

**SOCIOECONOMIC ANALYSIS OF ‘KATIKALA’
PRODUCTION AND CONSUMPTION IN ARSI-NEGELE
WOREDA OF OROMIA REGION, ETHIOPIA**

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Acronyms

AAU- Addis Ababa University

AIDS- Acquired Immuno Deficiency Syndrome

ANCEDA- Arsi-Negele Concern for Environment and Development Association

CHD- Coronary Heart Disease

DFID- Department for International Development

FDRE- Federal Democratic Republic of Ethiopia

GDP- Gross National Product

HIV- Human Immunodeficiency Virus

HH-Household

HHH- Household head

MoARD- Ministry of Agriculture and Rural Development

NGOs- Non Governmental Organizations

SNNPRS- Southern Nations Nationalities People Regional State

UNDP- United Nations Development Program

WDR- World Development Report

WFS- World Food Summit

WHO- World Health Organization

Abstract

This is a socioeconomic analysis of katikala production and consumption in Arsi-Negele woreda of Oromia region. Production and consumption of alcohol in general and katikala in particular have benefits and problems. Hence the main objective of the study was to assess the socioeconomic benefits and problems of katikala production and consumption in that locality.

Multiple research methods: household survey, observation, key informant interviews and focus group discussions were employed to gather both quantitative and qualitative information on the production and consumption of katikala. This information was analyzed and discussed, and it was found that katikala production and consumption has both benefits and problems. Some of the benefits of katikala production are income generating and employment creation. On the other hand katikala production has problems such as health problems mainly due to indoor air pollution, and poor educational performance of students or school drop out because of time competition and high labor demand. It was also found that katikala consumption has benefits to colorfully celebrate cultural festivals, and problems such as poverty, unemployment, family disorganization, and crimes & accidents.

Therefore based on the findings of the study it was concluded that both katikala production and consumption had benefits and problems. However since the extent of these benefits and problems are highly subjected to time. Meaning since katikala production is the main or supplementary means of livelihood for respondents; the benefits outweigh the problems currently. But katikala production and/or consumption have long term problems like chronic health problems and environmental degradation through deforestation due to high consumption of fuel wood which outweighs the benefits in the long run. Thus the study has recommended a short term and long term plans to maximize benefits and minimize or avoid problems.

Chapter 1 Introduction

1.1 Background

This is a socioeconomic analysis of katikala production and consumption in Arsi-Negele woreda. The socioeconomic benefits and problems of katikala production and consumption would have been examined in this study.

Katikala is a traditional alcoholic beverage produced and consumed in different parts of Ethiopia. According to Zastrow (1996), alcohol is a colorless liquid in beer, wine, brandy, whiskey, vodka, rum, and other intoxicating beverages. The type of alcohol found in beverages is ethyl alcohol / ethanol. Many drinkers believe that alcohol is a stimulant as it seems to facilitate interpersonal relationships, and usually leads those who have a few drinks to talk more. It is, however, very definitely a depressant to the central nervous system, as its chemical composition and effects are very similar to those of ether. As a result, alcohol slows mental activity, reasoning ability, speech ability, and muscle reactions. It distorts perceptions, lessens coordination, and slows memory functioning and respiration.

In many countries there are beverages which either fall outside of the usual beer, wine and spirits categories or which are traditionally produced at the local level, for example, in villages and homes. This kind of production seems especially common in many African countries, where a wide variety of different beverages can be found. Many of these are produced by fermentation of seeds, grains, fruit, and vegetables or from palm trees (WHO, 2004).

In Ethiopia, being one of African countries, different types of traditional alcoholic beverages such as Tella, Korefe, Shamit, Tej, and katikala are produced and consumed. Katikala production process and consumption patterns are described by Selinus as follows:

Katikala is a distilled beverage. Ground gesho leaves and water are kept for three to four days and after that a kita (i.e., bread) made up of teff or other cereals and

germinated barley or wheat is added. The mixture is allowed to ferment for five to six days and then distilled. In the villages distillation is carried out with primitive equipment made of gourds and wood. Katikala is brewed in rural and semi-urban areas and is used more commonly by farmers and semi-urban dwellers than by people who live in the cities. In cities, those who drink katikala are predominantly lower class people or those who have become dependent upon alcohol and cannot afford to buy industrially produced alcohol (Selinus, 1971:16).

1.2 Statement of the problem

Katikala production is assumed to have benefits and problems on the producers and town municipality of the study area. The previous studies found that the production of alcohol in general and katikala in particular has benefits. According to Little (1989), the promotion, production and sale of alcoholic beverages are a big business. The global alcohol market has been estimated to roughly \$170 billion, about \$ 40 billion of which is in the United States. As any one can readily see from television, newspapers, magazines, and highway billboards, this industry aggressively advertises its products. As a result people often drink to get rid of unwanted emotions, including loneliness, anxiety, depression, feelings of inadequacy, insecurity, guilt and resentment, and to lubricate social relationships which creates a good market.

In many countries alcohol is an important source for raising government revenue and therefore, an established target of taxation. In the former Soviet Union ,for example ,excise tax on alcoholic beverages and state profits (derived from alcohol and wine industry and imports)accounted for between 12% and 14% of state revenue for more than 60 years(WHO,2004).

Guinand (1999) also pointed out that in local centers of North and South Gondar such as Ibnat, Guhala, Qualissa and Arbaya women brew Tella and katikala, local alcoholic drinks sold to farmers in local bars. Women can make a profit out of the brewing almost through out the year. According to Wolde (1999), the production of katikala has now assumed as an important source of income in many Ethiopian towns that the people make a substantial income for its export to other local or regional towns. Among the towns that are presently known for the production and export of katikala are DebreSina, DebreBirhan, Arsi-Negele, Bahir Dar and Assela.

On the other hand the existing studies also found that activities like katikala production that uses fuel wood as energy source causes problems. As it is pointed out in the World Development Report (1992), in poor countries indoor air pollution from burning wood, charcoal, and dung endangers the health of 400 million to 700 million people.

Katikala consumption is also expected to have benefits and problems on the consumers, local drink house/ bar owners, and the community as a whole. Previously done works on the issue found that alcohol consumption has benefits. Moderate drinking of alcohol is good for health, for instance, may offer some protection against diabetes and cholelithiasis (gall stones) and coronary heart disease (WHO, 2004). On the other hand alcohol is a special form of embodied material culture and the most widely used psychoactive agent in the world, and it has been a fundamentally important social, economic, political, and religious artifact for millennia (Dietler, 2006). Katikala is one of a traditional alcoholic beverage which would have a benefit of colorfully celebrating cultural festivals in the study area.

However, earlier studies have also indicated the problem of alcohol consumption. As it is stated in the WHO (2004), alcohol consumption can affect work performance through absences, work accidents, reducing productivity and unemployment, and increases medical and legal expenses and decreases eligibility for loans.

About 2 billion people across the world consume alcoholic drinks. Alcohol consumption can harm health, but the nature and the severity of the effects depend on both the amount of alcohol consumed overtime, and the pattern of drinking. It has also adverse social and economic effects on the individual drinker, the drinker's immediate environment and society. Indeed, individuals other than the drinker can be affected, for example, by traffic accidents or violence. It has an impact on society as a whole in terms of resources required for criminal justice, health care and others social institutions (WHO, 2004).

The problem of alcohol consumption in Ethiopia is also studied by some scholars. Kassaye (1999), in 1998 has studied 241 students randomly selected from two government schools and one private secondary school in Addis Ababa and 187 students from a government secondary school in Butajira found that the percentages of ever use of

alcohol were 17.9%, 57.8% and 18.2% in the urban governmental high schools, private high school and Butajira rural governmental high school, respectively. Anther study with a survey of 561 youths (15 to 24years old) in Addis Ababa found that alcohol use was a predictor of the likelihood of engagement in sexual activity (Taffa, 2002) .In addition to this, in the study of 10468 adults of a rural and semi –urban community in Butajira, it was found that people who were currently problem drinkers reported lifetime suicide attempts more often than others (Alem, 1999).

These have shown that alcohol production and consumption in general, and katikala production and consumption in particular have different socioeconomic benefits and problems. However, as it was indicated by the woreda information desk and the sponsoring organization, the socioeconomic benefits and problems of katikala production and consumption in Arsi-Negele woreda was not studied previously. Moreover the researcher had become interested on the issue under study after frequently visiting the study area. Thus the study has been conducted to address the following questions:

1. What economic costs and benefits do katikala production and/or consumption have on the producers, consumers and town municipality?
2. What are its social benefits and problems to individuals and different social institutions like family?
3. What are the health benefits and problems of katikala production and consumption on the producers and/or consumers?

1.3 Objectives of the study

1.3.1 General objective

The general objective of this study is to assess the socio economic benefits and problems of katikala production and consumption in Arsi - Negele woreda.

1.3.2 Specific Objectives

1. To examine the social benefits and problems of katikala production and consumption on individuals and different social institutions such as family, health care, education, and criminal justice system.
2. To know the health effects of katikala production and consumption on the producers and consumers.
3. To assess the economic benefits and costs of katikala production and/or consumption.

1.4 Significance of the study

Different researchers have tried to assess directly or indirectly the benefits and problems of alcohol production and consumption in Ethiopia. However, the benefits and problems of katikala production and consumption particularly in the study area were not assessed adequately. Therefore, this study mainly focuses on the analysis of the social, economic and health benefits and problems of katikala production and consumption in Arsi - Negele woreda. Moreover, in countries like Ethiopia where there is scanty information available on the issue, the study provides some information on the problem under investigation both for those who are interested in conducting further study and are responsible and accountable in designing the necessary strategies to mitigate or solve the problem and enhance the benefits.

