

Effects of Policy Regulation on Alcohol Trade in Kirinyaga County, Kenya

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Abstract: Although governments have absolute obligation to control alcohol trade and enactment of new laws, alcohol trade is still a big issue in Kenya. This article provides the investigation concerning effects of policy regulation on alcohol trade in Kirinyaga West, Kirinyaga County, Kenya. The article adopted the availability theory and single distribution theory pioneered by Single Eric and Sully Lederman respectively. 349 respondents from 38 urban centres in Kirinyaga West Sub County served as a target population. A sample size of 35 alcohol traders was used as respondents of the study. Interviews and questionnaires were used in data gathering. Quantitative data collected was analyzed using descriptive statistics while qualitative data was analyzed into themes and patterns. The study results revealed that issuing of licensing limits; enacting licensing laws and penalties have helped regulate the alcohol trade. Corruption has undermined compliance with alcohol trade policies while police arrests have helped to control the alcohol trade. The study also showed that majority of alcohol traders do not conform to stipulated operating hours while a good number of manufacturers do conform to the requirements of labelling standards. In few cases alcohol is sold to underage persons. The study recommended that County government should educate members of the public and officials involved in alcohol regulation on how to implement enforcement strategies successfully. There should be proper evaluation of licensing policies to ensure they work well in alcohol trade regulation. The government should also carry out interim audits on alcohol businesses to ensure they comply with required policies that would lead to successful alcohol policy regulations.

I. INTRODUCTION

Abuse of alcohol and drugs is one of the most significant problems affecting many countries across the globe. The manufacture and alcohol consumption has been around for centuries and was primarily enjoyed to signify a specific economic, social or political occurrence (Ambler, 2009). Liquor trade has been managed and regulated throughout the history of the United States, and subject to relatively high taxes. The legislative campaign was driven by various urgent interests grounded on public opinion (Duailibi et al., 2010). Over a period, it has established a regulatory framework that enhances orderly as far as liquor trading enforcement is concerned. It also involves encouraging discernment and keeping people safe from serious drinking consequences, restricting the number and type of selling outlets, appropriate drinking age limits, enacting and implementing taxes and other laws to reduce the supply of alcoholic beverages as well as mitigating the risks caused by excessive drinking conduct.

Over the decades, the public has also been enthusiastic about restrictive alcohol trade regulations which have led several states and nations to enact a ban on the selling of intoxicating liquors. It has included not only the manufacture, selling or distribution of liquor but also usage and domestic processing to limit the supply and affordability of alcohol and to mitigate the health issues. A major issue in several countries is to control the commerce in liquor and ensure it's not available to the underage age group (Achieng, 2013). In addition to these rules, the restriction of locations and authorised drinking limit has been set. For instance, in UK through 2003 Legislation Act, the government has created a consent age at 18, and anybody who sells or buys liquor on behalf of an individual below 18 is prone to litigation.

When evaluating a task of a government enforcement entity in drug trade control, Barbor et al. (2010) found alcohol consumption is rooted in Australian tradition as a result it has led to significant medical and social concerns. As per their study, only about one-third of liquor is taken from legalized businesses this is believed to cause a lot of problems. Furthermore, Doherty and Roche (2003), claim that the compliance unit plays an important role in controlling the manufacture, delivery and selling of alcohol in conjunction with the administration. The law enforcement officers may also control the trading of liquor on both legalized and unauthorized sites. In fact, the state has a tremendous chance to eliminate multitude of liquor-related harms by regional administration.

Based on political conditions and state laws, the restructuring of liquor industry in the United States has already been slowly assured and completed. Element of privatization can include allowing beer to be sold in retail stores, granting beer corporations mandate to operate beer store, selling alcohol via bank cards, etc. General policy reports aimed at enhancing US privatization and its effect on liquor business and harmful impacts (Achieng, 2013) are important. On either hand, as per the latest privatization studies in Canada, liquor sales in British Columbia outlets suggest that redistribution raises revenues and challenges. Stockwell et al. (2009), emphasizes that the results depend on the regional combination of newly state owned outlets versus the region's Liquor control areas. So privatizing liquor sales at global level is important.

Consumption of alcohol has ravaged the Kenyan diverse economy, especially in central Kenya. Availability, ccessibility and affordability of cheap liquor have intensified

the rise in binge drinking in this area as well as manufacturing of ancient liquor. The proliferation of such alcohols contributed to the enactment of the Alcohol Drinks Control Act in 2010. According to Lutta, (2016), the legislation was called "Mututho legislation" and aimed to control the country's production, selling and usage of second hand liquor generation. This may have contributed to the creation of the 2012 National Agency for the Anti-Drug Movement (NACADA) Authority to improve public awareness on alcohol and drug abuse by promoting services, recovery centres, and requirements of people with alcohol problem. However, as per NACADA, (2012), the agency also regulated bar starting and shutting hours, and imposed high sanctions for vendors, employers, and producers. The government directed producers to put clear Label on liquor beverages into an attempt to regulate the sale and alcohol intake. In addition, no liquor retail stores would be located anywhere near 300 meters to any colleges and schools and therefore prohibited liquor sales to adolescents or risk a 12-month detention or 150,000 Kshs fine or perhaps both.

