positive or negative feelings. Elements of such feelings are called bi-polar adjectives and include love-hate, like-dislike or admire-detest.

(iii) The cognitive or behaviour tendency component.

This embodies a tendency to behave in a certain way. This does not mean that a certain behaviour will occur but that a certain action is likely to occur if the opportunity presents itself. An attitude therefore predisposes an individual to act

in a certain way towards a person or objects. In studying the concept of attitudes it is important to understand the reasons for people holding particular attitudes, Katz (1960) identified four functions that form the motivational basis for attitudes.

1. The instrumental or adjective function.

This directs people towards rewarding objects and away from undesirable ones. As a result people acquire attitudes, that are perceived as helpful in achieving desired goals or useful in avoiding undesired goals.

2. The ego-defensive function.

This allows people to protect themselves from acknowledging their deficiencies. To a great extent, attitudes of negative prejudice help the individual sustain his self-concept by maintaining a sense of superiority over others

3. The value-expressive function.

This enables people to achieve self-expression in terms of centrally held values. Value-expressive attitudes generate pleasure and satisfaction through expression of opinions that reflects self-concept. Such attitudes differ from the ego-defensive attitudes which serve to obscure an individual's true nature from himself.

4. The knowledge function.

This represents the cognitive component of attitudes, which gives coherence and direction to experience, Katz argues that knowledge is sought in order to give meaning to what would otherwise be an unorganized and chaotic universe.

It is therefore from the above outlined components and functions that it can be seen that attitudes are distinguished by their multiplicity ie it is difficult to

differentiate between the individual components and functions served by any particular attitude.

The other dimension identified is the degree to which attitudes are interrelated. There is a tendency for attitudes to be clustered and a similar tendency to categorize people and objects leading to the formation of stereotypes.

2.4 ATTITUDES MEASUREMENT:

Attitudes are hypothetical constructs and hence are not directly observable. This means that, their strength and direction can only be inferred. However, some attempt at quantifying attitudes is necessary if we are to compare individuals as groups, and also to determine behavioural changes in individuals when they have experienced attitude change.

To be able to determine the effect on attitudes of, for example advertising and sales promotion is obviously of vital importance to the marketer, but the measurement of the direct behavioural expression of an attitude (ie the action arising from the holding of an attitude) is usually extremely difficult.

Hence attitude measurement techniques concentrate on what individuals describe as being their 'feelings' towards the attitude object concerned. The most widely used approach to attitude measurement has been the attitude scale. (Williams 1994). These consist of sets of statements or words relating to an attitude item. They are usually concerned with measuring the valence, that is , the degree of positive or negative feeling of the attitude. Some of the known

scaling techniques are the Thurstone scale, Likert scale, Guttman's scalogram Analysis, Kelly's Repertory Grid Technique etc.

2.4.1 METHODOLOGICAL PROBLEMS OF ATTITUDES MEASUREMENT.

For any scientific technique there are requirements of reliability--the ability of any given method to produce results that are consistent; and validity--the degree to which a technique measures what it is designed to measure.

Attitude scales demonstrate fairly good reliability, but difficulties arise with regard to the question of validity. Before being able to measure something, we must define that something and analysis of the literature on attitudes will reveal a number of different definitions.

Attitudes consist of three major components; conative, cognitive and affective. However most of the techniques used in attitude measurement are self-report measures and what they measure is the affective component of attitudes. Hence, the attitude scale is essentially a one-dimension measure that cannot represent the total complexity of an attitudinal system.

2.5 IMPORTANCE OF ATTITUDES IN MARKETING

Though there are methodological problems connected with both the definition and the measurement of attitudes, existing knowledge albeit limited can be successfully applied in marketing.

The attitudes held by consumers influence the way they perceive a particular

product and this in turn affects buying decisions. Attitude research can therefore be a useful tool in the identification of market segments and can provide a basis on which the marketer can devise a marketing strategy, appropriate to individuals target market.

As Darling and Kraft (1977) point out, it is important to pinpoint the attitudinal dimensions providing barriers to successful market entry and determine the need for, and feasibility of, corrective action. If none is possible, marketing resources might more profitably be spent in other markets.

3.2 Population of Study

The population of study consisted of all people who were aged 18 years and over in the United Kingdom. The total number of people aged 18 years and over in the United Kingdom was 49,785,000 (ONS, 2007).

3.3 Sampling design

3.3.1 Participants

The Population of Study was divided into three geographical regions: North, South and West. The North region included England, Scotland and Wales. The South region included England, Wales and Northern Ireland. The West region included England, Wales and Northern Ireland. The participants in this study were selected from the population of study.

3.3.2 Sampling technique

Stratified random sampling technique was used to select the sample. The population of study was divided into three geographical regions each comprising two administrative locations. A 1000 random sample in each geographical region was selected through random sampling. The respondents were then selected both inside bars and outside using simple random sampling.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

The type of research design adopted for the study was descriptive research. This was for the purpose of providing an accurate snapshot of the various aspects of the market environment to be studied.

3.2 Population of Study

The population of study, consisted of all people living in Mathira Division. The total number is 148,788 people. (1999 census)

3.3 Sampling design

3.3.1 Sample Size

The Population under investigation consisted of all people (both males and females) over 18 years of age and living in Mathira division. However due to time and resource constraints the scope of this study was limited to 100 respondents.

3.3.2 Sampling technique

Stratified random sampling technique was used to select a representative sample. The population elements were stratified into 3 geographical regions each comprising two administrative locations. A shopping centre in each geographical region was selected through random sampling. The respondents were then selected both inside bars and outside using simple random sampling.

3.4 Data Collection Methods

Both primary and secondary data was used in this study. Data collection instruments were a structured questionnaire, interview and personal observation.

3.5 Data analysis and presentation

Data collected from this research was coded and tabulated. The data was analyzed using standard statistical tools which include descriptive analysis – use of percentages and Likert Scales and econometric methods – use of Logit model.

This is as described in section 1.7.

The statistical package for Social Scientists (SPSS) Software was also utilized for analysis.

The results are presented in both descriptive and inferential modes.

Data was captured using the following format

- (i) Respondent's demographic characteristics
- (ii) Status of opaque beer consumption
- (iii) Analysis of opaque beer's demand
- (iv) Choice and individual attributes
- (v) Effects of opaque beer consumption
- (vi) Suggested public opinion to measure acceptability and increased sales of opaque beer
- (vii) General public attitudes towards opaque beer

CHAPTER FOUR

4.0 DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

The broad objective of the study was to investigate attitudes of the consumers of opaque beer and the problem of safety and sales. Specifically the study intended to establish the status of opaque beer consumption in the study area, determine the factors which would enhance the sales performance of the beer and document possible policy guidelines from the study as pertains to quality packaging and pricing.

Using the study objectives as a basis, the data collected through self administered questionnaires and personal interviews was analysed, presented and discussed using both descriptive and inferential statistical tools (parametric and non-parametric).

Data was captured using the following format:

- (i) Respondents demographic characteristics
- (ii) Status of opaque beer consumption
- (iii) Analysis of opaque beer preference
- (iv) Choice and individual attributes
- (v) Effects of opaque beer consumption
- (vi) Suggested public opinion to ensure acceptance and increased sales of opaque beer.
- (vii) General public attitudes towards opaque beer.

4.2 RESPONDENTS DEMOGRAPHIC CHARACTERISTICS

Analysis of the respondents demographic characteristics was undertaken in terms of age, sex, marital status, income, education level and occupation.