1.5 Limitation of the study

The study has got different limitations. Firstly, since most studies were on alcohol in general there were no sufficient previous studies to have a comprehensive literature review for the theme under study. Secondly, there was a difficulty to gather both quantitative and qualitative data because of the sensitive nature of the issue. Thus the researcher was unable to collect some required and important information. Finally, the study was unable to single out the socioeconomic benefits and problems of katikala

production and/or consumption from other factors that affect the socioeconomic status of the producers, consumers, social institutions, and the society at large.

1.6 Organization of the paper

This paper is organized in five chapters. Chapter one deals with introduction whereas chapter two deals with literature review. Chapter three and four deal with the study area description & methodology, and results & discussion respectively. Finally chapter five gives the conclusion and recommendations.

Chapter 2 Literature Review

2.1 Theoretical Framework

Theoretical framework is the guideline to review and/or summarize the previous studies in an organized manner. There might be several frameworks such as Basic Needs Approach, Farmer First Approach, Social Development and Sustainable Livelihood Approach which would be appropriate for examining different aspects of the theme under study. While the former were concerned only in needs and weaknesses the later one deals with strengths with the following objectives: improved access to high quality education, information, technologies and training, and better nutrition and health; a more supportive and cohesive social environment; more secure access to and better management of natural resources; better access to basic and facilitating infrastructure; more secure access to financial resources; and a policy and institutional environment that supports multiple livelihood strategies and promotes equitable access to competitive markets for all (DFID, 2000). Thus, the researcher of this study chose sustainable livelihood approach to properly assess the socioeconomic benefits and problems of katikala production and consumption in the study area.

2.1.1 Sustainable Livelihoods Approach

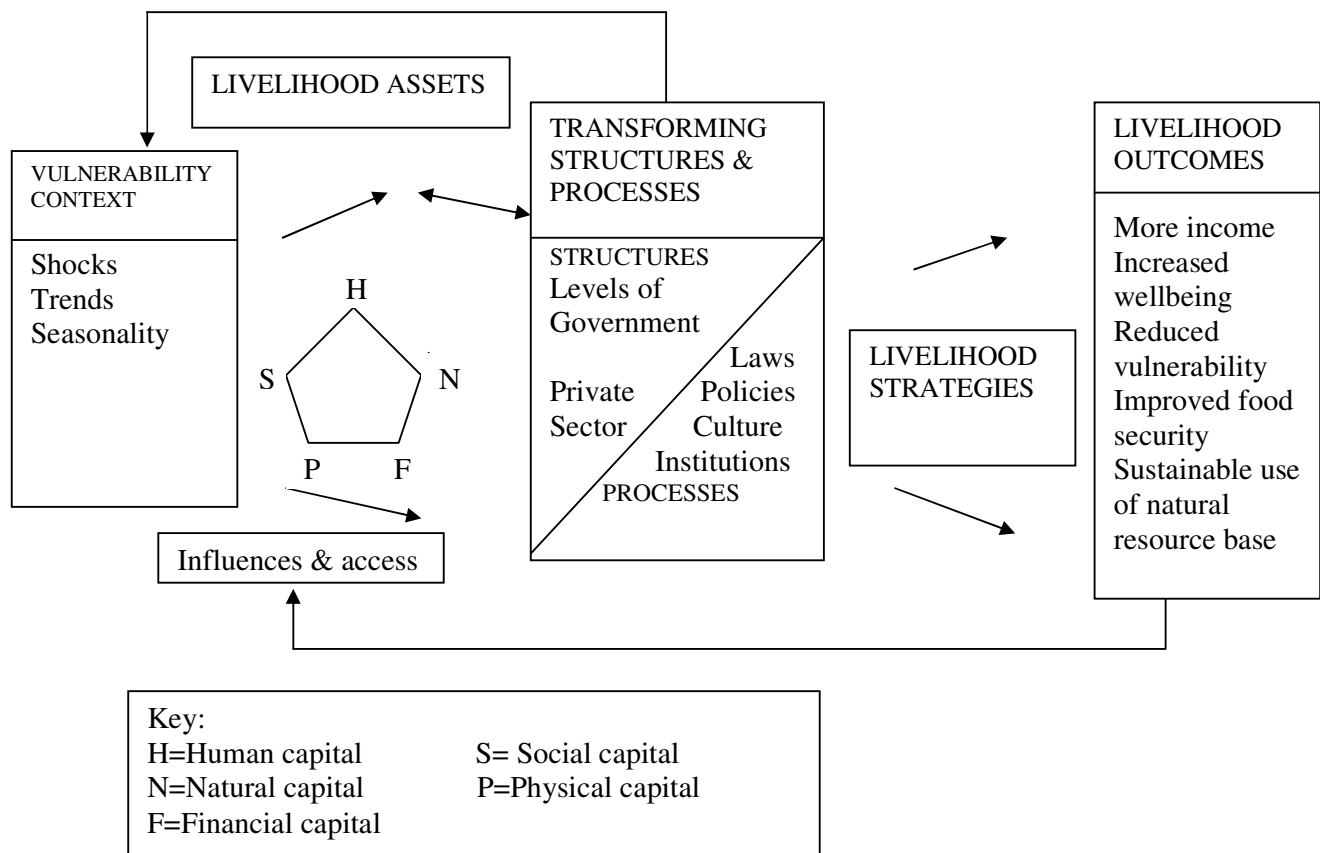
According to Chambers and Conway (1992), a livelihood comprises the capabilities, assets and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain and enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.

The Sustainable Livelihood Approach has six core principles namely people-centered-putting people at the centre of development; holistic-attempting to identify the most pressing constraints faced by and promising opportunities open to people; dynamic-seeking to understand and learn from change so that it can support positive patterns of change and help mitigate negative patterns ;building on strengths–recognition of everyone’s inherent potential for his or her removal of constraints and realization of

potentials; macro-micro links –bridging and stressing the links between the two levels ,as people are often affected from decisions at the macro policy level and vice-versa ;and sustainability-resilient in the face of external shocks and stresses, not dependent upon external support ,able to maintain the long term productivity of natural resources and not undermining the livelihood options of others(DFID,2000).

This approach comprises different elements: vulnerability context, livelihood assets, structures and processes, livelihood strategies, and livelihood outcomes. Each of these components also has subparts that would be addressed on respective sections particularly by showing their socio economic relationship with katikala production and consumption. The framework has been presented diagrammatically in figure 1 below followed by the discussion of each part.

Figure 1 Sustainable Livelihoods Framework



Source: DFID, 2000

2.1.1.1 Vulnerability Context

The vulnerability context forms the external environment in which people exist and gain importance through direct impacts up on people's asset status. It comprises trends(i.e. demographic trends; resource trends ;trends in governance),shocks(i.e. human ,livestock, or crop health shocks ;natural hazards ,like floods ;economic shocks ;conflicts and seasonality (i.e. seasonality of prices ,products or employment opportunities)and represents the part of the framework that lies further outside stakeholders control(Stephen, 2001). Accordingly katikala production as a means of livelihood can be affected by shocks like crop disease that reduces the availability of inputs (cereals) in the market, trends such as the shortage of fuel wood through time, and seasonality due to the fluctuation of price of inputs and products.

2.1.1.2 Livelihood Assets

The livelihood approach is concerned first and foremost with people. It seeks to gain an accurate and realistic understanding of the peoples strengths (assets)and how they endeavor to convert these into positive livelihood outcomes .The approach is founded on a belief that people require a range of assets to achieve positive livelihood outcomes ;no single category of assets on its own is sufficient to yield all the many and varied livelihood outcomes that people seek .This is particularly true for poor peoples whose access to any given category of assets tends to be very limited .As a result ,they have to seek ways of nurturing and combing what assets they do have in innovative ways to ensure survival(Bebbington,1999).

There are different assets which are negatively and/or positively affected by the production and consumption of alcohol in general and katikala in particular. These are listed and discussed as follows:

I. Human Capital

Human capital represents the skills, knowledge ability to labor and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives. At a household level ,human capital is factor of the amount and

quality of labor available ; this varies according to household size, skill levels, leadership potential, health status ,etc. and appears to be a decisive factor –besides being intrinsically valuable –in order to make use of any other types of assets .Therefore ,changes in human capital have to be seen not only as an isolated effects ,but as well as supportive factor for the other assets(DFID,2000).

Accordingly, production and consumption of alcohol in general and katikala in particular either benefits or creates a problem to this asset. This should be observed mainly in relation to the health aspect of the capital.

Health Benefits of Alcohol Consumption

Cerebrovascular disease (stroke) consists of several types, the most subtypes being ischemic stroke and hemorrhagic stroke, which are affected differently by alcohol. For ischemic stroke, the predominant type of stroke, the weight of evidence including biological mechanisms, suggests that low to moderate consumption of alcohol may offer some protection (Sacco, 1999).

Alcohol may offer some protection against diabetes and cholelithiasis (gallstones). Findings from a cohort of more than 40000 male health professionals showed that moderate alcohol consumption may decrease the risk of diabetes, perhaps through the effect of alcohol on insulin sensitivity (Rimm, 1995). With regard to cholelithiasis (gallstones) there is some evidence that alcohol may offer some protection against gallstones. Findings from a large scale cohort case control studies reported that there is an inverse relationship between alcohol consumption and gall stones (Leitzmann, 1998).