There are a lot of adverse effects related to liquor use in Kenya. There is extremely high number of casualties and injuries arising from drug misuse. For reference 2016, World Health Organization (WHO) published a study showing that four out of almost 100 people in Kenya die from liquor addiction. The study was informed by the fact that majority of Kenyans rely heavily on liquor, with 37 per cent of the entire nation taking unhealthy craft beers which are known as Changaa according to Kairu, (2018). Kenya's drug catastrophe is alarming and has influenced nation's Sustainability ideas in terms of health complications and productivity growth both local and at state level.

Despite the implementation of strict guidelines on beer production, distribution, and use, many counties frequently encounter the increase of alcoholism. Kirinyaga is one of the areas which have higher instances of illegal brewing. Kirinyaga is full of all types of unauthorized craft beers that are degrading the livelihoods of its inhabitants. The inhabitants protest about the introduction of harmful beverages in the area and demand the intervention of the government (Daily Nation, 2013). According to the local residents, the illicit beers are produced and sold by rogue merchants to either the local bars, many of whom produce their beverages over the night and deliver them to partying pubs as stated by Githinji, (2016). The teenagers have already converted substance abuse into a 24/7 issue. As a result, Kirinyaga County's economy stagnates as a lot of middle aged people don't have a job.

In response to the above, the Kirinyaga local government passed The Kirinyaga County Alcoholic Drinks Control Act, 2014; a new legislation on alcohol that focuses on enabling county administrative units like security to prosecute dealers as well as producers of illegal beverages. The legislation was intended to reduce the number of casualties due to abuse of alcohol in Kirinyaga County. The new legislation also

stipulates that no liquor can be sold unless the county government has approved the producer as well as the retailers. According to Kamau, (2014), Former Governor Joseph Ndathi in his reign approved this law requiring the factories to obtain license from county government and NACADA. The new policy restricted the sale of fizzy drinks in plastic containers, as well as aiming to limit the amount of alcohol distribution stores (Kamau, 2014). Generally speaking, the legislation focuses on promoting reasonable and fair trade by issuing permits and controlling the production, selling, delivery, consumption, and public alcohol ads so as to encourage wellness, personal, and economic growth.

Problem Statement

In a study executed by Richter, Vaughan and Foster (2004), with regard to public opinion on underage drinking guidelines, it revealed that there's an extensive help from the general public in regard to the of sale of liquor to persons under the age of 21 years. The workout concerned a cell-phone research of about 900 participants of age 21 years and above throughout the USA in 2001 between the month of March and April, however the research lacks an evaluation of how licensing, legislation, and compliance with regulations dictate liquor business control.

Likewise, a survey in an attempt to assess the public opinion of a variety of drug regulation laws being proposed in some of the regions of the United States revealed that certain measures were endorsed by a majority of the population (Wagenaar et al, 2000). Strategies that concentrated on liquor promotion and ads, high liquor taxes, burn binge drinking in public areas, and delivery service earned massive public support. At the other hand, legislation involving a universal 21-year prohibition age and government control of liquor states earned extensive public support. The research study was done via phone interviews with 7021 respondents in USA. While it does not include regulatory strategies, the report is insightful on the drafting of drugs policy and public engagement.

When investigating liquor overdose interpretation, Reis (2007) engaged 217 participants, mainly campus teenagers. The study sampled 25 respondents who failure was due to poor timing, and 191 who had a reason for poor decisions. The findings indicated that people with a bad luck ascribing liquor were less likely to continue to change. Therefore, the study proposed proactive training programs to help teenagers discourage binge drinking. In a related study, Beck et al. (2008) the study showed a major association between intoxication for social facilitation with violations of accommodation and driving while drunk. In regard to the above, they proposed liquor-free scheduling that would fulfil the use of togetherness and control of emotional effects that would minimize liquor-related issues. This research is insightful in regard to alcohol control though it does not focus on enforcement and compliance with standards as determinants of alcohol trade regulation.

In his analysis of factors impacting implementation of misconduct and compliance strategies, Lutta, (2016), claims that bribery is really the primary factor affecting the enforcement of liquor trade regulatory policies. 50.8 per cent claimed that bribery hinders the enforcement of alcohol trade regulatory policies the study also found that 20 per cent of enforcement personnel obstructed policy other causes, such as deprivation, had a substantially lower impact. The study supported reducing bribery notably within the police unit. The report, however, under look compliance with the policies as a factor of alcohol trade regulation.