Table 1.1: Marital status, sex Given the respondents age:

Age	Gender				Row Total
	Male		Female		
	Married	Single	Married	Single	
18-25	3(3%)	11(11%)	1(1%)	4(4%)	19(19%)
26-33	12(12%)	15(15%)	1(1%)	3(3%)	31(31%)
34-41	12(12%)	1(1%)	1(1%)	3(3%)	17(17%)
42-49	11(11%)	1(1%)	5(5%)	3(3%)	20(20%)
50 & above	10(10%)	2(2%)	1(1%)	0(0%)	13(13%)
Column total	48(48%)	30(30%)	9(9%)	13(13%)	100(100%)

Source: Survey

From table 1.1 above 57% of the respondents were married people with males constituting 48% and females 9%, 43% of the respondents were single people with males constituting 30%. This can partly be attributed to the fact that anyone above 18 years of age is considered mature enough to marry. Therefore in the higher age brackets i.e. from 34 years upwards we have 40% respondents who are married as compared to 10% who are single.

The above table also reveals that the study had more male respondents (78%) than female respondents (22%). This can be explained by the fact that most of

the respondents were interviewed inside bars and only a small number of women frequent the bars, since the society looks down upon such women.

Table 1.2: Education Level given respondents Age.

Educ. Level Age	Primary	Sec.	Graduate	College	Never Attended School	Row Total
18-25	7(7%)	11(11%)	0	1(1%)	0	19(19%)
26-33	11(11%)	15(15%)	4(4%)	2(2%)	0	32(32%)
34-41	2(2%)	9(9%)	2(2%)	3(3%)	0	16(16%)
42-49	9(9%)	8(8%)	1(1%)	2(2%)	0	20(20%)
≥ 50	8(8%)	1(1%)	2(2%)	1(1%)	1(1%)	13(13%)
Column Total	37(37%)	44(44%)	9(9%)	9(9%)	1(1%)	100(100%)

Source: Survey

From table 1.2, 44% of the respondents have gone upto secondary level of education while 37% had gone only up to primary level of education. 9% had college certificates or Diplomas while 9% were graduates. One respondent had no formal schooling.

The table also reveals that, in all age brackets, there were more people who had gone beyond the primary school level of education as compared to those who only had the primary school level of education.

Table 1.3: Monthly Income given the respondents Education level.

Age \ Educ. Level	Primary	Sec.	Grad.	College	Never Attended School	Row Total
0-1500	10(10%)	8(8%)	0	0	0	18(18%)
1501-3000	18(18%)	7(7%)	0	0	1(1%)	26(26%)
3001-4500	3(3%)	11(11%)	0	1(1%)	0	15(15%)
4501-6000	3(3%)	2(2%)	0	0	0	5(5%)
6001-7500	2(2%)	3(3%)	2(2%)	3(3%)	0	10(10%)
7501-9000	0	7(7%)	1(1%)	0	0	8(8%)
>9000	1(1%)	6(6%)	6(6%)	5(5%)	0	18(18%)
Column Total	37(37%)	44(44%)	9(9%)	9(9%)	1(1%)	100(100%)

Source: Survey

Results in table 1.3 reveals that 59% of the respondents had an income of Sh. 4500 or less while only 41% had an income above sh4500. This is because opaque beer is targeted at low income earners and therefore are the people more likely to be found consuming it.

Further testing the significance of the relationship between the level of education with the level of income, the following null (H_0) and alternative (H_1) hypothesis were used.

H_0 : Level of education does not influences income level.

H_1 : Level of education influence income level

Using the chi-square test at 0.05 level of significance, the Pearson (P) value was 0.00001. The Null hypothesis (H_0) is therefore rejected in favour of the alternative (H_1) hypothesis. The P value can therefore be interpreted to mean that, there is a strong correlation between the level of education and level of income i.e. the more the years of schooling, the better were the earnings.

Table 1.4 Occupation given respondents monthly income.

Income \ Occupation	0-1500	1501-3000	3001-4500	4501-6000	6001-7500	7501-9000	Over 9000	Row total
Teacher	0	0	1(1%)	0	5(5%)	0	7(7%)	13(13%)
Mason	1(1%)	1(1%)	1(1%)	0	0	0	0	3(3%)
Carpenter	1(1%)	1(1%)	2(2%)	0	0	0	0	4(4%)
B/person	3(3%)	2(2%)	3(3%)	2(2%)	1(1%)	4(4%)	8(8%)	23(23%)
Farmer	6(6%)	15(15%)	2(2%)	2(2%)	1(1%)	2(2%)	1(1%)	29(29%)
Driver	1(1%)	2(2%)	1(1%)	0	2(2%)	0	0	6(6%)
Mechanic	0	1(1%)	4(4%)	1(1%)	0	0	0	6(6%)
N/C officer	0	0	0	0	1(1%)	0	1(1%)	2(2%)
Watchman	1(1%)	1(1%)	0	0	0	0	0	2(2%)
Accountant	0	0	0	0	0	2(2%)	0	2(2%)
Hairdresser	1(1%)	0	0	0	0	0	1(1%)	1(1%)
Painter	0	0	1(1%)	0	0	0	0	1(1%)
C/labourer	4(4%)	2(2%)	0	0	0	0	0	6(6%)
Tailor	0	0	0	0	0	0	0	1(1%)
Anthropologist	0	0	0	0	0	0	1(1%)	1(1%)
Column total	18(18%)	26(26%)	15(15%)	5(5%)	10(10%)	8(8%)	18(18%)	100(100%)

Source: Survey

Table 1.4 results reveals that people in 7 out of the 15 occupations (47%) earned Sh.4500 or less. However in farming, driving, mechanic occupations, though we have people earning beyond Sh.4500, 23 out of 29 farmers (79%), 4 out of 6

drivers (66%), and 5 out of 6 mechanics (83%) interviewed earned less than Sh.4500.

Further, testing the significance of the relationship between type of occupation and the respondents monthly income, the following Null (H_0) and alternative (H_1) hypothesis were used.

H_0 : Type of occupation does not influence income level.

H_1 : Type of occupation influences income level.

Using the Chi-square test at 0.05 level of significance the pearson (P) value was 0.00010. The Null hypothesis (H_0) is therefore rejected in favour of the alternative (H_1) hypothesis. Therefore, there is evidence of dependence between the type of occupation and income level. This is why it is evident from the results that teaching, anthropology, accounting, business and nursing had more people in higher income brackets. This can be explained by the fact that the occupations earning higher incomes also require more years of schooling.

The study also reveals that majority (52%) of the respondents were either farmers or business people. This is because 81% of the respondents (Ref. Table 1.3) had either only primary or secondary school level of education and therefore making it difficult for them to get any former employment. They therefore ended up going into informal self-employment.

4.3 STATUS OF OPAQUE BEER CONSUMPTION

4.3.1 Types of Opaque Beer Consumed

The study established that the brands of opaque beer taken were Medusa, Chairman, Mezea, cheers, vienna and kairasi (a general name for a variety of unbranded opaque beers).

Results in Table 2.1 shows the number of people taking a certain brand and also the number of people taking a particular brand given that, they also take another given brand.

Table 2.1: Brands consumed and the number of people who consume them.