It is possible that some of the protective effects are mediated through the antioxidative constituents of alcoholic beverages ,especially wine (Reinke &McCay ,1996) However, most of the protective effect appears to be linked to ethanol ,per se .In sum, the relationship between average volume of drinking and CHD seems to be J-shaped. Light to moderate drinking is associated with a lower CHD risk than abstaining or heavy drinking .However, the studies on average volume of consumption and CHD are heterogeneous, indicating that factors other than the ones included in the study co-determine the relationship. One of the main factors is pattern of drinking that is the way in which the

same average amount of alcohol is consumed. In this respect two patterns deserve mentioning :irregular heavy drinking occasions and drinking with meals .As regards heavy drinking occasions ,several studies showed that for the same volume consumed heavy drinking occasions (e.g., eight drinks in one setting) have a detrimental effects on CHD (McElduff &Dobson ,1997;Murray,2002).With respect to drinking with meals ,Trevisan (2001a;2001b) reported more protective effects of alcohol consumption when it was predominantly consumed with meals compared to alcohol consumption outside of meals .

Health Problems of Alcohol Production and Consumption

In many developing countries indoor air pollution ranks not far behind poor urban air quality as a cause of respiratory ill health. People , mostly women and children , are exposed to indoor than to outdoor air risks- 400 million to 700 million people according to rough estimates by WHO- but exposure levels are often many times higher .In high - income countries the main indoor air risks are emissions from synthetic materials and resins and from radon gas. In developing countries the problem arises when households cook with or heat their homes with biomass (wood, straw, or dung). For poor households, mostly in rural areas, these are often the only fuels available or affordable (WDR, 1992).

The global burden of disease from alcohol exceeds that of tobacco in large part because acute consequences of alcohol use lead to death and disability in the younger years of life. There is evidence of a convergence in drinking patterns among the young, towards products marketed to youth cultures and tastes, and associated in developed countries with drinking to intoxication and with acute consequences such as motor vehicle crashes, drowning, and interpersonal violence. It also appears that young people in many countries are beginning to drink at earlier ages, while research in developed countries has found early initiation of alcohol use to be associated with greater likelihood of both alcohol dependence and alcohol related injury later in life (Jernigan, 2001).

Alcoholics have a life expectancy of ten to twelve years less than non alcoholics. Several reasons account for this. One is that over an extended period of time, alcohol gradually destroys liver cells and replaces the cells with scar tissue. When the scar tissue is extensive, a medical condition called cirrhosis of the liver occurs. Also, although it has no

healthy food value, alcohol contains a high number of calories. As a result, heavy drinkers have a reduced appetite for nutritious food and thus frequently suffer from vitamin deficiencies and are more susceptible to infectious diseases. Heavy drinking also causes kidney problems, contributes to a variety of heart ailments, is a factor leading to sugar diabetes, and also appears to contribute to cancer. Death may also result from drinking an excessive amount of alcohol, for example, from depression of the respiratory system or from the drinker choking on vomit while unconscious (Zastrow, 1996).

While some studies have shown that low to moderate alcohol consumption is beneficial for certain conditions such as heart disease, regular and prolonged use of alcohol leads to a host of health problems such as impaired mental functioning, liver disorders, gastro intestinal problems, heart disease and stroke, lung disorders, cancer, skin and bone disorders, pregnancy and infant development complications and increased risk for other addictions (WHO, 2004).

In terms of lives lost, the benefits of alcohol consumption may outweigh its detrimental effects in some countries. Indeed, the number of deaths prevented by alcohol in some age groups may be greater than the deaths caused by alcohol. This is mainly due to the beneficial effects of low and moderate alcohol consumption on diseases of the heart and blood vessels. It applies mainly to developed countries with high life expectancy where moderate amounts of alcohol are regularly taken with meals. However, in terms of life years lost, a different picture emerges. Indeed, fewer years are gained by preventing heart disease in the elderly than that is lost because of premature death at an early age, say from traffic accidents (Green Facts, 2006).

Sexual risk behavior accounts for a large number of opportunities for acquiring HIV infection, and alcohol use has been shown to increase high risk sexual behavior. Alcohol use and sexual behavior are particularly prevalent in settings such as night clubs, bars, dark homes, motels, and brothels. Furthermore, alcohol is commonly used as a disinhibitor, a sex facilitator, a symbol of masculinity, and a means of relation, recreation, socializing and improving communication skills. Alcoholic beverages are also used as facilitation in approaching the opposite sex (WHO, 2005)

Alcohol use has been associated with increased risk of injury in a wide variety of settings

including road traffic accidents (vehicles, bicycles, and pedestrians), falls, fires, injuries related to sports and recreational activities, self inflicted injuries or injuries resulting from interpersonal violence (Cherpitel, 1992; Martin&Bachman, 1997).

According to WHO (2001), there is no organ from the body that immune from alcohol related harm. The level of alcohol problems is related both to the overall amount of drinking in country (per capita alcohol consumption) and to the particular pattern of drinking. Such problems will include conditions which by definition are caused by alcohol use, including alcohol psychosis , alcohol dependence syndrome, alcoholic gastritis and alcoholic liver cirrhosis, as well as conditions in which alcohol may play a crucial cause role such as chronic pancreatitis , road injuries, fall injuries, fire injuries, drowning , suicide and homicide . On the other hand, alcohol use increases sexual risk behavior in which its use and sexual risk behaviors are particularly prevalent in settings such as night clubs, bars, dark houses, and brothels that people use as facilitation in approaching the opposite sex which leads to HIV /AIDS vulnerability through unsafe sex (WHO, 2005).

To sum up , in some countries there would be even more alcohol related “prevented” death than caused deaths ,mainly owing to the beneficial effect of low and moderate alcohol consumption on cardiovascular disease on some populations ,like women of advanced age. This, however, applies mainly to countries with established market economies, where life expectancy is high and the countries prevailing drinking pattern is a regular drinking pattern of moderate amounts, preferably consumed with meals. If one considers, however, life years lost instead of counting deaths only, a different picture emerges. There are more life years lost due to alcohol consumption than deaths ‘prevented’ .This can be explained by the fact that the years gained from alcohol consumptions beneficial effect on CHD are usually gained at higher ages and comprise only few years compared to the many years lost in deaths at early ages ;e.g., in alcohol related traffic casualties . The balance would bend down stronger to the detrimental side, if in addition to life years lost also years spent in disability were included in estimates, such as the burden of disease measure of disability adjusted life years lost (WHO, 2004).

II. Social Capital

There is much debate about what exactly is meant by the term 'social capital' and the aspects it comprises. In the context of sustainable livelihood framework it is taken to mean the social resources upon which people draw in seeking for their livelihood outcomes, such as networks and connectedness that increase peoples trust and ability to cooperate or membership in more formalized groups and their systems of rules, norms and sanctions (Kollmair and Gamper, 2002). However, this capital can be affected especially negatively by the production and consumption of alcohol which in turn affects both individuals and different social institutions such as family.

One component of the social capital is equality that mainly geared towards gender issues. According to MoARD (2007), Gender issues refer to the needs, problems and concerns brought up in the distinction of perceptions and roles between women and men. In development, these relate to economic issues such as access to and control over resources and socio-political issues such as status, taboos, early marriage, etc. Women have significantly less access than men to knowledge ,assets and services .They also have less influence and choice in the decision (private and public) that have a bearing on their lives and those of children .These enduring and sometimes widening inequalities affect the ability of women to carry out their critical roles .

Alcohol consumption is linked to many harmful consequences for the individual drinker, the drinker's immediate environment and society as a whole. Such social consequences as traffic accidents, work place related problems and interpersonal violence have been receiving more public or research attention in recent years, indicating a growing interest in a broader concept of alcohol related consequences (Klingemann & Gmel, 2001). On the other hand, however, social consequences affect individuals other than the drinker, for example, passengers involved in traffic casualties or family members affected by failure to fulfill social role obligations, or incidences of violence in the family. Ultimately, these events have an impact on society as a whole in so far as they affect economic productivity or require the attention and resources of the criminal justice or health care system, or of other social institutions (Gmel &Rehm, 2003).

Alcohol Consumption and the Family

It is well established that drinking can severely impair the individuals functioning in various social roles. Alcohol misuse is associated with many negative consequences both for the drinker's partner as well as the children. Maternal alcohol consumption during pregnancy can result in fetal alcohol syndrome in children and paternal drinking is correlated with child abuse and impacts a child's environment in many social, psychological and economic ways (Gmel&Rehm, 2003).

Drinking can impair performance as a parent, as a spouse or partner, and as a contributor to household functioning. There are also other aspects of drinking which may impair functioning as a family member. In many societies drinking may be carried out primarily outside the family and the home. In this circumstance time spent while drinking often competes with the time needed to carryout family life .Drinking also costs money and can impact upon resources particularly of a poor family, leaving other family members destitute. Also, is worth noting that specific intoxicated events can also have lasting consequences, through home accidents and family violence (Room, 1998; Room, 2002).

A recent paper by Bonu (2004) suggests that adverse child health effects of alcohol use are primarily through two distant determinants (indirect effects)-forgone household disposable income and caretakers time for child care .Diversion of scant economic resources for alcohol use that could have otherwise been used for seeking health care, may lead to self care or delay in seeking health care. The other potential ways by which alcohol use reduce the household income are through morbidity associated with the drinking habit among the consuming individuals ,resulting in increase medical expenditures and loss of income due to lost wage ,and ,sometimes, resulting in the premature death of sole wage earners in a household (Bonu,2004).

Universal differences in how women and men consume alcohol suggest that to some extent there may be biological bases for these differences. However, the enormous cross-cultural variation in the size of the gaps between men's and women's drinking require other more cultural and socio-cultural explanations. Research thus far has suggested four categories of possible socio- cultural reasons why men's and women's drinking patterns remain dissimilar namely power, sex, risks and responsibilities (WHO, 2005).