County administration has a major impact on the sale and consumption of liquor. Kirinyaga County has developed policies compacting liquor production and consumption in line with the NACADA Agency whose function is to facilitate the monitoring, mitigation, and reduction of alcoholism in Kenya. According to NACADA (2012), kids in remote areas are more likely than metropolitan peers to participate in alcohol intake early in life. The Agency also stresses the importance of enforcement since law can't efficiently prevent liquor and drug abuse. The Agency also promotes public awareness via studies and literature materials (NACADA, 2012). In Kirinyaga County, the trouble of liquor business and consumption is rife, with such a large number of people especially the young participating in slightly earlier-age alcohol intake. The question of the county's liquor business is exacerbated by the demand, affordability, and product supply. Even after devolution, alcohol abuse is still on increase this poses several concerns as to what functions the county government authorities perform in governing alcohol trade. The research attempted to examine effects of policy regulation on alcohol trade in Kirinyaga County. This report centred on licensing, enforcement, and compliance with requirements in regard to regulating the alcohol trade.

Theoretical framework

This study used availability theory and single distribution theory. In the year 1988, Single Erick offered a detailed account of three inter-related yet separately identifiable suggestions of availability theory as it was understood then. First, increase in the availability of alcohol consumption in the society leads to an increase in the overall average intake by the residents (Single, 1988). Second, increase in the average of alcohol intake in a population resulted into increase in the number of heavy drinkers. Thirdly, heavy drinking results in adverse social and health effects, increases the number of heavy drinkers in the population.

Since then, Stockwell and Gruenewald (2004) have further developed the primary idea of availability theory to incorporate the ways in which availability changes may affect different drinking groups in regards to other impacting factors. Stockwell and Gruenewald (2004) proposed availability theory by highlighting that, increased alcohol availability in the community will increase mean intake of the population when these changes lower alcohol price, for example, real price of alcoholic drinks in the retail plus the convenience

costs of purchasing them. Therefore, Stockwell and Gruenewald (2004) concluded that high availability of alcohol has no impact on increased alcohol intake. Instead, it is increased availability that results in real change in full price of alcohol that will result in increased intake. In this regards, only attempts to lower availability which impacts a range of factors influencing full price of alcohol have the ability to decrease consumption (Chikritzhs et al., 2007). Therefore, while regulating availability of alcohol, it is essential to consider these factors. A basic assumption of economic states that, an increase in price of the consumables has an effect of reducing quantity demanded keeping other things constant. An increase in cost of product demanded varies across a broad range of elasticity among different consumers (Schmidt & Popham, 2008). Nonetheless, tax increment or general reduction in availability of alcoholic drinks ought to lower the overall alcohol intake among the drinkers. Alcohol trade is sensitive to the market factors such as availability and price.

Indirect evidence supporting impact of market forces to frequency of heavy drinking is based on the analysis of distribution of alcohol intake. For a segment of alcoholics with insensitive drinking behaviours to alcohol-related characteristics of their socio-economic condition, then it is expected that amount of alcohol taken by approximate 10% of the heavy drinkers to have less impact to the drinking routines of the remaining population. According to the Ledermann's studies on distribution of consumption, there is a precise correlation between the per capita intake and the number of drinkers taking excess of the specified amount, for example, three-ounce pure alcohol per day (Skog, 2006). The existence of distribution law as per Ledermann was surveyed and a great variation was found with regards to average consumption. Therefore, Ledermann concluded that virtually and sufficient essential condition for regulating the amount of heavy drinking in the community would be achieved through reduction of per-capita consumption. Bruun et al. (2009), argue that for government to reduce the number of heavy drinkers, it needs to invest in reducing the total intake of alcohol. If consumption distribution is greatly skewed, a significant amount of the total amount drunk by the population is taken by the heavy drinkers, in way that sizeable decrease in the overall intake will not be prevalent without reduction in consumption of some heavy drinkers. The level of drinking of the relatively and typically extreme alcoholics are aware of many of the same legal, cultural, and socioeconomic forces since it affects other consumers. This correlation between the 95th-percentile and median consumption has a strong probability enough to enhance consideration in implementation of policies.

II. LITERATURE AND EMPIRICAL REVIEW

Regulation on Alcohol business

Moore et al. (2010) highlights that licensing system assumes critical role in regulating and empowering other regulatory and enforcement agencies to determine traders who are

permitted by the state to engage in alcohol trade. In another study to determine significance of laws and policies in relation to alcohol trade in Brazil, Duailibi et al. (2007), found that restriction of opening hours had a positive impact as it led to reduction of homicides. The research found that the number of homicides when opening hours were set at 24 hours was very high in comparison to when alcohol sale was prohibited from midnight to 6 a.m. The officers play a significant role in restricting and controlling availability of alcohol to the public (Rehm et al., 2001). The administration enforcement department should on the other hand be accountable. In support of this, Partanen (2009), says that strict laws cannot bear any fruit where there is massive corruption. The knowledge on regulation and control of alcohol trade may effectively and efficiently limit or restrict alcohol trade.