Brand	Medusa	Mezea	Chairman	Cheers	Vienna	Kairazi
Medusa	54(100%)	13	33	1	17	11
Mezea	13	13(20%)	9	0	3	2
Chairman	33	9	33(61%)	0	10	11
Cheers	1	0	0	1(2%)	1	0
Vienna	17	3	10	1	17(31%)	2
Kairasi	11	2	11	0	2	11(20%)

Source: Survey

It is evident from Table 2.1 that 54 people consume medusa. However of this number, 13 people also consume mezea, 33 people also consume chairman, 17 people also consume vienna and 11 people also consume kairasi. This is apart from taking medusa.

Of the 13 mezea consumers, all of them also take medusa, 9 of them also take chairman, 3 also take vienna and 2 of them also take kairasi. This shows that the level of loyalty to a specific brand among the opaque beer consumers is very low.

Further medusa and chairman are consumed more as compared to the other brands e.g. of all opaque beer consumers interviewed all of them consume medusa while 61% of all opaque bear consumers consume chairman. Mezea is consumed by 24% of opaque beer consumers, cheers by 2%, vienna by 31% and kairasi by 20%. This can be explained by the fact that, these brands come in tightly sealed 500ml plastic containers, which most of the consumers prefer to beer scooped from a 20-liter jerry can.

4.3.2 Beer type and consumer distribution.

Analysis results revealed four (4) types of alcoholic beverages consumed in the study area. These are opaque beer, clear beers (lagers and stouts), wines and spirits.

beer taken, the following null (H_0) and alternative (H_1) hypotheses were used:

H_0 : Age of consumer does not influence type of beer taken

H_1 : Age of consumer influences type of beer taken

Using the Chi-square test, at 0.05 level of significance the Pearson (χ^2) value was 0.112. Therefore we accept the H_0 hypothesis and reject the alternative hypothesis.

Table 2.2: Age by Type of beer taken

Age \ Type	Opaque beer	Clear beer	Wines	Spirits	Row total
18-25	13(14%)	3(4%)	0	0	16(18%)
26-33	15(17%)	12(14%)	0	0	27(31%)
34-41	5(6%)	8(9%)	1(1%)	1(1%)	15(17%)
42-49	12(14%)	5(6%)	0	0	17(20%)
50 and over	9(10%)	3(4%)	0	0	12(14%)
Column total	54(61%)	31(37%)	1(1%)	1(1%)	87(100%)

Source: Survey

The table 2.2 reveals that in all age brackets except one, there are more opaque beer consumers than in other types of beers. It is also evident that age brackets 18-25 years and 26-33 years have more opaque beer consumers, than all the other age brackets combined.

Testing the significance of the relationship between age of consumer and type of beer taken, the following Null (H_0) and alternative (H_1) hypotheses were used.

H_0 : Age of consumer does not influence type of beer taken

H_1 : Age of consumers influences type of beer taken.

Using the Chi-square test at 0.05 level of significance the Pearson (P) value was 0.112. Therefore we accept the Null hypothesis and reject the alternative hypothesis.

This therefore means that, the age of the consumer does not determine the type of beer he/she takes.

Table 2.3 Income by type of beer taken

Type Income	Opaque beer	Clear beer	Wines	Spirits	Row total
0-1500	14(16%)	3(4%)	0	0	17(20%)
1501-3000	21(24%)	1(1%)	0	0	22(25%)
3001-4500	11(12%)	3(4%)	0	0	14(16%)
4501-6000	3(4%)	2(2%)	0	0	5(6%)
6001-7500	3(4%)	6(7%)	0	0	9(11%)
7501-7500	1(1%)	3(4%)	1(1%)	1(1%)	6(7%)
over 9000	1(1%)	13(14%)	0	0	14(15%)
Column total	54(62%)	31(36%)	1(1%)	1(1%)	87(100%)

Source: Survey

From Table 2.3, 62% of the beer consumers, consume opaque beer with 36% taking clear beer. The remaining 2% are taken by wines and spirits consumers.

Testing the significance of the relationship between income of the consumer and the type of beer taken, the following Null (H_0) hypothesis and alternative (H_1) hypothesis were used.

H_0 : Income level of consumer does not influence the type of beer taken.

H_1 : Income level of consumer influences type of beer taken.

Using the Chi-square test at 0.05 level of significance the Pearson (P) value was 0.00001. therefore I reject the Null hypothesis (H_0) and accept the Alternative (H_1) hypothesis. The results show that there is a strong positive correlation between level of income and type of beer taken. Therefore people in lower income brackets will more likely go for opaque beer since its cheap, while those in upper income brackets will more likely go for clear beers, wines or spirits as they can afford them.

Table 2.4: Education level by type of beer taken

Type Education level	Opaque beer	Clear beer	Wines	Spirits	Row total
Primary	30(34%)	3(4%)	0	0	33(38%)
Secondary	21(24%)	18(21%)	0	1(1%)	40(46%)
Graduate	1(1%)	6(7%)	1(1%)	0	8(9%)
College level	1(1%)	4(5%)	0	0	5(6%)
Not attended school	1(1%)	0	0	0	1(1%)
Column total	54(61%)	31(37%)	1(1%)	1(1%)	87(100%)

Source: Survey

From Table 2.4, the significance of the relationship between education level and type of beer taken was tested using Chi-square at 0.05 level of significance. The following Null (H_0) and alternative (H_1) hypotheses were used.

H_0 : Education level does not influence type of beer taken

H_1 : Education level influences type of beer taken.

The Pearson (P) value from the test was 0.00007. I therefore reject the Null hypothesis and accept the alternative hypothesis that education level influence type of beer taken.

This is why, from table 2.4 opaque beer was mostly consumed by those with either primary or secondary school level of education, with the two categories constituting 34% and 24% respectively of all opaque beer consumers. However as the level of education went higher, we had more people consuming clear beer than opaque beer. This is because the higher the level of education, the better the occupation and the higher the income.

4.3.3 Frequency of taking opaque beer

Using income and occupation level, the frequency of opaque beer consumption was determined.

Table 2.5: Monthly Income by Frequency of Taking Opaque Beer

Frequency \ Income	Everyday	Twice a week	Thrice a week	Once a week	About twice a month	About once a month	No specific times	Row total
0-1500	7(12%)	1(2%)	1(2%)	2(4%)	1(2%)	0	2(4%)	14(26%)
1501-3000	5(9%)	1(2%)	2(4%)	8(15%)	0	0	5(9%)	21(39%)
3001-4500	3(5%)	0	0	3(5%)	4(7%)	1(2%)	0	11(19%)
4501-6000	1(2%)	0	0	1(2%)	0	1(2%)	0	3(6%)
6001-7500	2(4%)	0	0	0	0	0	1(2%)	3(6%)
7501-9000	0	0	0	1(2%)	0	0	0	1(2%)
over 9000	1(2%)	0	0	0	0	0	0	1(2%)
Column total	19(34%)	2(4%)	3(6%)	15(28%)	5(9%)	2(4%)	8(15%)	54(100%)

Source: Survey

Table 2.5 shows that 34% of the opaque beer consumers; consume it on a daily basis. They are followed by those who consume once a week (28%)

The study reveals that, there is a tendency for the frequency of taking opaque beer decreasing with increase in income. On further probing, the consumers said that, the lesser the income, the less the work activities one is involved in hence more time to engage in drinking. However with higher income, the more work activities one is involved in leaving less time to engage in drinking.

Table 2.6: Occupation by frequency of taking opaque beer.