The effect of men's drinking on other members of the family is often particularly on women in their roles as mothers or wives of drinkers. The risks include violence ,HIV infection ,and an increased burden in their role of economic providers .In a paper that looked alcohol and alcohol related problems facing women in Lesotho facilitates a vicious circle in which women are at one time brewers of alcohol ,then sellers ,then become excessive consumers due to the problems created by their drinking husbands(Mphi,1994).

Drinking by Parents may harm family life leading to a variety of deleterious effects on young people. Problems for the young people in such homes may include instability or collapse of marriages and family structures, increased risk of physical or sexual abuse, neglect, and strain on family finances. Such family problems may in turn put young people at greater risk of developing antisocial problems, emotional problems and problems in the school environment (Jernigan, 2001).

Drinking can impair how a person performs as a parent, a partner as well as how she/he contributes to the functioning of the household. It can have lasting effects on their partner and children, for instance through home accidents and violence. Children can suffer from Fetal Alcohol Spectrum Disorders (FASD) when mothers drink during pregnancy. After birth, parental drinking can lead to child abuse and numerous other impacts on the child's social, psychological and economic environment. The impact of drinking on family life can include substantial mental health problems for other family members such as anxiety, fear and depression. Drinking outside the home can mean less time spent at home. The financial costs of alcohol purchase and medical treatment as well as lost wages can leave other family members destitute (WHO, 2004).

The economic consequences of chronic alcohol use are devastating and can seriously hinder any sense of development. In a study of alcohol use among the Basarwa of the Kgalagadi and Ghani districts in Botswana, informants stated that since a significant proportion of household income was spent on liquor less cash was available for food, clothing and essential items. As one informant succinctly stated 'alcohol makes poor people poorer'. A person who is regularly under the influence of alcohol will have little motivation or interest in working ,unless it is to obtain money to buy more alcohol .One particular problem is that a regular drinker can easily become economically tied and

indebted to alcohol venders who are only pleased to provide alcohol 'on credit'. In addition to this child neglect is an increasing problem when parents are intoxicated so early in the day that they are not able to prepare food for their children ,even if there is food available .A concern is that some parents will sell food to buy alcohol while others will give alcohol to their children as a food substitute and to stave off hunger .Generally ,the neglect of young children due to alcohol abuse means that these children are under socialized as well as malnourished ,leading to a refusal to attend school ,begging and stealing for food, and other delinquent activities(MacDonald,1996).

III. Natural Capital

Natural capital is the term used for the natural resource stocks from which services flows (e.g., land, water, forests, and air quality) for livelihoods. It is of special importance for those who derive all or part of their livelihoods from natural resource based activities, as it is often the case for the poor stakeholders, but also in more general terms, since a good air and water quality represents a basis for good health and other aspects of livelihood (Kollmair and Gamper, 2002). Katikala production mainly uses fuel wood which has in door air pollution that affects the health of individuals.

IV. Physical Capital

As it is pointed out in DFID (2000), Physical capital comprises the basic infrastructure and producer goods needed to support livelihoods, such as affordable transport, secure shelter and buildings, adequate water supply and sanitation and affordable energy and access to information. Its influence on the sustainability of the livelihood system is best fit for representation through the notion of opportunity costs or 'trade-offs', as a poor infrastructure can preclude education, access to health services and income generation, for example, without water supply facilities long periods are spent in non-productive activities, such as the collection of water-needing extra labor force, that could be of use somewhere (or would be a time resource to go to school). Since infrastructure can be very expensive, not only its physical presence is important, but as well the pricing and secure disposition for the poorest groups of society must be considered. Therefore affordable transport to sell the produced katikala and relatively suitable house for both production of katikala and residence is an asset for other capitals.

V. Financial Capital

According to Kollmair and Gamper (2002), financial capital denotes the financial resources that people use to achieve their livelihood objectives and it comprises the important availability of cash or its equivalent that enables people to adopt different livelihood strategies. Two main sources of financial capital can be identified:

- Available stocks comprising cash, bank deposits or liquid assets such as livestock, not having liabilities attached and usually independent on third parties.
- Regular inflows of money including labor income, pensions, or other transfers from the state, and remittances, which mostly dependent on others and needed to reliable.

Among the five categories of assets financial capital is probably the most versatile as it can be converted into other types of capital or it can be used to direct achievement of livelihood outcomes (e.g. purchasing of food to reduce food insecurity). However, it tends to be the asset the least available for the poor, what makes other capitals important as substitutes. Thus the costs and benefits of katikala production and consumption in relation to financial capital have been discussed in the following section.

Economic Benefits of Alcohol Production

The promotion, production and sale of alcoholic beverages are a big business. The global alcohol market has been estimated to roughly \$170 billion, about \$ 40 billion of which is in the United States (Little, 1989).

In many countries alcohol is an important source for raising government revenue and therefore, an established target of taxation. In the former Soviet Union ,for example ,excise tax on alcoholic beverages and state profits (derived from alcohol and wine industry and imports)accounted for between 12% and 14% of state revenue for more than 60 years(WHO,2004).

According to Guinand (1999), in local centers of North and South Gondar such as Ibnat, Guhala , Qualissa and Arbaya women brew Tella and katikala , local alcoholic drinks sold to farmers in local bars. Women can make a profit out of the brewing through out almost all the year.

The production of katikala has now assumed such as importance in many Ethiopian towns that the people make a substantial income for its export to other local or regional towns. Among the towns that are presently known for the production and export of katikala are DebreSina, DebreBirhan, Arsi-Negele, Bahir Dar and Assela (Wolde, 1999).

Ethiopian economy manifests itself in the predominance of subsistence activities, severe problems of unemployment, a narrow production base, deterred or neglected informal sector, environmental degradation, lop-sided development and weak institutional capacity (Abebe, 1994).

Research done to date shows that wage incomes of the urban labor force employed under different circumstances has failed to provide what at one time was already considered as a subsistence level of living. This has provoked the quest for additional income from the informal sector not only for the unemployed and the destitute but also for the urban wage and salary earners who found their salaries depressed as a result of the fall in their real income .As a result the majority of the labor force of Ethiopian towns earn their livelihood through a variety of informal activities (Wolde, 1999).

Katikala ,which is in the past was a traditional home made alcoholic drink ,has become a commercial item and is supporting considerable number of labor force (of female),particularly in urban parts of Ethiopia. The finding of (Wolde, 1999) in the study of Employment and Income in the Urban Informal Sector with particular emphasis of katikaka producers in Assela town has indicated that katikala industry is found to support huge labor force particularly in production sector. Lack of job opportunity, family responsibility and insufficient family income from other sources are found to be the major pushing factors for the operators to be involved in this activity. The producers are using simple and rudimentary tools and they work in unsanitary conditions.

Economic Costs of Alcohol Consumption

Alcohol consumption can affect work performance in several ways. The first one is absences- there is ample evidence that people with alcohol dependence and drinking problems are on sick leave more frequently than other employees, with a significant cost to employees, employers, and social security systems. In Costa Rica, an estimated 30

percent of absenteeism may be due to alcohol. Secondly, work accidents - in India about 40 percent of work accidents have been attributed to alcohol use. Thirdly, productivity-heavy drinking at work may reduce productivity. In Latvia, 10 percent of productivity losses are attributed to alcohol. Co-workers perceive that heavy drinkers have lower performance, problems in personal relationships and lack of self direction, though drinkers themselves do not necessarily perceive effects on their work performance. Lastly, unemployment-heavy drinking or alcohol abuse may lead to unemployment and unemployment may lead to increased drinking (WHO, 2004).

Drinking alcohol costs a nation billions of dollars. While the hidden costs has not been calculated for many of developing and developed countries, the burden on any nation is bound to be substantial when the cost of medical care, lost productivity through absenteeism, accidents at work, loss of job skills, Salaries for public and Social work, court costs, damage to property and cars, insurance payments, and others are added together. For instance, in Malaysia 38 percent of those who died in road accidents, 30 percent of hospital admissions for head injuries, 25 percent of below average in work performance and 10 percent of reports having health problems are alcoholics. This shows that the effects of alcohol are more devastating in developing countries where there are 1.3 billion people living on less than US \$ 1 a day. Because in these countries, which are already faced with other more urgent basic needs problems such as malnutrition and medication for infections diseases; burdens due to alcohol are a criminal waste and will further stretch the already limited resources (Assunta, 2001).

There is a strong interest in many countries regarding the development of scientifically valid , credible estimates of the economic costs of alcohol use .It is a well established fact that the use of alcohol entails a large number of adverse consequences in such widely differing areas as physical and mental health, traffic safety , violence, and labor productivity. There has been much effort in the past three decades in attempting to estimate these costs and recent investigations have suggested that they account annually for a substantial part of the GDP of industrialized countries. On the assumption that the harmful effects of drinking can be evaluated in monetary terms, health researchers and economists have attempted to estimate the costs of alcohol consumption to society. This costs can be either direct- the value of goods and services actually delivered to address the harmful effects of alcohol consumption, or indirect - the value of personal productive

services that are not performed because of the adverse consequences of drinking (WHO, 2004).

Relatively few countries have attempted to estimate the costs of alcohol use. Estimating the costs of alcohol consumption encounters problems over availability of data as well as methodological difficulties. However, the fact that studies carried out in different countries using a variety of approaches and methods all seem to lead to convergent results in a positive indication that results are valid. In all cases, there is a confirmation that alcohol consumption imposes significant damage on society. In cost estimation studies, the impact of alcohol use disorders on the material welfare of a society is estimated by examining the social costs of treatment, prevention, research, law enforcement and lost productivity plus some measure of the quality of life years lost (WHO, 2004).