Alcohol Licensing

The licensing fee comprises of a small percentage of the product or services sold (Doherty & Roche, 2003). Licensing helps the business to gain an upper hand and tap into existing production, distribution, and marketing systems those other organizations may not access. Licensing allows only legit traders and puts off harmful traders in the market (Chikritzhs et al., 2007). Across the world, in different countries there are different department and agencies involved in licensing of alcoholic drinks. In Oregon, for example, the Oregon Liquor Commission (OLCC) controls and regulates trade and consumption of alcoholic drinks (Oregon, 2019). Otherwise, the general classifications covered under the licensing laws includes when, where, how the liquor is served, and to whom it might be served. According to Triangle Accounting (2018), it is common in USA to have other restrictions in restaurants and alcohol outlets such as drink limits per customers. In trying to seek public opinion on the wide range of laws and policies in different states, Wagenaar et al. (2000), revealed that majority of the public were in support of licensing. License or policies relating to advertising and marketing of alcoholic drinks and ban of alcohol in different public places had high approval rates.

The government regulates many industries or business on regular basis to oversee their activities in a measure to ensure they produce and sell products and services that have no significant harmful effects to financial wellbeing, human health, or community structure (Bruun, 2009). According to The Kirinyaga County Drinks Control Bill of 2014, a person or business entity intending to produce or trade alcoholic trade in Kirinyaga County or seeking to operate an alcohol establishment should make application for license according to the County Liquor Licensing Committee in the sub-county seeking to establish the business at a prescribed fee (Kamau, 2014).

The regulations help the government to weed out criminal or undesirable activities in the market that undercut honest industries. In support of this, Lutta (2016), points out corruption as a rampant issue in Kenya. Corruption of the

officials is a big issue in the development and wellbeing of many counties in Kenya. However, according to research study by Lenk et al. (2014), assessing the state and law enforcement agencies and their strategies for enforcing laws regulating the sale of alcohol to drunken clients at licensed outlets and noted that sale of alcoholic drinks to intoxicated customers was high on licensed alcohol outlets. In spite of the difficulties, the Liquor Licensing board has had a big role in regulation of alcohol trade in Kirinyaga County. For instance, according to the Standard Digital reports by Munene (2018), the Board has exploited the loopholes to license bar owners even in areas or building that do not qualify to operate as liquor outlets business. According to the board administrators, the board has managed to reduce the number of liquor outlets from 1400 to 700 (Munene, 2018). The Board has also declined the application brewing licenses since Kirinyaga County has banned production and trade of second-generation liquor. In 2015, the board managed to close 12 factories which brewing second generation alcohol after an uproar from the residents.

Enforcement on Alcohol trade

Kenya's law on alcohol such as The Alcohol Drinks Control Act, 2010 seeks to regulate and control production, sale, distribution, and consumption of alcohol in the country. The act was also enacted with the need to control sale of alcoholic drinks to underage persons, promote public awareness by educating the citizenry on the effects of consumption of alcohol and provision of rehabilitation facilities the victims (NACADA, 2012).

In the study on the Alcoholic Drinks Control Act 2010, Achieng (2013) highlights that in spite of the Alcohol and drinks Control Act among other laws regulating alcohol trade in Kenya, there is still huge cases of alcohol consumption before 2pm which is considered most productive hours in a day. In support of this, Gathura (2015) notes that despite the Alcoholic Drinks Control Act 2010 otherwise known as Mututho laws, a significant number of Kenyans consumed alcohol and even exposing youths and their children as a result of affordability and availability of cans and non-returnable bottles. Even so, war on illicit trade is still a big issue in Kirinyaga as a result of corruption and reluctance of the officials (Munene, 2016). For instance, the Licensing officials receive bribes from the alcohol establishment operators. According to Muriithi (2018b), three assistant chiefs in Thaita, Kianjege, and Ndui-ini are thought to be collaborating with the brewers. The Central commissioner held a crackdown operation in all illicit liquor selling outlets that led to dismissal of at least 17 chiefs and assistant chiefs working with the brewers. The county government works hand in hand with the local administrators to fight cartels that engage in manufacturing and selling of second-hand alcohol in Kirinyaga County in an effort to protect the younger generation from being wiped by illicit brews (Muriuki, 2016). The county government of Kirinyaga has enacted strict laws to tighten licensing of alcohol selling outlets as a way to

regulate alcohol trade in the county (Kamau, 2014). The laws have also enabled the county administrators to close thousands of bars as well as closing production factories. In relation to the Alcoholic Drinks Control Act of 2010, the county government enacted the Kirinyaga County Alcoholic Drinks Control Bill of 2014 that helped in tightening of licensing and dealing with corruption throughout the alcohol trade business (Standard Team, 2013). Doherty and Roche (2003), argues that in addition to protection and responding to manifestation of harmful activities such as assaults, crime, theft, and domestic violence, police assumes a significant role regulation of alcohol and drug trade.