Frequency \ Occupation	Everyday	Twice a week	Thrice a week	Once a week	About twice a month	About once a month	No specific times	Row total
Teacher	1(2%)	0	0	0	0	0	1(2%)	2(4%)
Mason	1(2%)	0	0	0	1(2%)	0	0	2(4%)
Carpenter	1(2%)	0	0	0	2(3%)	0	1(2%)	4(7%)
B/person	1(2%)	1(2%)	1(2%)	3(5%)	0	0	0	6(11%)
Farmer	10(17%)	0	1(2%)	6(10%)	0	1(2%)	5(9%)	23(40%)
Driver	1(2%)	0	0	2(4%)	0	0	0	3(6%)
Mechanic	3(5%)	0	1(2%)	0	1(2%)	1(2%)	0	6(11%)
Nurse/Clinic officer	0	0	0	0	0	0	0	0
Watchman	0	0	0	0	1(2%)	0	0	1(2%)
Accountant	0	0	0	0	0	0	0	0
Hairdresser	0	0	0	0	0	0	0	0
Painter	0	0	0	1(2%)	0	0	0	1(2%)
Casual labourer	1(2%)	1(2%)	0	2(4%)	0	0	1(2%)	5(10%)
Tailor	0	0	0	1(2%)	0	0	0	1(2%)
Anthropologist	0	0	0	0	0	0	0	0
Column total	19(34%)	2(4%)	3(6%)	15(28%)	5(9%)	2(4%)	8(15%)	54(100%)

Source: Survey

Table 2.6 reveals that most of the consumers who take opaque beer on daily basis are farmers (17%) followed by mechanics (5%). This can be explained partly by the fact that most of them fall in the lower income groups (Ref. Table 1.4), hence have less activities engaging them in the course of the day leaving them with more free time. The other reason can be attributed to the fact that people in these occupations are self employed and hence have no specific working hours and therefore always find time to go and drink.

4.3.4 DURATION OF TAKING OPAQUE BEER

Based on ages and monthly income levels, respondents were asked to indicate the period of time, they have been taking opaque beer.

Table 2.7: Age by Duration of taking opaque beer

Duration \ Age	Less than 1 year	1-2 years	3-4 years	5 years and over	Row total
18-25	3(5%)	6(11%)	4(8%)	0	13(24%)
26-33	1(2%)	2(4%)	11(20%)	1(2%)	15(28%)
34-41	0	0	3(5%)	2(4%)	5(9%)
42-49	0	2(4%)	4(8%)	6(11%)	12(23%)
50 and over	0	0	3(5%)	6(11%)	9(16%)
Column total	4(7%)	10(19%)	25(46%)	15(28%)	54(100%)

Source: Survey

From Table 2.7, the significance of the relationship between age of consumer and duration of taking opaque beer was tested using chi-square at 0.05 level of significance. The following Null (Ho) and alternative (Hi) hypothesis were used.

Ho: Age of consumer does not influence duration of taking opaque beer.

H_i: Age of consumer influences the duration of taking opaque beer.

The Pearson (P) value from the test was 0.00022. Therefore the null hypothesis is rejected and the alternative that age does influence the duration of taking opaque beer is accepted.

It is therefore evident from Table 2.7 that, opaque beer consumers in upper age brackets i.e. over 34 yrs, have been consuming opaque beer for a longer period than those in lower age brackets i.e. less than 34 yrs. Therefore, the longer one has lived, the greater the chance that one has been consuming opaque beer for a longer period.

Table 2.8: Monthly income by Duration of taking opaque beer

Duration Income	Less than 1 yr.	1-2 yrs.	3-4 yrs.	5yrs and over	Row Total
0 - 1500	1 (2%)	4 (8%)	6 (11%)	3 (5%)	14 (26%)
1501 – 3000	1 (2%)	4 (8%)	11 (20%)	5 (9%)	21 (39%)
3001 – 4500	1 (2%)	1 (2%)	7 (12%)	2 (4%)	11 (20%)
4501 – 6000	1 (2%)	1 (2%)	0	1 (2%)	3 (6%)
6001 – 7500	0	0	0	3 (5%)	3 (5%)
7501 – 9000	0	0	0	1 (2%)	1 (2%)
over 9000	0	0	0	0	1 (2%)
Column Total	7 (8%)	10 (20%)	25 (45%)	15 (27%)	54 (100%)

Source: Survey

From Table 2.8, the significance of the relationship between monthly income of consumer and duration of taking opaque beer was tested using Chi-square at 0.05% level of significance. The following Null (H_0) and alternative (H_1) hypotheses were used.

H_0 : Monthly income level does not influence duration of taking opaque beer

H_1 : Monthly income level influences duration of taking opaque beer

The Pearson (P) value from the test was 0.00053. Therefore the null hypothesis is rejected and the alternative that income level does influence the duration of taking opaque beer is accepted. However the correlation is not strong.

It is evident from Table 2.8 that 46% of the consumers have been consuming opaque beer for a period of between 3 to 4 years but most fall in the category of those earning sh.4500 and less. Those who have been consuming opaque beer for a period of 5 years and over constitute 28%. They are distributed in all income brackets except the highest.

4.4 ANALYSIS OF OPAQUE BEER PREFERENCE

The respondents were asked to rank the factors price, sold in convenient quantities, packaging, potency and taste in making decision to purchase opaque beer.

This is shown in Table 3.2.

Table 3.1: Ranking of factors influencing opaque beer consumption

Rank	1	2	3	4	5	Row total
Factor						
Price	36(67%)	12(22%)	5(9%)	1(2%)	0	54(100%)
Sold in convenient quantities	2(4%)	18(33%)	25(46%)	7(13%)	2(4%)	54(100%)
Packaging	0	1(2%)	3(6%)	40(74%)	10(18%)	54(100%)
Potency	14(25%)	22(41%)	17(31%)	1(2%)	0	54(100%)
Taste	2(4%)	1(2%)	4(8%)	5(9%)	42(78%)	54(100%)
Column total	54(100%)	54(100%)	54(100%)	54(100%)	54(100%)	

Source: Survey

Table 3.1 shows 67% of opaque beer consumers ranked price first as the most important factor in making decision to consume opaque beer. 25% ranked its potency, as the most important factor they take into consideration in making their decision to consume opaque beer.

The study also shows that 78% of opaque beer consumers consider taste as the least important factor in making decision to consumer the drink. 18% cited packaging as the least important factor in making their decision.

To get the overall ranking of the factors, the following criteria was used. Rank 1 was the highest and had a score of 5 while rank 5 was the lowest with a score of 1. This is shown in Table 3.2.

Table 3.2: Criteria for overall ranking

Price	Sold in convenient qualities	Packaging	Potency	Taste
36x5=180	2x5=10	0x5=0	14x5=70	2x5=10
12x4=48	18x4=72	1x4=4	22x4=88	1x4=4
5x3=15	25x3=75	3x3=9	17x3=51	4x3=12
1x2=2	7x2=14	40x2=80	1x2=2	5x2=10
0x0=0	2x3=2	10x1=10	1x0=0	42x1=42
Total 245	173	103	211	78
Rank 1	3	4	2	5

Source: Survey

Overall price took the first rank, followed by potency in second place while taste took the last position. This therefore means that price is the most important factor to most opaque beer consumers when making decision to consume the drink. Packaging and taste were rated poorly with both taking rank 4 and 5 respectively. They are therefore rated lowly by consumers in making their decisions to consume opaque beer.