2.1.1.3 Structures and Processes

Transforming structures and processes represent the institutions, organizations that shape livelihoods. They are of central importance as they operate at all levels and effectively determine access, terms of exchange between different types of capital, and returns to any given livelihood strategy (Alex, 2000; Keeley, 2001).

Structures can be described as the “hardware” (private and public organizations) that set and implement policy and legislation, deliver services, purchase, trade and perform all manner of other functions that affect livelihoods (DFID, 2000). An absence of well working structures often constitutes an obstacle to sustainable development and makes simple asset creation difficult in case of adverse structures.

Complementary to structures, processes constitute the “software” determining the way in which structures and individuals operate and interact. There are many types of overlapping and conflicting processes operating at a variety of levels. Important processes for livelihoods are for instance policies, legislation and institutions, but also culture and power relations. They may serve as incentives for people to make choices, they may be responsible for access to assets or they may enable stakeholders to transform or substitute one type of asset through another (Alex, 2000).

Transforming structures and processes occupy a central position in the framework and directly feedback to the vulnerability context, while influencing and determining ecological or economic trends through political structures, while mitigating and enforcing effects of shocks or keeping seasonality under control through working market structures; or they can restrict peoples choice of livelihood strategies and may thus be a direct impact on livelihood outcomes (Stephen, 2001).

Katikala production as a means of livelihood has structures like marketing processes (e.g., the task of “kemashs”-individuals who are entitled to fix the price of katikala). Thus there should be transformations in market structures and marketing process to benefit most producers from this livelihood.

2.1.1.4 Livelihood Strategies

Livelihood strategies comprise the range and combination of activities and choices that people undertake in order to achieve their livelihood goals. They have to understand as a dynamic process in which people combine activities to meet their various needs at different times and on different geographical or economic levels, whereas they may even differ with in a household. Their direct dependence on asset status and transforming structures and processes becomes clear through the position they occupy within the framework. A changing asset status may further or hinder other strategies depending on the policies and institutions at work (Keeley, 2001).

Considering livelihood strategies and issues connected to sustainable livelihood approach in general is important to recognize that people compete (for jobs, markets ,natural resources ,etc.),which makes it difficult for every one to achieve simultaneous improvements in their livelihoods . The poor are themselves a very heterogeneous group placing different priorities in a finite and therefore disputed environment (DFID, 2000). Katikala production is a major and supplementary livelihood strategy for most of the households in the study area.

2.1.1.5 Livelihood Outcomes

Livelihood outcomes are the achievements of livelihood strategies, such as more income (e.g. cash), increased wellbeing (e.g. non-material goods like health status), reduced vulnerability (e.g. better resilience through increase in asset status), improved food security (e.g. increase in financial capital in order to buy food) and a more sustainable use of natural resources (e.g. appropriate property rights). Outcomes help us to understand the output of the current configuration of factors within the livelihood framework; they demonstrate what motivates stakeholders to act as they do and what their priorities are. They might give us an idea of how people are likely to respond to new opportunities and which performance indicators should be used to assess supportive activity. Livelihood outcomes directly influence the assets and change dynamically their level –the form of the pentagon, offering a new starting point for other strategies and outcomes (Kollmair and Gamper, 2002). Katikala production and consumption affects these livelihood outcomes either positively or negatively.

Chapter 3 Study area description and Methodology

3.1 Description of the Study Area

3.1.1 Location, Administrative division and Land use

Arsi- Negele woreda / district is located in the Central Rift Valley of Ethiopia in West Arsi Zone, Oromia Region 230 Kilometers from Addis Ababa. According to the Woreda Information Desk, it has 43 Rural Kebeles and 4 Urban Kebeles .The woreda is surrounded by Munessa and Kore Woredas in the East, Shashemene and Kofele woredas in the South, Shala woreda and SNNPRS in the West, and Adami Tulu Jido Kombolcha and Ziway Dugda woredas in the North. See figure 3 on the next page.

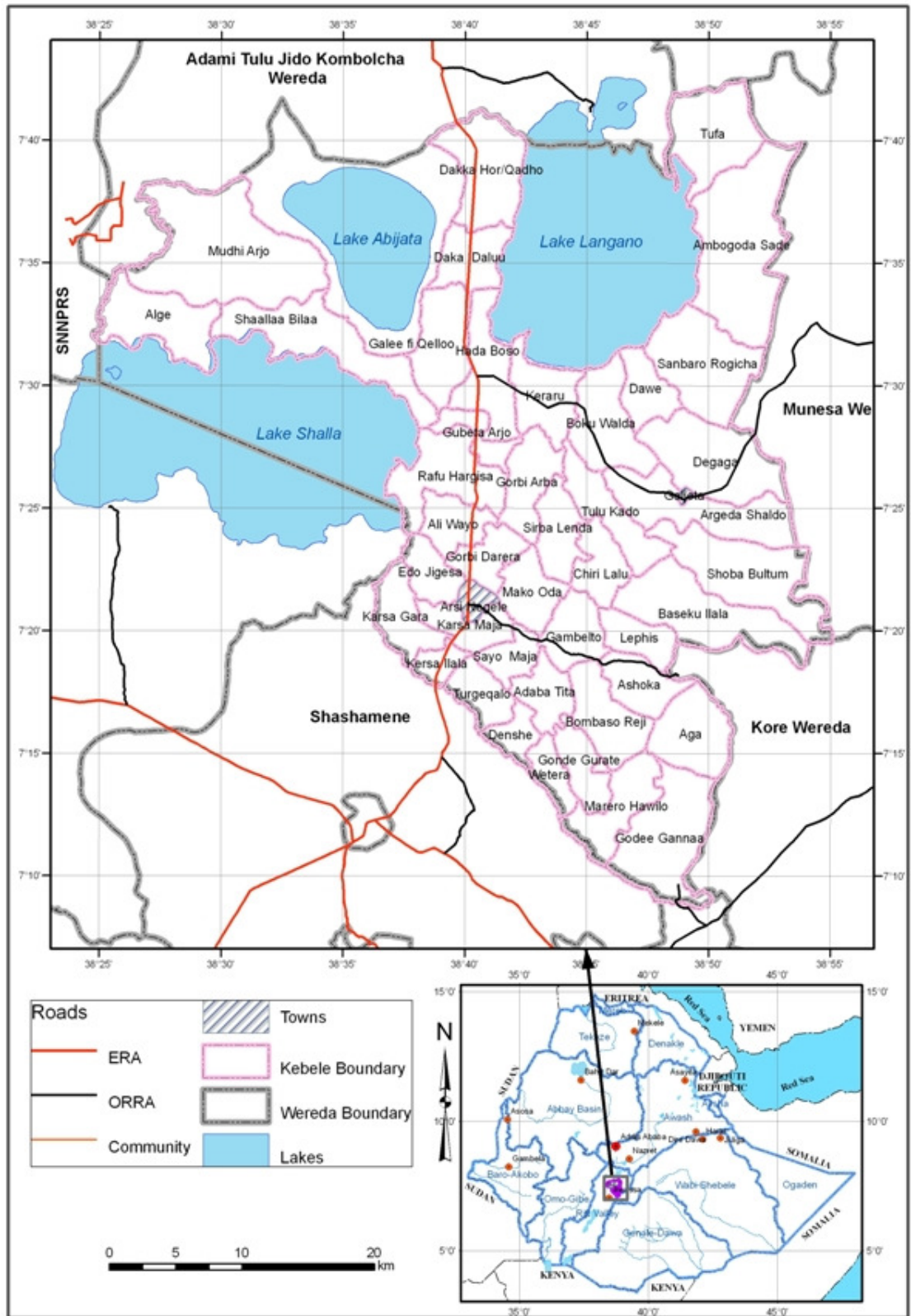
Land use pattern in the study woreda is shown in Table 1 in which there is only small percentage of uncultivated land; there must be an expansion of non-farm activities. However, a significant proportion of the woreda land is covered by water mainly with three lakes namely Langano, Shalla and Abijata which have a great contribution for tourism industry (one of the potential non-farm activity) of the study area.

Table 1 Land use of Arsi-Negele Woreda

Land Use	Area in ha.	% Share
Annual crops	70754	38.3
Perennial crops	-	-
Cultivable land	5515	3.0
Grazing land	9640	5.0
Forest	15339	8.0
Waste land	9990	5.0
Water body	44731	24
Others	6660	4
Total	184582	87.3

Source: Arsi-Negele Woreda Agriculture and Rural Development Office: 2007

Figure 2 Map of Arsi-Negele woreda



3.1.2 Population

Understanding properly how population issues and population dynamics influence socio economic development and how population dynamics are in turn affected by socio economic development is very important to formulate practical measures to address the issue. Table 2 shows population of katikala producing and /or consuming kebeles.

Table 2 Number of HHs and Population of katikala producing and /or consuming kebeles

No	Name of kebeles	Number of HHHs	Population
1	Tulu Kado	879	4521
2	Lephis	919	4730
3	Baseku Ilala	1977	10173
4	Turge Qello	952	4898
5	Dagaga	1421	7313
6	Sanbaro Rogicha	1153	5931
7	Shoba Bultum	1525	7847
	Rural sub total	8826	45413
8	Arsi-Negele kebele 01	2044	10518
9	Arsi-Negele kebele 02	1631	8389
10	Arsi-Negele kebele 03	2748	14138
11	Goljota	783	4029
	Urban sub total	7206	37074
	Grand Total	16032	82487

Source: Arsi-Negele Woreda Finance and Economic Development Office: 2007

3.1.3 Economic activities

Agriculture is the main stay of rural households and the secondary source of income for some urban dwellers. It consists of crop production with the major crops Maize, Wheat, Teff, Sorghum and Haricot bean, and livestock raising. Households also produce katikala to supplement their major means of livelihood. The byproduct of katikala production is used as feed of animals. Table 3 has shown livestock population of the study area.