The police department has been committed to controlling alcohol trade through patrol and working with the local authorities to curb illicit brews (Martin, 2013). Through the help of police officers, Kirinyaga County has taken a big step in regulating alcohol trade including arresting the county officials, Local authorities, and bar operators who collaborate or engage in production and distribution of second generation liquor against the laws (Muriithi, 2018a; Kamau, 2018). The police also help to enforce laws relating to licensing of alcohol trade. Additionally, according to The Kirinyaga County Alcoholic Drinks Control Bill of 2014, police officers help in licensing processes, for example, in determining which business should have license to sell alcohol. The law enforcement unit works hand in hand with the court to administer justice in timely, fair, accessible and accountable way, upholding the rule of law, as well as protecting the constitution (Njenga, 2015). The contribution of community in administration cannot be ignored seeing that they have crucial ground information (Lenk et al., 2014). In collaboration with the local administration and police departments, county government can effectively regulate alcohol trade in the county.

Conformity with Requirements on Alcohol trade

The manufacturer or importers are bound by the law to ensure they conform to the safety standards that play a critical role in the manufacture and design of products, testing, maintaining safety, as well as evaluating to the conformity to requirements. Standards entail normative documents designed and drafted by a recognised body, or organization to provide guidelines for practices (Tukes, 2016). Standards increase safety and compatibility of products and services, protect the environment and consumers, and also enhance domestic and international trade (Tukes, 2016). The government of Kenya has established Kenya Bureau of Standards (KEBS) as the statutory body to ensure safety and quality of imported products, protect Kenyan producers from unfair competition, and ensure that domestic manufacturers meets the set regulations.

According to Kamau (2014), in an effort to ensure safety in alcohol trade, the County government of Kirinyaga enacted Kirinyaga Drinks Control Act of 2014 that will restrict the manufacturers and distributors from selling alcohol without

licenses from the county government upon getting a permit from NACADA. According to the Alcohol Drinks Control Act of 2010, the manufacturers of spirituous liquor such as Changaa are permitted do so but should conform to the requirements and standards of the requirements. In this regards, therefore, the Act has allowed them to remain in business as long as they obtain licenses from the licensing bodies. This follows rites and frictions between the manufacturers and the local authorities. For instance, according to Muriuki (2016), in the fight against illicit brews, chiefs in Laikipia west received death threats as they were interfering with their source of income.

The Alcohol Drinks Control Act of 2010, stipulates that any person violating the Act in relation to manufacture, distribution, and sale of alcoholic drinks commits an offence that attracts for a fine of at least two million shillings or five years' imprisonment or both (Achieng, 2013). According to Daily Nation reports, through the NACADA the public health officials and law enforcement units have the powers to impose Kshs 10 million fines or imprison the offenders for five years upon production of illicit brews (Munene, 2013). Following this directive factory owners and distributors of illicit brews will face stiff penalties. In collaboration with the enactment of the Kirinyaga Drinks Control Act of 2014, NACADA officials and police officers have joined hands to undertake crackdown of liquor outlets violating liquor laws.

III. RESEARCH METHODOLOGY

The study utilized descriptive research design in regard to Kombo and Tromp (2006) where he highlights that descriptive research design is mostly preferred when the research intends to show a description of the phenomenon. The study targeted a population of 349 alcohol traders located in 38 urban centres distributed as Kiine ward (166), Mukure ward (90), and Kariti ward (93) in Kirinyaga West Sub County. According to Mugenda and Mugenda (2003), when the study population is less than 10,000, a sample size of between (10-30%) is a good representation of the target population and hence 10% which is 35 alcohol traders was adequate for the analysis and was selected through snowballing sampling method. Interview guide and self-administered questionnaires were used in data collection. The instruments of study were tested for reliability and validity before use. Ethical considerations were ensured during data collection. Quantitative data was analysed via descriptive statistics and findings presented in form of frequency and percentages while qualitative data was presented in form of thematic analysis.

IV. RESULTS AND DISCUSSION

The study involved 35 respondents where only 32 questionnaires were successfully filled and returned for analysis.

Table 1: Distribution of respondent's background information

Gender of respondents	Frequency	Percentage
Male	24	75%
Female	8	25%
Age of respondents		
18-35	2	62.5%
36-55	10	31.25%
Above 55 Years	20	6.25%
Marital status		
Single	7	21.88%
Married	17	53.13%
Divorced	6	18.75%
Widowed	2	6.25%
Level of education		
Primary school certificate	11	34.4%
Secondary school certificate	15	46.9%
College level	4	12.5%
University level	2	6.3%
Respondent's Occupation		
Employed	8	25%
Self employed	8	25%
Part-time	13	40.63%
Retired	3	9.375%
Respondent's Monthly Income		
Less than Ksh 15,000	15	46.9%
Ksh 15,000-30,000	9	28.1%
Ksh 30,000- 50,000	4	12.5%
Above Ksh 50,000	4	12.5%