4.5 CHOICE AND INDIVIDUAL ATTRIBUTES

When individuals are faced with a choice between two alternatives, the choice they make depends on the characteristics of the individual. To be able to make predictions about choices of individuals not in the original sample, a logit model is used.

Source: Survey

For the purpose of this study, the choice was either to consume opaque beer or clear beer (lagers and stouts). The individual attributes considered were age, marital status, sex, education level, income (monthly) and occupation.

From the logit model
$$L_i = \ln \frac{P_i}{1-P_i} = Z_i = \alpha_0 + \alpha_1 X_i$$

Where

L_i the logit is the logarithm of the odds ratio, that a particular choice will be made.

$\frac{P_i}{1-P_i}$ is the odds ratio in favour of buying opaque beer

X_i where $X_1 =$ Age
 $X_2 =$ Marital status
 $X_3 =$ Sex
 $X_4 =$ Educational level
 $X_5 =$ Income
 $X_6 =$ Occupation

Table 4.1: Empirical probability of opaque beer consumption given age of Consumers

Age (Yrs) X	No. of individuals with age X (N ₁)	No. of individuals buying opaque beer (n ₁)	Probability of buying opaque beer given ones age (P(n ₁ /N ₁))	$\frac{P}{1-p}$	$L = \ln \frac{P}{1-P}$
18-25	16	13	0.8125	4.33	1.4656
26-33	26	14	0.5385	1.167	0.1544
34-41	16	6	0.3750	0.6	-0.5108
42-49	17	12	0.7059	2.4	0.8754
50 and over	12	9	0.75	3	1.0986

Source: Survey

Table 4.1 above shows that, at age bracket 18-25 years, there is a very high probability (0.81), that an individual will buy opaque beer. This is followed by the age of 50 years and over with a probability of 0.75 in favour of an individual buying opaque beer. At age bracket 34-41 years we have the lowest probability (0.375) in favour of buying opaque beer.

Table 4.1 also shows that the odds ratio of preferring opaque beer are highest at ages 18-25%. The odds of ages 34-41 preferring opaque beer is 1.9764 lower than for ages 18-25 years.

Table 4.1: Empirical probability of opaque beer consumption given one's marital status.

Marital status X	No. of individuals of marital status X (N_1)	No. of individuals buying opaque beer (n_1)	Probability of buying opaque beer given one's age ($P(n_1/N_1)$)	$\frac{P}{1-p}$	$L = \ln \frac{P}{1-P}$
Single	37	28	0.75	3.1102	1.1347
Married	50	26	0.52	1.083	0.0797

Source: Survey

The Table 4.2 above shows that single person has a probability of 0.75 in favour of buying opaque beer with an odds ratio of 1.1347. A married person has a probability of 0.52 in favour of buying opaque beer with an odds ratio of 0.0797 in preference of opaque beer.

Table 4.3: Empirical Probability of Opaque Beer Consumption Given

Ones Sex

Sex X	No. of individuals of sex X (N_1)	No. of individuals buying opaque beer (n_1)	Probability of buying opaque beer given one's sex ($P(n_1/N_1)$)	$\frac{P}{1-p}$	$L = \ln \frac{P}{1-P}$
Male	73	46	0.6301	1.7034	0.5326
Female	14	8	0.5714	1.3332	0.2876

Source: Survey

Table 4.3 shows that, there is a probability of 0.63 in favour of buying opaque beer given that one is a male while there is a probability of 0.57 in favour of buying opaque beer given that one is a female.

The table also shows that, the odds of female preferring opaque beer is 0.53 times lower than for males.

Table 4.4: Empirical probability of opaque beer consumption given one's education level.

Sex X	No. of individuals with education level X (N_1)	No. of individuals buying opaque beer (n_1)	Probability of buying opaque beer given one's education level ($P(n_1/N_1)$)	$\frac{P}{1-p}$	$L=\ln \frac{P}{1-P}$
Primary	33	30	0.9091	10.0011	2.3027
Secondary	40	21	0.525	1.1053	0.1001
College	5	1	0.2	0.25	-1.9221
Graduate	8	1	0.125	0.1463	-1.3863

Source: Survey

From the Table 4.4, people with primary level of education had a high probability (0.9) in favour of buying opaque beer. On the other hand graduates had the lowest probability of 0.125 in favour of buying opaque beer.

Graduates had the lowest odd ratio of -1.3863 which is 3.689 lower than for those with primary level of education. This means that the odds of a graduate preferring opaque beer are 3.689 lower than that of those with primary level of education.

Table 4.5: Empirical probability of opaque beer consumption given one's monthly income

Monthly income (X)	No. of individuals with income X (N_1)	No. of individuals buying opaque beer (n_1)	Probability of buying opaque beer given one's income ($P(n_1/N_1)$)	$\frac{P}{1-p}$	$L=\ln \frac{P}{1-P}$
0-1500	17	14	0.8235	4.6657	1.54023
1501-3000	22	21	0.9545	20.978	3.04347
3001-4500	14	11	0.7857	3.6663	1.29918
4501-6000	5	3	0.6	1.5	0.4054
6001-7500	9	3	0.33	0.4925	-0.70826
7501-9000	6	1	0.1667	0.2	-1.60943
over 9000	14	1	0.0714	0.0769	-2.56524

Source: Survey

From Table 4.5, people in lower income brackets i.e. those in earning sh.4500 and less, have high probabilities in favour of buying opaque beer e.g. those in income bracket Sh.0-1500 have a probability of 0.82 while those in income bracket Sh.1501-3000 have a probability of 0.95. Beyond the income of Sh.4500, the probabilities in favour of buying opaque beer decrease with increase in income e.g. people in income bracket of Sh.7501-9000 have a probability of 0.1667 in favour of buying opaque beer, while those with an income of over sh.9000 have a probability of 0.0769 in favour of buying opaque beer.

Consumers in income bracket sh.1501-3000 have the highest odds ratio of 3.04347 while those with an income of over sh.9000 have the lowest odds ratio of -2.56524. This means that the odds of consumers with income of over sh.9000 preferring opaque beer is -0.84 times lower than for those with incomes sh.1501-3000.

Table 4.6: Empirical probability of opaque beer consumption given one's Occupation

Occupation* X	No. of individuals in occupation X (N ₁)	No. of individuals buying opaque beer (n ₁)	Probability of buying opaque beer given one's occupation P(n ₁ /N ₁)	$\frac{P}{1-p}$	$L = \ln \frac{P}{1-P}$
Teacher	9	2	0.2222	0.2857	-1.2518
Mason	3	2	0.6667	2.0003	0.6932
B/person	20	6	0.3	0.42857	-0.8472
Farmer	26	23	0.88	7.6655	2.0367
Driver	5	3	0.6	1.5	0.4054

Source: Survey

* Some occupations listed in table 1.4 have not been analysed here because their P is either 1 or 0 (Zero) and hence the corresponding logits are meaningless.

From Table 4.6 above, farmers had a high probability (0.88) in favour of buying opaque beer. Teachers had the lowest probability (0.22) in favour of buying opaque beer. Farmers had the highest odds ratio of 2.0367 with teachers having

the lowest of -1.2528 . This means that the odds of a teacher preferring opaque beer are 3.2895 lower than those of a farmer.

4.6 EFFECTS OF OPAQUE CONSUMPTION

The respondents felt that opaque beer has had both social and economic effects on the society it is consumed. Table 5.1 below presents the effects and the frequency given the sex of the respondents.