Table 3 Livestock Population of Arsi-Negele woreda

S.No	Type	Number
1	Cattle	231782
2	Sheep	37706

S.No	Type	Number
3	Goats	31061
4	Horses	7739
5	Mules	789
6	Donkeys	27964
7	Poultry	82954
8	Bee hives	3665

Source: Woreda Agriculture and Rural Development Offices, 2007

Moreover according to the woreda information desk particularly people residing in urban areas are engaged in different activities such as katikala production, trade, industry, service provision, and others. Katikala production is an activity that requires large amount of inputs like labor and fuel wood.

3.1.4 Health

Health is one key component of human capital for bringing development. However, there are only one health center, six clinics and fourteen health posts staffed by 16 nurses, 13 assistant health workers and one health officer in the woreda for keeping this asset. As a result different diseases are badly affecting the resource in the woreda which in turn creates a great obstacle for development. Table 4 shows below ten top diseases of the woreda.

Table 4 Ten Top Diseases of Arsi-Negele woreda

No.	Type of diseases	Number of cases	Percentage
1	Malaria	4406	16.3
2	Pneumonia	3941	14.6
3	Diarrhoea	2617	9.7
4	Intestinal Parasites	2427	9
5	Gastritis	2188	8.1
6	Common cold	1813	6.7

No.	Type of diseases	Number of cases	Percentage
7	AFI*	1242	4.6
8	Tonsillitis	1173	4.3
9	STD**	1147	4.2
10	Rheumatism	1102	4.1
	Total	22056	81.6

Source: Arsi-Negele Woreda Health Office, 2007

Note: * acute febrile illness
 **sexually transmitted diseases

3.1.5 Education

Education is the other component of human capital for bringing development. According to the woreda Education office the education sector has 31 first cycle primary schools, 47 second cycle primary schools, 2 high schools, and one preparatory school, staffed by 820 teachers of which 450 are certificates, 161 are diplomas and 34 are first degree holders. This sector is usually challenged by high school drop out rate.

3.2 Research Design

The study has employed both quantitative and qualitative methods to effectively and efficiently address the research questions and attain objectives. Household survey was employed to gather quantitative data while observations, key informant interviews and focused group discussions were employed to collect qualitative data.

3.2.1 Quantitative Method

Household Survey: The study area population consists eleven kebeles: Arsi-Negele town kebele 01, 02, 03, Goljota, Beseko Ilala, Shoba Bultum, Lephis, Tulu Kado, Turge Qello, Senbero Rogicha and Degaga in which katikala is produced and consumed. These were categorized into rural and urban kebeles using stratified sampling mainly due to their difference in their major means of livelihood. According to the woreda information desk four of these kebeles (Arsi-Negele town kebele 01, 02, 03 and Goljota) are urban and

seven of them (Beseko Ilala, Shoba Bultum ,Lephis ,Tulu Kado , Turge Qello, Senbero Rogicha and Degaga) are rural. The woreda information desk also indicated that more than 95 % of these kebele households produce katikala. Then to get representative sample three rural kebeles (Beseko Ilala, Tulu Kado and Degaga), and two urban kebeles (Arsi-Negele town kebele 01 and 02) were selected randomly.

According to the woreda Finance and Economic development office indicated in table 2 on page 28, the three rural kebeles (Beseko Ilala, Tulu Kado and Degaga) have 1977,879 and 1421 households respectively. Then proportionately 3 percent of these figures that are 59, 26 and 43 respectively which sum up to 128 households were selected randomly using simple random sampling procedures. Table 2 on page 28 also indicated that the number of households in the two urban kebeles (Arsi-Negele kebele 01 and 02) are 2044 and 1631 respectively, and 3 percent of these figures that is 61 and 49 respectively which add up to 110 households were selected proportionately using simple random sampling.

Accordingly the sample size of the study was 238 households and/or producers, meaning the survey start with the household head and if the individual is a producer the interview questionnaire proceeds with that person if not the remaining questions will be forwarded to the producer.

Interview questionnaire as instrument was prepared for gathering information from households about their livelihood, health status, children's education, poverty, employment situation, income status, food security, and migration status. This questionnaire was pre-tested and improved. Data collection was done by six enumerators who were above tenth grade after two days training. Then data was collected by these data collectors from January 15 to February 05, 2008 for 22 days. The principal researcher had supervised the data collection process and made the necessary corrections timely.

3.2.2 Qualitative Methods

Checklist and interview guide were employed as an instrument to collect qualitative information .Accordingly different checklists and interview guides were used for observations, key informant interviews, and focus group discussions. These were done by

the principal researcher with the help of some guides and translators. It was done from February 10 to 28, 2008 for 19 days.

Observation: The researcher observed different places and situations to get the real picture of the benefits and problems of katikala production and consumption. To accomplish this activity the researcher observed families/households, market places, work places; bars/ local drink houses, and natural resources.

Key informant interview: There were 14 key informant interviews held with different key informants: woreda health office expert, woreda education office expert, expert from labor and social affairs office ,expert from agriculture, rural development and food security office , a representative from the criminal justice system ,expert from trade and industry, a representative from the municipality ,expert from women affair, bar/local drink house owners, waitresses, ANCEDA manager, divorced women, and katikala producers to get an in-depth information and substantiate the observation and survey results. The benefits and problems of katikala production and consumption were the issues forwarded to key informants. For details see appendix 1 &2.

Focus group discussion: This was another important method to get in-depth information. It is used to discuss & clarify some points which were sensitive to key informants. It was held with 2 groups' rural women &youth from Degaga and 2 groups of urban women &youth from Arsi-Negele town kebele 01 which was selected randomly. Issues of benefits and problems of katikala production and consumption were raised. See also appendix 1& 2.

3.2.3 Secondary documents

Data had been collected from documents which can be available in the form of censuses, surveys, registration books (e.g. woreda health office registration books), and/or other sources to supplement both quantitative and qualitative methods.

3.3 Data analysis

Data gathered by survey method was analyzed by calculating descriptive statistics mainly percentage, mean and standard deviation, and make inferences from this analysis; and the information obtained from observations, key informant interviews and focus group discussions has been analyzed qualitatively and integrated with quantitative analysis.

3.4 Ethical Considerations

This study was approved by College of Development Studies / CDS/, School of Graduate Studies, Addis Ababa University. The researcher and data collectors have followed a standardized procedure in observing, conducting interviews, holding focused group discussions and administering household survey questionnaires. Accordingly, the researcher and data collectors would have been informed about the subject and purpose of the study, and obtained the informed consents of all the respondents, interviewees and focused group discussion participants. As result, all had the right to discontinue or refuse to participate in the study.

Chapter 4 Results and Discussion

Different research methods (household survey, observation, key informant interview, and focus group discussion) have been used to gather socio economic information/data on the production and consumption of katikala in Arsi-Negele woreda. The results of this study are analyzed and discussed in three parts namely background information of katikala producers and consumers, benefits and problems of katikala production, and benefits and problems of katikala consumption respectively.

4.1 Background Information of Katikala Producers and Consumers

Because of the sensitiveness of the issue it was difficult to obtain the background information of katikala consumers in household survey. Thus the study has employed key informant interview and focus group discussion to gather some background information about katikala consumers. Hence it was found that most of the katikala consumers are male adults with low educational and income statuses.

On the other hand background information of katikala producers was gathered through household survey. It includes age, sex, educational status, family size, ownership status of the house, relationship of the producers to the household heads, health status, marital status, religion, ethnicity and migration status of household heads and /or producers in the study area.

Age is usually considered as background information for most studies because of its importance in assessing which age group is highly involving in the activities under study. As it is shown in table 5 in the next page while the mean age of the household heads is 40 for rural and 38 for urban the mean age of the producers is 32 for rural and 30 for urban. It was also found that the majority of the respondents fall in one standard deviation below and above the mean.

Table 5 Age of household heads and/or producers, and their family size

Variable	Description	No. of respondents	Mean	S .deviation
Age of household heads	Rural	128	40	12.2
	Urban	110	38	11.1
	Total	238	39	11.8
Age of producers	Rural	119	32	9
	Urban	105	30	10
	Total	224	31	9.7
Family size	Rural	128	5	2.5
	Urban	110	5.3	2.3
	Total	238	5.2	2.4

Source: Field Survey, 2008

Family size is also considered as background information because of its importance in assessing the availability of labor and its burden on food security. Table 5 has also shown the family size of the respondents and the average family size is 5. This shows that katikala production with other means of livelihood is averagely supporting five family members in fulfilling the basic needs.

Gender issues, as it was discussed in the literature review, refer to the needs, problems and concerns brought up in the distinction of perceptions and roles between women and men which relate to economic issues such as access to and control over resources and socio-political issues such as status, taboos, early marriage, etc in development. Because of these women may have less access than men to knowledge, assets and services, and less influence and choice in the decision that have a bearing on their lives and those of children. Table 6 shows the sex of the respondents.