According to the results, 75% of the respondents were male while 25% were female respondents. The findings indicate that 62.5% were between 18-35 years of age, and 31.25% were between 36-55 years of age while 6.25% were above 55 years of age. The result shows that the majority of the respondents were between 18-35 years making up to a 62.5%. The results about marital status show that majority of the respondents who constitute of 53.13% had families, 21.88% were single, and 18.75% were divorced while 6.25% were widowed. According to the results, majority of the respondents 53.13% are married. On level of education majority of the respondents 46.9% had attained secondary education, 34.4% had attained primary education, and 12.5% had attained college education while 6.3% had attained university level of education. The results on occupation indicate that majority of respondents (40.63%) worked part time, 25% of respondents were both employed and self-employed respectively while 9.375% had retired from their

working institutions. The results on earnings indicated that, 46.9% earned less than Ksh. 15,000 per month, 28.1% earned between Ksh 15,000-30,000 per month while 25% earned Ksh earned 30,000 and above.

Table 2: Consumption of alcohol

Alcohol Consumption Profile	Frequency	Percentage
Number of alcohol consumers	7	21.88%
Number of non-alcohol consumers	25	78.13%
Location of alcohol intake		
Bars	25	76.9%
Village alcohol producers	7	23.1%
Frequency of alcohol consumption		
Everyday	18	57.69%
Once per week	9	26.92%
Once per Month	5	15.38%

The results indicate that the majority 78.13% agreed that they take alcohol while 21.88% agreed that they do not take alcohol. The results also indicate that 62.5% of respondents consumed alcohol from local bars while 18.8% consumed alcohol from village alcohol producers while 57.69% agreed that they consume alcohol every day, 26.92% consumes alcohol once per week while 15.38% consumes alcohol once per month.

Regulations on alcohol trade

The results of this variable was obtained according to the Likert scale of 1-5 which indicates 1-strongly disagree, 2-disagree, 3-average, 4-agree, 5-strongly agree.

Table 3: Regulations on alcohol trade

Statement	Mean	Standard deviation
Regulations on alcohol trade	3.7188	1.19770
Licensing of liquor outlets	3.5938	1.10306
County government agencies and licensing of liquor industry	3.2813	1.22433
Issuing of licenses and regulation of alcohol trade	3.8125	.85901
County government agencies and administration of liquor licenses	3.0313	1.12119
Liquor licensing process	3.5000	1.16398
Licensing and alcohol trade	3.1250	1.15703
Enactment of alcohol licensing laws and trade in illicit brews	3.6250	1.12880
Penalties and alcohol regulation	3.5625	1.04534
Licensing policies and public awareness	4.4063	.79755

The results indicate that regulations of alcohol trade works properly since 68.7% of the respondents agreed with the statement with a mean of 3.7188 and a standard deviation of 1.19770. The results correlate with the results of Moore et al.

(2010) that licensing system performs a critical role in regulation and empowering of regulatory agencies of the alcohol trade. The results indicate that most of liquor outlets are licensed and most of the respondents have information about licensing regulations in Kirinyaga County which is confirmed by a mean of 3.5938 and a standard deviation of 1.10306. However, the results correlate with the study of Chikritzhs et al. (2007) that majority of alcohol traders are licensed in order to operate legally and put off harmful products that can enter into market, backed up by interview with a member of county alcohol licencing committee on alcohol trade licensing he noted that,

“Upon the grant of a licence through payment of prescribed fee, then the alcohol trade is deemed to be operating legally”

A mean of 3.2813 indicates that most of respondents do not know that county government agencies are effective in licensing of liquor with a standard deviation of 1.22433. According to the results, issuing of licenses is effective and has helped as far as regulation is concerned which is shown by a mean of 3.8125 and a standard deviation of .85901. A mean of 3.30313 indicates that respondents had diverse responses and it is not clearly whether county government agencies have ensured fairness in administration of liquor licenses, a case which is supported by a standard deviation of 1.12119. However, according to the study by Partanen, (2009), some of factors that may lead to lack of effectiveness and fairness in implementation of policies is presence of corruption. A mean of 3.5 and a standard deviation of 1.16398 shows, that there is effectiveness in licensing process of alcohol trade in Kirinyaga County. According to the results, a standard deviation of 1.1570 and a mean of 3.1250 shows that respondents were not sure whether licensing has made any impact in manufacturing, distribution or sale of alcohol trade in Kirinyaga County. A mean of 3.5625 and a standard deviation of 1.04534 shows that respondents supported that use of penalties have helped to regulate alcohol trade in Kirinyaga County. A mean of 4.4063 agreed that majority of public are aware of licensing policies with a standard deviation of 0.79755 shows that respondents had almost close responses which supports the results that public is aware of policy regulation towards alcohol trade in Kirinyaga County. The study is backed by the study of Munene (2018), Kirinyaga County alcohol licensing board banned production and trade of second generation liquor thus ensuring all operating bars and factories have valid licenses.