Table 5.1: Opaque beer effects by sex of Respondents

Effect	Male	Female	Percent
• Has caused homes/families to break	54%	18%	72
• People have lost their lives after consuming it	65%	21%	86
• Makes people age faster	30%	18%	48
• Women have been made to shoulder family responsibilities	42%	20%	62
• Men fail to meet their marital/conjugal obligations	15%	14%	29
• Young men failing to get married on time	24%	10%	34
• Some people forget about their personal hygiene	31%	12%	43
• Children have dropped out of school	28%	16%	44
• The number of alcoholics has increased in society	15%	8%	23
• Has made people once industrious to be lazy	60%	19%	79
• Brought about adverse financial constrains to families concerned	61%	22%	83
• Brought about an increase in the level of poverty in society.	51%	17%	68

Source: Survey

On the social side, 86% of the respondents felt that people have lost their lives after consuming these brews. This is mainly due to over consuming the brew and failing to feed properly.

The study also revealed that 72% of the respondents felt that families have also broken up as a result. This is mainly due to disagreements over misuse of family earnings on the drinks or as a result of the head of the family neglecting it due to excessive drinking.

The respondents (48%) also reported that opaque beers make consumers age faster. Probed further they said it's as a result of excessive drinking and failing to feed properly hence poor health.

From table 5.1 62% of the respondents reported that women have been left to shoulder all the family responsibilities by their husbands eg. providing for food, clothing, school fees etc. This is as a result of their husbands getting "married" to the drinks and failing to provide for the family.

Some respondents (29%), said that a number of men were failing to meet their marital/conjugal obligations. This is due to the fact that, most of them spend the whole day drinking and by evening they are too drunk. They just fall into a deep sleep when they go home, until the following morning when they go back again to the bars for their drink and the whole process repeats itself. They therefore get no time for their partners.

The respondents (34%) felt that, young men were failing to marry on time, as a result of being “married” to their drink. This is because, some of them forget about their personal hygiene i.e. rarely take a bath and hence becomes difficult to attract a lady. Others drink the whole day and hence have no time to look for a wife. Others can't afford to pay dowry, as a result of spending all their earnings on the drink.

44% of the respondents felt that the children have dropped out of school and gone to child labour after their parents fail to pay their school fees. This is due to most of the income going to the liquor and hence the children have to work in order to provide for some of the basics like food and clothes.

The respondents (79%) also felt that the beer has made some people once industrious/productive to be lazy/unproductive. This is as a result of these people getting “hooked” to the drinks and spending most of their time drinking instead of working.

The study also reveals that 83% of the respondents felt that some families of opaque beer consumers experience adverse financial constraints. This is as a result of some men draining most of the family income on the beer. This has brought about an increase in the level of poverty in the society, since purchasing power for other items has greatly been eroded, as most money is channeled towards opaque beer consumption.

4.7: SUGGESTED PUBLIC OPINION TO ENSURE ACCEPTANCE AND INCREASED SALES OF OPAQUE BEER

Respondents were required to indicate their opinion/advice on price and alcohol content i.e. should they be increased, remain the same or decreased and also on the mode of package they would prefer. The analysed results are presented by the tables 6.1, 6.2 and 6.3 below.

Table 6.1: Monthly Income by Advice/Opinion on Price

Opinion	Increase	Remains the same	Decrease	Row Total
Income 0 – 1500	4(4%)	9%	5%	18%
1501 – 3000	3(3%)	14%	9%	26%
3001 – 4500	3%	4%	8%	15%
4501 – 6000	1%	2%	2%	5%
6001 – 7500	5%	5%	0	10%
7501 – 9000	5%	3%	0	8%
Over 9000	12%	4%	2%	18%
Column Total	33%	41%	26%	100%

Source: Survey

From table 6.1, 41% of the respondents suggested that prices should remain as they are. 33% suggested that prices should be increased while 26% opted for a decrease in price. For respondents with incomes sh.6000 and less, we have 53% respondents recommending either for a decrease or for prices to remain the same as opposed to 11% of respondents recommending for an increase. This

can be attributed to the fact that most opaque beer consumers fall under these income brackets.

Beyond an income of sh.6000 we have 22% of respondents recommending for an increase in price as opposed to 14% of respondents recommending either for a decrease or for prices to remain the same. Probed further, the respondents said that, this could curb on excessive consumption of opaque beer currently exercised by some consumers.

Table 6.2: Age by Advice/Opinion on Alcohol Content

Opinion \ Age	Increase	Remains the same	Decrease	Row Total
18-25	3%	9%	7%	19%
26-33	3%	11%	18%	32%
34-41	0	5%	11%	16%
42-49	2%	10%	8%	20%
50 and over	2%	8%	3%	13%
Column Total	10%	43%	47%	100%

Source: Survey

From the Table 6.2 47% of the respondents were of the opinion that the Alcohol content in these beers should be reduced while 43% were of the opinion that the present level should remain. Only 10% were of the opinion that it should be increased. For respondents aged 41 years and less, we have more (36%) people supporting a decrease in alcohol content as opposed to those of the

opinion that it should remain as it is. For those with 42 years and over more (18%) of respondents are of the opinion that alcohol content should remain the same as opposed to 11% respondents who are of opinion that it should be decreased.

Probed further, the respondents said that a decrease in alcohol content should curb excessive consumption of opaque beer. A reduction in alcohol content level would mean spending more to be at the same level of drunkenness previously enjoyed by a certain amount of money. The idea of spending more will discourage some people from frequent drinking.

Table 6.3: Age by Advice/Opinion on Package Size

Package size \ Age	20 litre terry can	1 litre container	500ml containers	300ml or less container	Row total
18-25	3%	3%	13%	0	19%
26-33	5%	1%	25%	1%	32%
34-41	2%	1%	13%	0	16%
42-49	3%	4%	12%	1%	20%
50 and over	1%	1%	11%	0	13%
Column Total	14%	10%	74%	2%	100%

Source: Survey

Table 6.3 above shows that majority of the respondents (74%) felt that, opaque beer should be delivered in 500ml bottles while only 14% felt that it should be glass bottles than plastic ones. Probed further, the respondents said glass bottles are cleaner and would also give the opaque beer consumer a "Class" just

delivered in 20 litre jerry cans. Also, in all age brackets, most of the respondents were of the opinion that opaque beer should be delivered in 500ml containers.

The respondents felt that delivering it so is more hygienic and safer to the consumers than scooping from a 20 litre jerry can.

The respondents were also required to indicate the mode of package they prefer i.e. either glass or plastic bottles and the responses are presented in Table 6.4 below.

Table 6.4: Age by mode of package preferred.

Package mode \ Age	Glass bottles	Plastic bottles	Row total
18-25	12%	7%	19%
26-33	24%	8%	32%
34-41	11%	5%	16%
42-49	11%	9%	20%
50 and over	6%	7%	13%
Column Total	64%	36%	100%

Source: Survey

Table 6.4 shows that 64% of the respondents preferred glass bottles to plastic ones. Also in all age brackets except one, we had more respondents in favour of glass bottles than plastic ones. Probed further, the respondents said glass bottles are cleaner and would also give the opaque beer consumers “Class” just

like those who are consuming clear beer. Consumers of opaque beer said that, when its sold in glass qualities scooped directly from bigger containers and in plastic bottles, people look upon it as a “lesser” beer ie. something of low quality.