Table 6 Sex of the household heads and producers

Variable	Description	Rural		Urban	
		No .of households	%	No. of households	%
Sex of the household heads	Male	112	87.5	92	83.6
	Female	16	12.5	18	16.4
	Total	128	100	110	100
Sex of the producers	Male	-	-	-	-
	Female	119	100	105	100
	Total	119	100	105	100

Source: Field Survey, 2008

As it is seen in Table 6, 87.5 % of rural & 83.6 % of urban katikala producing household heads are males whereas 12.5 % of rural & 16.4 % of urban katikala producing household heads are females. This implies that the majority of the katikala producing household heads are males that go in line with the literature review which creates a favorable condition to control the resources of the households. On the other hand it was found that katikala producers are all females. But as it was indicated by key informant interviews and focus group discussions these households have no power in controlling household resources particularly in rural areas.

Ownership status of the house for katikala production is important in envisaging the profitability of katikala production by considering additional costs for house rent. Relationship of the producers to the household heads is also vital in assessing which part of the family is involved in the activity under study and the presence of additional costs for maid servant. Table 7 has shown that 89.8 % of rural and 51.8 % of urban respondents are producing katikala in their own houses. It was also indicated that most of the rural producers are wives which implies that they had minimized their costs of production. However, for urban producers even though most of them are producing katikala in their own houses, they hired maid servants who increase the cost of production and decrease the profit.

Table 7 Ownership status of the house and relationship of the producers with household heads

Variable	Description	Rural		Urban	
		No .of households	%	No .of households	%
Ownership status of the house	Own house	115	89.8	57	51.8
	Government rented	-	-	8	7.3
	Private rented	13	10.2	45	40.9
	Total	128	100	110	100
Relationship with household heads	Wife	101	78.9	50	45.5
	Daughter	7	5.5	6	5.4
	Maid servant	11	8.6	46	41.8
	Relative	-	-	3	2.7
	HHH themselves	9	7.0	5	4.6
	Total	128	100	110	100

Source: Field Survey, 2008

Human capital is a key component for bringing development. One of this asset is education which can be affected by several factors. Katikala production and consumption is a factor that has a negative impact on education in the case of this study. As it is shown in table 8, the majority of rural and urban respondents had started formal education but they dropped out. This was one of the issues forwarded for key informant interviews and focus group discussion participants and it was found that it is because of diverse problems like financial constraint and shortage of labor for katikala production.

Table 8 Educational level of the household heads and producers

Variable	Description	Head of households				katikala producers			
		Rural		Urban		Rural		Urban	
		No	%	No	%	No	%	No	%
Educational level	Illiterate	44	34.4	27	24.6	40	33.6	21	20
	Read & write	15	11.7	18	16.4	12	10.1	17	16.2
	1-4	18	14	15	13.6	23	19.3	24	22.9
	5-8	34	26.6	33	30	31	26.1	37	35.2
	9-12	1	13.3	15	13.6	13	10.9	5	4.8
	12+	-	-	2	1.8	-	-	1	0.9
	Total	128	100	110	100	119	100	105	100

Source: Field Survey, 2008

Religious denomination and ethnicity is also important in assessing which religious and ethnic groups are highly involved in the activity under study. As it is shown in Table 9, most of the respondents are Orthodox Christians and Amhara.

Table 9 Religion and ethnicity of the household heads and producers

Variable	Description	Head of households				katikala producers			
		Rural		Urban		Rural		Urban	
		No	%	No	%	No	%	No	%
Religion	Muslim	2	1.6	4	3.6	2	1.7	1	0.95
	Orthodox	126	98.4	89	80.9	114	95.8	80	76.2
	Protestant	-	-	16	14.6	3	2.5	23	21.9
	Catholic	-	-	1	0.9	-	-	1	0.95
	Total	128	100	110	100	119	100	105	100
Ethnicity	Oromo	44	34.4	25	22.8	43	36.1	12	11.4
	Amhara	83	64.8	76	69.1	75	63	67	63.8
	Others *	1	0.8	9	8.1	1	0.9	26	24.8
	Total	128	100	110	100	119	100	105	100

Source: Field Survey, 2008

*includes Tigre, Gurage, Kembata, Wolayta, and Hadiya

Health is another component of human capital, and individuals should be healthy to bring development. However, as it was indicated in the description of study area malaria and other diseases are seriously affecting the health status of the people in that locality which in turn creates a great impact in the production of katikala.

Table 10 Health status of the producers

Variable	Description	Rural		Urban	
		No. of producers	%	No. of producers	%
Health status	Not sick in 12 months prior to survey	70	54.7	94	85.5
	Sick every month	51	39.8	8	7.3
	Sick every week	5	3.9	6	5.4
	Sick daily	2	1.6	2	1.8
	Total	128	100	110	100

Source: Field Survey, 2008

Table 10 has shown that 54.7 % of rural and 85.5 % of urban respondents are not sick in 12 months prior to the survey. This implies that the majority of the producers are not sick. However in the literature review of previous studies, alcohol in general and/or katikala production in particular that uses fuel wood as a source of energy causes indoor air pollution. Thus, this contradictory situation was forwarded for key informants and focus group discussion participants and it was found that it might be because of two reasons. Firstly, individuals especially in urban areas do not want to be considered as a sick person due to fear of fire from their employers. Secondly, the production process by itself usually causes chronic diseases and signs and symptoms of these diseases may not be visible within a short period of time.

Marital status as background information is important in assessing the difficulty and /or suitability of katikala production for engaging in to marriage and having a stable & enjoyable life after marriage. As it seen in table 11, even though the majority of the producers are married, a significant percentage of respondents are unmarried and divorced. This issue was also presented for key informants and focus group discussion participants and it was found that this is because of lack of relationships with someone to exchange love due to the nature of the work for unmarried individuals and divorce due to inability of giving enough time for their husbands because of the nature of the activity.

Table 11 Marital status of the producers

Variable	Description	Rural		Urban	
		No. of producers	%	No. of producers	%
Marital status	Unmarried	21	16.4	27	24.6
	Married	95	74.2	65	59.1
	Divorced	7	5.5	6	5.4
	Widowed	4	3.1	10	9.1
	Separated	1	0.8	2	1.8
	Total		128	100	110

Source: Field Survey, 2008

Place of birth is another important factor in assessing the migration status of the individuals involved in the activity under study. Table 12 has indicated that approximately 74 % of the urban respondents were not born in Arsi-Negele woreda, and these individuals come from different parts of Ethiopia. There might be different reasons to migrate to Arsi-Negele .Most of the individuals (48.2 % of rural households and 57.3 % of urban households) flow to this area to engage in katikala production to earn a better income and to get job respectively.

Table 12 Place of birth of the producers and their reason to come to the study area if they born outside of the woreda

Variable	Description	Rural		Urban	
		No. of producers	%	No. of producers	%
Place of birth	Arsi-Negele	101	78.9	28	25.5
	Gonder	13	10.2	37	33.6
	Woliyta Sodo	-	-	21	19.1
	Shewa	9	7	6	5.5
	Gojjam	-	-	3	2.7
	Others*	5	3.9	15	13.6
	Total		128	100	110
Reason to come to the study area	To get job	6	22.2	47	57.3
	To earn a better income	13	48.2	13	15.9
	Because of friends /relatives	7	25.9	18	22
	Conflict at place of origin	-	-	2	2.4
	Marriage	1	3.7	-	-
	Family	-	-	2	2.4
	Total		27	100	82

Source: Field Survey, 2008

*includes Asela, Bale, Addis Ababa, Mekele

4.2 Benefits and problems of katikala production

As it was indicated previously the study had employed different research methods. Using those methods information has been gathered about the benefits and problems of katikala production. This was analyzed and it was found that katikala production has benefits such as means of livelihood for households/producers through earning income, creating employment and securing food, and revenue for the municipality through taxation. On the other hand katikala production has also problems like health problems, food insecurity, poor educational performance of students, family disorganization, deforestation (due to high demand of fuel wood), and accidents.

One of the benefits of katikala production mentioned earlier was revenue for Arsi-Negele town /woreda capital municipality. According to key informants about 10 cars load and export katikala from this town to other parts of Ethiopia and out side of Ethiopia daily. Each of these cars loads 48 jerricans each containing 80 liters. The municipality taxes 5-7 birr per jerrican. By so doing the municipality collects more than 1 million birr per year from this tax only.

Photo 1 Cars loading katikala that creates employment for individuals and generates revenue for the town municipality through taxation



Means of livelihood for households /producers through generating income, employment creation and food security is the other benefit. In the literature review it was indicated that livelihood comprises the capabilities, assets and activities required for a means of living.

In the study area there are different means of living /livelihood strategies namely mixed farming with katikala production, katikala production and cattle fattening, katikala production with other incomes, and katikala production only in different percentages. See table 13.

Table 13 Livelihood strategies of the respondents with their major reasons to depend on katikala production and its benefits

Variable	Description	Rural		Urban	
		No. of respondents	%	No. of respondents	%
Livelihood strategies	katikala production & mixed farming	90	70.3	30	27.3
	katikala production and cattle fattening	17	13.3	26	23.6
	katikala production and other incomes	5	3.9	8	7.3
	katikala production only	16	12.5	46	41.8
	Total	128	100	110	100
Reason of producing katikala	Lack of land	75	58.6	10	9.1
	Shortage of finance to start another business	16	12.5	31	28.2
	Easy accessibility	35	27.3	44	40
	Lack of alternative income generating activities	2	1.6	25	22.7
	Total	128	100	110	100
Benefit of katikala production	Income generating	85	66.4	45	40.9
	Employment creation	16	12.5	17	15.5
	Food security	27	21.1	48	43.6
	Total	128	100	110	100

Source: Field Survey, 2008

As it is shown in table 13, katikala production only is the main means of livelihood for 41.8 % of urban respondents whereas mixed farming with katikala production is the main livelihood strategy for 70.3 % of rural households. This could be due to access of land for rural households. This issue was raised during key informant interview and focus group discussion to check the above results. According to key informants and focus group discussion results rural households usually produce katikala to supplement their main means of livelihood, mixed farming. However, some rural and most urban households have no access for land by any means. Hence these households switch to other livelihood strategies like katikala production and cattle fattening. Livestock raising contributes to

direct food supply or cash income generation. Thus households fattened cattle using katikala residue in addition to other feeds and sale them to earn income. According to a key informant from the woreda Agriculture and Rural Development Office there are about 200 fattened cattle marketed every week. See the following photo.