Table 4: Enforcement on alcohol trade

Statement	Mean	Standard deviation
Enforcement policies and alcohol sale	2.9688	1.03127
Enforcement role and transparency	3.5000	1.10716
Severe punishments on sale and distribution of alcohol	3.2188	1.26324
Enforcement and public safety	3.4375	1.10534
Police arrests and regulation of alcohol trade	3.4688	1.24394

Public participation and enforcement of alcohol policies	2.6250	1.15703
War on illicit brew	3.5938	1.13192
Personnel and alcohol enforcement	3.5000	1.19137
Enforcement departments and accountability	3.9375	.91361

A mean of 2.9688 and a standard deviation of 1.03127 shows that alcohol is not sold at the right time and to the right person. Therefore, the results show weakness on the side of authorities in ensuring alcohol is sold at the right time to the right persons. These results contrast with the results of the study by Duailibi et al, (2010), where he found that regulation of opening hours had a positive impact on regulation of alcohol trade in Brazil. According to the results, a mean of 3.5 and a standard deviation of 1.10716 indicate that respondents were not sure whether corruption has undermined enforcement role as well as regulation measures on controlling alcohol trade in Kirinyaga County. These results are supported by the study of Lutta, (2016) that corruption has major negative impacts on regulation of alcohol trade a case which may be so in Kirinyaga County. A mean of 3.2188 and a standard deviation of 1.2632 shows that respondents were strongly neutral on whether severe punishments for alcohol have reduced sale and distribution of alcohol in Kirinyaga County. According to the results, a mean of 3.4375 and a standard deviation of 1.10534 shows that respondents were not sure whether enforcement has enhanced public safety. This indicates that enforcement is essential if the right implementation is taken to ensure that the public is aware on how to abide to the current policies. In support of this, the study by Doherty and Roche (2003) states that enforcement policies have enhanced protection from assaults crime, poor hygiene practises, theft and also reduction in domestic violence in regard to alcohol trade.

The results with a mean of 3.4688 and a standard deviation of 1.2439, shows that police arrests may have helped in alcohol regulation in Kirinyaga County. Even though a mean of 3.4688 shows neutral, the results can be supported by the findings of Munene (2013) that public health officials and law enforcers have been granted a right to arrest and fine alcohol law breakers Kshs 10 million or imprison the offenders for five years, a case that has increased strength in regulation of alcohol trade in Kirinyaga County. The results with a mean of 2.6250 and a standard deviation of 1.15703 indicate that there is minimal public participation in enforcement of alcohol policies in Kirinyaga County, a case that may lead to failure of alcohol regulation in the county. However, the research by Lenk et al. (2014) shows that community participation in alcohol regulation cannot be ignored since they provide crucial information in alcohol regulation. The results with a mean of 3.5938 and a standard deviation of 1.13192 indicate that war on illicit brew is still a big issue in Kirinyaga County. The fight against illicit brew is not only a major issue in Kirinyaga County but also in some of other counties in Kenya. For example, according to Muriuki (2016), chiefs in Laikipia

County received death threats since they interfered with illicit brews which were a main source of income for some people in the county. The overall mean of the results was 3.5000 and a standard deviation of 1.19137 which indicates that there may be enough authorised personnel for enforcement in the county. When the Sub county commissioner in Kirinyaga West was asked to comment on the enforcement personnel, he said

“We have been engaging police, chiefs, assistant chiefs and headmen in the ground to ensure that enforcement of alcohol regulation are adhered and they have been doing a good job.”

An overall mean of 3.9375 and a standard deviation of 0.9136,1 shows that enforcement departments have enhanced accountability in enforcement of alcohol trade in Kirinyaga County. The results of the study can be further supported by the research done by Kamau (2014) which states that Kirinyaga County government has enacted Kirinyaga Drinks Control Act of 2014, which its main aim is to restrict manufacturing and distribution of alcohol, a case that have promoted accountability of the alcohol agencies and authorities.

Table 5: Conformity with Requirements on alcohol trade

Statement	Mean	Standard deviation
County government agencies and conformity	4.0625	.71561
Standards and requirements for alcohol trade	3.6875	1.09065
Programs on regulation of alcohol trade	3.6563	1.12478
Assessment on alcohol trade businesses	3.0938	1.25362
Alcohol traders and trading business hours	2.8125	1.20315
Alcohol businesses location and learning institutions	3.5313	1.16354
Alcohol sale and intoxicated persons	3.6563	.90195
Alcohol manufacturing and labelling standards	3.9063	.96250
Alcohol trading on under age persons	4.0625	.75935
Hygiene in alcohol selling outlets	3.2188	1.26324