4.7.2 OTHER SUGGESTED AREAS OF IMPROVEMENT

The consumers of opaque beer also reported three more areas, they would wish improvements to be done on. These areas are taste, colouring, and indication of ingredients and alcohol content on labels. This is presented by table 6.5 below.

Table 6.5: Other suggested areas of improvement

Area of improvement	Frequency	Percentage of opaque beer consumers
Taste	32	59%
Colouring	28	52%
Indication of alcohol content and ingredients	25	46%

Source: Survey

From table 6.5 above 59% of opaque beer consumers were of the opinion that, the taste was too bitter. They also said the beers left behind a sharp smell and hence improvements are necessary.

52% of thee opaque beer consumers were of the opinion that, some brands had very dark colours which were not appealing. Consumers therefore suggested for a more appealing colour.

Source: Survey

The consumers (46%) also said that most of the brands didn't indicate the ingredients used in the preparation of the beers nor the alcohol content level. Consumers were of the opinion that ingredients and alcohol content level should be indicated on container labels, to enable a consumer make a better choice.

4.8 GENERAL PUBLIC ATTITUDES TOWARDS OPAQUE BEER

In trying to capture the attitudes of the people, a number of unfavourable statements towards opaque beer were used. The respondents were to indicate whether they agree; Neither agree nor disagree; or they disagree with the statements, with the responses attracting the scores of 3,2, and 1 respectively.

The results are as in Table 7.1.

Table 7.1: Scores to attitude statements

Statement No.*	Sum	Mean
17	188	1.88
5	202	2.02
10	216	2.16
3	227	2.27
6	231	2.31
1	237	2.37
7	246	2.46
2	264	2.64
16	269	2.69
13	275	2.75
4	289	2.89
12	292	2.92
11	294	2.94
15	294	2.95
8	297	2.97
9	298	2.98
14	299	2.99
Total	4419	44.19

Source: Survey

*For the statements refer to appendix II

For an absolute negative attitude towards opaque beer, the average score would be 51. However with an average score of 44.19, it shows that there is a negative attitude feeling towards opaque beer though not absolute. This can mainly be attributed to the effects, it has had on society e.g. contributing to deaths, breaking families e.t.c which have attracted very high scores.

From the table 7.1, the statement 'selling of opaque beer should be banned' attracted the lowest score meaning that though it has had some adverse effects, banning it will not be the solution. Improving it would be more acceptable as it provides an alternative to those who can't afford the clear beers which are expensive.

From the study, 74% of opaque beer consumers who showed have been taking the beer for a period of 3 years and over with 27% of consumers saying opaque beer on a daily basis.

In terms of factors influencing opaque beer preference, price took the first position with 67% ranking it first as the most important factor in making decision to consume opaque beer. 20% ranked potency and taste as the most important factors. However most people were dissatisfied with the taste with 78% ranking it fifth. Packaging was ranked fourth by 74% of opaque beer consumers.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter summarises the findings of the study and gives the recommendations arising thereof.

The study has revealed that most of the people who consume opaque beer fall between the 18-25 years age bracket and from 42 years and above. The study has also revealed that most opaque beer consumers are males constituting 85% of opaque beer consumers. It has also been revealed that majority (55%) of opaque beer consumers are of primary level of education and most fall between an average monthly income of between sh.0-6000. In terms of occupations most are farmers representing 42% of opaque beer consumers.

From the study, 74% of opaque beer consumers interviewed have been taking the beer for a period of 3 years and over with 35% of the consumers taking opaque beer on a daily basis.

In terms of factors influencing opaque beer preference, price took the first position with 67% ranking it first as the most important factor in making decision to consumer opaque beer. 25% ranked potency of the beer as the most important factor. However most people were dissatisfied with the taste with 78% ranking it fifth. Packaging was ranked fourth by 74% of opaque beer consumers.

However the study also found that opaque beer had brought with it, some adverse effects on the society it is consumed. These effects included people losing their lives, families breaking up, children dropping out of school, families experiencing adverse financial constrains, making people once industrious to be lazy e.t.c. As a result of this, there has been a negative attitude towards opaque beer among the general public. In spite of all these problems resulting from opaque beer, people still felt that the selling of opaque beer should not be banned. This is because, the beer provided a cheaper alternative to those who could not afford clear beers.

The study also reveals that some brands are preferred more than others. These are one's which come in sealed plastic containers. The consumers feel safer consuming these, rather than the one's scooped directly from a 20-litre jerry can.

5.1 RECOMMENDATIONS

For opaque beer to get a wider acceptance and improve on its sales performance, various areas need to be addressed.

In terms of alcohol content it should be reduced. This is because the current level of alcohol in opaque beers (12%) was too high as compared to that of clear beers (4%).

Opaque beer should be delivered in 500ml containers instead of 20 litre jerry cans or any other container, where it has to be drawn from, before being sold to the consumer. The 500ml containers should be glass bottles as opposed to

plastic ones. This would ensure that the consumer gets a safe and hygienic drink and also uplifts his "class" or status in the pub to one equivalent to those taking clear beer.

Other areas recommended for change include changing the taste of opaque beers to a lesser bitter one. Some brands had very dark colours which were not attractive and hence brewers should come up with a more attractive colouring for their beers. Also, the ingredients used in preparing the brews plus the alcohol content of the beer should be indicated on the bottle labels.

Finally, the government should also strengthen its machinery for monitoring the opaque beers which are reaching the consumer, so that standards can be maintained and consumers get quality products. The government should ensure that the brewers comply with the standards set in the foods, drug and chemical Substances Act. Ingredients used should be within the stipulated standards. Also these alcoholic beverages have to be re-tested by the government chemist to ensure their fitness for human consumption and be certified. The factories should also be visited by public health officials from time to time to ensure they are clean.

This is in the face of some brewers sneaking their brands into the market which do not conform to the required standards.

5.2 RECOMMENDATIONS FOR FURTHER RESEARCH

The purpose of this study was to investigate attitudes towards opaque beer and factors which would enhance its sales performance. The study was done in Mathira Division of Nyeri District. However this area may not be truly representative of other areas. Therefore similar studies need to be done in other areas of Kenya where opaque beer is consumed. A comparative study would be necessary to establish if there are any similarities/differences between the consumers' opinions at these other areas.

Further research should also be carried out to determine the strategies adopted by brewers of opaque beer and their impact on sales in the face of the various accusations leveled against the beer.

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TO WHOM IT MAY CONCERN

RE: RESEARCH PROJECT BY 053/0245/98 - MURENE J. WAWERU

The above named is a second year MBA student at the Faculty of Commerce and is carrying out a research project entitled "Investigating Attitudes towards Unmalted Opague Beer and the Factors which would enhance its Sales Performance: A Case Study of Mathira Division".

The information obtained in the course of this project will be used for academic purposes only and will be treated with utmost confidentiality.

Please provide him with the necessary assistance.

Thank you.

Yours faithfully,


J. K. ATHIENYI
MBA COORDINATOR



KENYATTA UNIVERSITY
FACULTY OF COMMERCE
OFFICE OF THE MBA CO-ORDINATOR

TEL: 810901-19 EXT 57215
 FAX: 811455
 EMAIL: AVUKU@NBNET.CO.KE
 24 February, 2000

P.O. BOX 43844,
 NAIROBI,
 KENYA.

TO WHOM IT MAY CONCERN:

98
 98

RE: RESEARCH PROJECT BY D53/8245/98 : MUNENE J. WAWERU

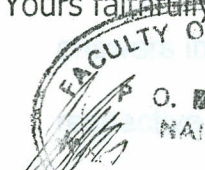
The above named is a second year MBA student at the Faculty of Commerce. He is carrying out a research project entitled "*Investigating Atitudes towards Unmalted Opague Beer and the Factors which would enhance its Sales Performance: A Case Study of Mathira Division*".

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Thank you.

Yours faithfully,


 FACULTY OF COMMERCE
 P. O. Box 43844
 NAIROBI
G.K. ATHERU
MBA CO-ORDINATOR

APPENDICES

APPENDIX II QUESTIONNAIRE

Introduction

The objective of this study is to investigate attitudes towards opaque beer and which areas should be addressed to ensure safety and increased sales for the beer. The questionnaire is intended to collect the necessary data that will assist in the analysis.

Beer has both an economic and social significance in any society. This study is therefore important in that, it seeks to establish policies, that would result in consumers getting a real value for their money i.e. getting a quality and safe beer,

The success of this exercise substantially depends on your cooperation, which is called upon and highly appreciated in advance.

The information collected from this questionnaire will be treated strictly for this academic research.

Interview date: _____

Interviewer: _____

Location: _____

INSTRUCTIONS

Please put a tick in the box provided. Where it is not so, write the answers in the spaces provided. If more space is needed, use the back of the respective page.

SECTION A

Background Information

1. Indicate where you fall among the following age brackets.

0 – 17 (Terminate)

18 – 25

26 – 33

34 – 41

42 – 49

50 and over

2. Indicate your marital status.

Single Married

3. Indicate your sex

Male Female

4. In what category of education level would you fall?

Primary

Secondary

Graduate

Other (specify) _____

5. Among the following occupations, indicate where you fall in.

Teacher

Mason

Carpenter

Business person

Farmer

Driver

Other (specify) _____

6. Indicate your monthly income earnings.

Sh. 0 – 1500 Sh. 4501 - 6000

Sh. 1501 – 3000 sh. 6001-7500

Sh. 3001 – 4500 sh. 7501-9000

Over Sh. 9000

SECTION B

1. Do you take any alcoholic beverage?

Yes No Go to Q. 9

2. Which type of alcoholic beverage do you take most of the time?

Opaque beers(Kairasi, medusa, etc)

Clear beer (Lagers and Stouts)

Wines

Spirits

Other (specify) _____

3. About how frequently do you drink opaque beer?

Everyday

Once a week

About twice a month

About once a month

Other (specify) _____

4. For how long have you been taking opaque beer?

Less than 1 year

1 – 2 years

3 – 4 years

5 yrs and over

5. The table below shows some of the opaque beers sold. Indicate which one(s) you take and whether it is packed in sealed bottles or in 20-litre jerry cans or in both. (use a tick).

Price

Sold in convenient quantities

Packaging

Type	Which one(s) do you consume	Packed in bottles only	Packed in 20-litre jerrycans only	Packed in both
Medusa				
Mezea				
Chairman				
Ngwareini				
Cheers				
Vienna				
Others(specify)				
(i) _____				
(ii) _____				
(iii) _____				

6. Do you take only one brand of opaque beer always?

Yes No Go to 8

7. If yes, what do you do when its out of stock?

Take any other brand available

Postpone drinking until when stocked

Other (specify) _____

8. From the following factors please indicate their order of importance to you in making the decision to consume opaque beer, such that 1 is the most important, 2 follows etc.

Price

Sold in convenient quantities

Packaging

Potency (high level of alcohol content)

Taste

Other (specify) _____

9) What advice would you give in terms, of the following attributes, in order to improve on the sales performance of opaque beers.

a) Price

Should it be

Increased

Remain the same

Decreased

b) Alcohol content

Should it be

Increased

Remain the same

Decreased

c) Package

(i) How should opaque beer be delivered?

20 litre jerry cans

5-litre jerry cans

1 litre containers

500 ml containers

other (specify).....

(ii) What are your reasons?

It can be sold in convenient quantities

It makes it cheaper to the consumer

It is more hygienic

Other (specify).....

(iii) Which of the following two modes of packages would you prefer.

Glass bottles

Plastic bottles

d) Is there any other area you would wish improvements to be done on, to enhance sales performance of opaque beer.

10. From your opinion what has been the main effects of opaque beer in the society you live in. (Indicate as many as you can);

1) and clear beer, I would prefer the clear beer.

2) The high alcohol content of opaque beers should be lowered.

3) There needs to be much improvement in opaque beer packaging.

4) More brands of opaque beer should not be introduced into the market.

5) Selling of opaque beer in glass exposes the consumer to health hazards.

SECTION C

1. For each of the following statements about opaque beer, tick appropriately according to your opinion.

	Agree	Neither Agree Nor Disagree	Disagree
1) Opaque beers are not good substitutes for regular beers (lagers and stouts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Given a choice between opaque and clear beer, I would go for the clear beer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) The high alcohol content of opaque beers should be lowered.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) There needs to be much improvement in opaque beer packaging.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) More brands of opaque beer should not be introduced into the market.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Selling of opaque beer in glasses exposes the consumer to health hazards.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 7) Opaque beer makes people age
faster.
- 8) Opaque beer consumption has led
homes/families to break.
- 9) Since introduction of opaque beers
people have lost their lives because
of it.
- 10) Opaque beer introduction did not
benefit low income earners.
- 11) Most opaque beer consumers are
driven to it by the cheap price.
- 12) The cheapness of opaque beers
have led many people to abuse it.
- 13) Though opaque beer is cheap, its
consumers' have not been able to
save.
- 14) Opaque beer has made some
people once industrious/
productive to be lazy/unproductive

15) Opaque beer consumption has
 brought about adverse financial
 constraints to the families concerned.

16) Introduction of opaque beer has led
 to an increase in the level of
 poverty in the society.

17) Selling of opaque beer should be
 banned.

Phase	Description	Number of Weeks				
i	Proposals					
ii	Adjustments					
iii	Data collection (5 weeks)					
iv	Data coding (6 weeks)					
v	Data analysis (7 weeks)					
vi	Report writing (5 weeks)					
vii	Completion (5 weeks)					

APPENDIX III

TIME – TABLE OF EVENTS

Phase	Description	Number of Weeks											
		1	2	3	4	5	6	7	8	9	10	11	12
I	Pilot study (1 week)												
II	Adjustments (1 week)												
III	Data collection (5 weeks)												
IV	Data coding (6 weeks)												
V	Data analysis (7 weeks)												
VI	Report writing (5 weeks)												
VII	Compilation (5 weeks)												

APPENDIX IV

BUDGET

a) Cost of proposal	Kshs.	Kshs.
(i) Typing and printing 40 pages @ Kshs 25	1,000	
(ii) Printing 2 copies 80 pages @ Kshs. 10	800	
(iii) Binding 3 copies @ 70	210	
(iv) Travelling expenses	1,000	
		3,010
b) Projected Cost of project		
(i) Travelling expenses	4,000	
(ii) Cost of processing data	3,000	
(iii) Typing and printing approximately 70 pages @ Kshs. 25	1,750	
(iv) Printing 4 copies @ Kshs. 10	2,800	
(v) Binding 5 copies @ 1,000	5,000	
		<u>16,550</u>
		19,560
10% contingency		<u>1,956</u>
Total cost		21,516

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