An overall mean of 4.0625 and a standard deviation of 0.71561 shows that county government agencies in Kirinyaga has enhanced conformity with requirements, a case that has helped in alcohol regulation in the county. The results are supported by the research conducted by Munene (2013) where he found that Kirinyaga Drinks Control Act of 2014 managed to close 14 bars in Ngurubani town in Mwea East sub County due to violation of alcohol regulations and policies. The results from an interview with a member of county licensing committee have also confirmed the following:

“All individuals intending to engage in alcohol trade must ensure the available premises are suitable in regard to the nature of licence sought, premises must conform to the prescribe requirements of the health and safety regulation; the applicant possesses the infrastructure and necessary equipment to carry out the business applied and premise

should have sufficient number of competent staff in line with norms as prescribed”

Therefore, these results correlate with the study of Kamau (2014), which shows that Kirinyaga County government was able to enact a body to ensure manufacturing, packaging and promotion standards are done in accordance to Alcohol Drinks Control Act of 2010 thus meeting requirements shown by ISO 9001. An overall mean of 3.6563 and a standard deviation of 1.12478 shows that programs have been initiated to regulate alcohol trade in Kirinyaga County. The results of the study are supported by the findings of Martin (2013), who found that police department in Kirinyaga County has been given a mandate together with community members to regulate alcohol trade, where in one case the police managed to recover and destroy multiple litres of brews. An overall mean of 3.0938 and a standard deviation of 1.25362 indicate that respondents were not aware whether there is consistent assessment of alcohol trade businesses in Kirinyaga County. Through an interview in regard to assessment role, a police officer said that,

“I do not understand how the county government has planned assessments to ensure conformity, but when called upon or when needed to do so by our seniors we respond accordingly, sometimes we collaborate with health officers, chiefs and local authorities who support us to carry out the exercise”

An overall mean of 2.8125 and a standard deviation of 1.20315 indicate that majority of alcohol traders do not adhere to stipulated trading business hours, which causes vacuum in policy regulations in Kirinyaga County. Despite the alcohol businesses operating in wrong trading hours, a research by Gathura (2015) shows that Alcoholic Drinks Control Act 2010 known by Mututho law only allow alcohol trading businesses to operate from 5 pm in the evening upto 11 pm. An overall mean of 3.5314 and a standard deviation of 1.1654 indicated that almost businesses are located 300m away from learning institutions, even though the data shows that some may be located nearer than that, a case which is contrast to alcohol regulation policies. These results correlate with the results of the study of Grubescic et al., (2012), that alcohol businesses should be located 300m away from learning institutions. An overall mean of 3.6563 and a standard deviation of 0.90195 indicate that there are average cases of alcohol sale to intoxicated persons in Kirinyaga County. This correlates with the study of Gathura (2015) which found that due to strict Mututho laws, alcohol manufacturers have come up with a more innovative way of packaging which allows people to purchase alcohol for home consumption, a case that increases alcohol sale to intoxicated persons.

The results with an overall mean of 3.9063 and a standard deviation of 0.96250 indicates that manufacturers conform to labelling standards in Kirinyaga County. This correlates with the study of Gathura (2015) which shows that alcohol traders observe labelling standards. According to the results, a mean of 4.0625 and a standard deviation of 0.75935 indicate that

traders in Kirinyaga County do not sell alcohol to under age persons, a case that shows there is obedient to policies concerning alcohol sale to underage in the county. According to the results, a mean of 3.2188 with a standard deviation of 1.26324 indicates that hygiene is not highly maintained within alcohol selling outlets as expected since a large number of respondents were unaware and disagreed with the statement. However, the research by Kamau, (2014) shows that hygiene is important in alcohol drinking locations where all alcohol traders are required to get a permit from NACADA and from county department of public health.

V. CONCLUSION

The results of this research exposed that enforcement; licensing and conformity with requirements had higher effects on the regulation of alcohol in Kirinyaga County. The respondents of the study who included alcohol traders, members of licensing board, chiefs, police and members of public indicated that they have adequate knowledge on regulation policies on alcohol trade in Kirinyaga County. The results also indicated that licensing, enforcement and conformity with requirements are effective policies and would lead to effective regulation of alcohol trade if they are employed adequately.

VI. RECOMMENDATIONS

Based on the findings of the research that licensing, enforcement and conformity with requirements as regulation policies have effect on regulation on alcohol trade in Kirinyaga, the following recommendations on alcohol trade are essential in order to improve alcohol trade and prevent alcohol negative impacts in the society. Various agencies such as County alcohol regulation board, administration department and community policing committee should work together in order to implement good strategies and resolution in order to ensure all policies are effective for alcohol regulation in Kirinyaga County. (1) There should be proper evaluation of licensing policies to ensure they work well in alcohol trade regulation. (2) The government should educate members of the public and officials involved in alcohol regulation on how to implement enforcement strategies successfully. (3) The government should also carry out interim audits on alcohol businesses to ensure they comply with required policies that would lead to success in alcohol policy regulations.

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