Photo 2 Fattened cattle market



This shows that rural livelihood in the study area is predominantly dependent on agricultural income; despite the fact that agricultural productivity and income diversification remain low and households are vulnerable to climatic changes especially due to deforestation for fuel wood and high rate of population growth. As a result in Ethiopia in general and study area in particular, underemployment and unemployment of youth and women are major challenges for the government. Hence the creation of employment and income generating activities in the formal and informal sectors could be the best way out. One of employment creation and income generating activity in the informal sector is katikala production. According to a key informant from the woreda Agriculture and Rural Development Office, most of the residents of Arsi-Negele town (more than 90 %) are producing katikala with the majority of them hiring a maid servant, and mainly in relation to this activity there are about 415 carts and 400 grinding mills in the town. Thus katikala production and its related activities are widely used livelihood strategies in the Arsi-Negele town and other katikala producing rural kebeles due to several reasons such as lack of land in rural areas, and shortage of finance to start another

business, easy accessibility and lack of alternative income generating activities in urban areas.

Photo 3 A lady producing katikala



As it is indicated previously income generation, employment creation and food security are the benefits of katikala production. To maximize these benefits households produce katikala in different frequencies starting from once per week to seven times a week. In rural areas, it was mentioned earlier that katikala production is a supplementary source of livelihood. Hence the majority of these households produce once per week. However most of the urban households produce katikala three times a week. This is due to the fact that it is the main means of livelihood strategy for these households. See also table 14.

Table 14 Frequency of katikala production per week

S.No	Description	Rural		Urban	
		No. of respondents	%	No. of respondents	%
1	Once	42	32.8	2	1.8
2	Twice	29	22.6	18	16.4
3	Three times	37	28.9	52	47.3
4	Four times	8	6.3	10	9.1
5	Five times	7	5.5	15	13.6
6	Six times	3	2.3	10	9.1
7	Seven times	2	1.6	3	2.7
	Total	128	100	110	100

Source: Field Survey, 2008

Katikala production requires different inputs mainly labor, maize wheat, gesho and fuel wood. As it was indicated in background information, labour is usually covered by household members mainly wives and daughters. Other inputs are purchased and/or prepared for producing katikala with some costs. For instance to get a volume of 20-25 liters of katikala with a one time katikala production ,households spend on average 195.5 birr in rural areas and 205 birr in urban areas. See table 15.

Table 15 Cost of different inputs for one time katikala production and the value of katikala produced (in Birr)

Variable	Type	Rural			Urban		
		Minimum	Maximum	Average	Minimum	Maximum	Average
Cost of different inputs	Maize	100	132	116	90	130	110
	Wheat	40	50	45	40	60	50
	Gesho	4	10	7	6	10	5
	Fuel wood	15	20	17.5	20	30	25
	Others	5	15	10	10	20	15
	Total		164	227	195.5	166	250
Value		160	220	190	180	250	215

Source: Field Survey, 2008

Then the produced katikala have been sold in 8-10 birr per liter with a gross income that ranges from 160 to 250 birr. In addition the katikala producers had benefited from the byproduct by using themselves for cattle fattening or selling a one time byproduct (approximately one barrel) with 20-30 birr for cattle fatteners.

Photo 4 Katikala market



However, there are problems such as health problems, losses, scarcity of inputs and high expense of inputs. These affect negatively the production and marketing process through the shortage of labour, reduction and lack of money for reinvestment to increase the frequency of katikala production. For this reason, the income earned from this livelihood strategy becomes insufficient to sustain the life of the livelihood of the household members. Table 16 has shown that katikala income is insufficient for 78.9 % of rural and 94.6 % of urban respondents. Thus households suffer from many associated problems like food insecurity, inability to cover medical expenses, taking unplanned credits and inability to save money for reinvestment and other purposes. See also table 16.

Table 16 Sufficiency of katikala income for household livelihood, cause of this insufficiency and associated problems of this low income

Variable	Description	Rural		Urban	
		No. of respondents	%	No. of respondents	%
Sufficiency of katikala income	Yes	27	21.1	6	5.4
	No	101	78.9	104	94.6
	Total	128	100	110	100
Cause of this insufficiency	Health problems	14	13.8	19	18.3
	Losses	35	34.7	30	28.8
	Scarcity of inputs	23	22.8	21	20.2
	High expenses of katikala production	29	28.7	34	32.7
	Total	101	100	104	100
Associated problems of this low income	Food insecurity	58	57.5	38	36.5
	Inability to cover medical expenses	6	5.9	6	5.8
	Taking unplanned credits	17	16.8	27	26
	Unable to save money	20	19.8	33	31.7
	Total	101	100	104	100

Source: Field Survey, 2008

As it was indicated in table 16, food insecurity is the major problem of low income earned from katikala production. According to WFS (1996), food insecurity occurs when food is either unavailable and/or where there is a lack of entitlement to food. It takes two basic forms: transitory food insecurity which refers to extreme case of famine caused by war, flooding, drought, crop failure, pest infestations, and loss of purchasing power in farming communities and market failures through high food prices. Chronic food insecurity that refers to long term and deep rooted food insecurity which is largely driven

by endemic poverty, people is subject to a continual problem of poor diet through an inability to acquire their basic food requirements, either because they are unable to buy it or to produce it for themselves.

Some of katikala producing households of the study area responded as they exposed to one form of food insecurity. They face transitory food insecurity mainly because of loss of purchasing power through high food prices. Even though these producers have income high food price due to the use of large amount of food items for katikala production make the respondents unable to purchase the required food items. Few respondents on the other hand replied that they are exposed to chronic food insecurity because of a continuous deterioration of their income gained from katikala production and inability of buying basic food requirements. This could be due to various factors such as health problems and frequent losses. Table 17 has shown the duration and suggested solutions of food insecurity.

Table 17 Duration of food insecurity & respondents suggested solutions for this food insecurity

Variable	Description	Rural		Urban	
		No. of respondents	%	No. of respondents	%
Duration of food insecurity	1-3 months	39	67.2	25	65.8
	3-6 months	13	22.4	10	26.3
	6-12 months	6	10.4	3	7.9
	Total	58	100	38	100
Respondent s suggested solutions for this food insecurity	Stopping katikala production	7	12.1	9	23.7
	Expanding the production of katikala	31	53.4	10	26.3
	Starting another business to get additional income	20	34.5	19	50
	Total	58	100	38	100

Source: Field Survey, 2008

As it is shown in table 16, 57.5 % of rural and 36.5 % of urban respondents have faced food insecurity. Table 17 has shown that most of the respondents (67.2 % of rural and 65.8 % of urban) were food insecure for 1-3 months in a year. Food insecurity in general might be attributable to one or more of the following factors namely environmental

degradation ,recurrent drought ,limited source of alternative incomes ,population pressure, limited technology, lack of product diversification and market integration, limited capacity in planning and implementation, and limited access to credit(FDRE,2003). As it was indicated by respondents of the household survey, key informant interview and focus group discussions the main causes of food insecurity in the study area are limited sources of income, environmental degradation mainly in rural areas, and lack of technology that maximizes profits and minimizes losses of katikala production. To address these problem respondents forwarded their own suggested solutions for this food insecurity, and most of them 53.4 % of rural and 50 % of urban replied for expanding katikala production and starting another business respectively for maximizing income and increasing purchasing power for food items. See the following photo which is one cause of deforestation created in relation to katikala production.

Photo 5 Fuel wood market



It was indicated previously that much of the labor required in relation to katikala production is covered by household members mainly wives and daughters. Here households were asked for the presence of children in their family and as it was seen from table 18, 79.7 % of rural and 73.6 % of urban respondents have children. Of these 88.2 % of rural and 93.8 % of urban households send at least one child to school. From these 31.1 % of rural and 38.2 % of urban respondents replied that katikala production has created a problem in the performance of children in their education. This is due to several factors in the form of competing study time, shortage of time to do home work ,inability of attending classes and lack of attention during class attendance. Some of factors that affect students' educational performance negatively are collecting fuel wood, fetching water, producing katikala, selling katikala and drinking katikala. Of these factors table 18 also

has shown that most of the students (46.4 % of rural and 48.3 % of urban) are affected by producing katikala.

Table 18 Presence of children in the household, their access to education, negative effects of katikala production and factors that affect children’s education negatively

Variable	Description	Rural		Urban	
		No. of respondents	%	No. of respondents	%
Presence of children	Yes	102	79.7	81	73.6
	No	26	20.3	29	26.4
	Total	128	100	110	100
Access to education	Yes	90	88.2	76	93.8
	No	12	11.8	5	6.2
	Total	102	100	81	100
Presence of negative effects	Yes	28	31.1	29	38.2
	No	62	68.9	47	61.8
	Total	90	100	76	100
Factors that cause these negative effects	Collecting fuel wood	5	17.9	1	3.5
	Fetching water	2	7.1	3	10.3
	Producing katikala	13	46.4	14	48.3
	Selling katikala	7	25	9	31
	Drinking katikala	1	3.6	2	6.9
	Total	28	100	29	100

Source: Field Survey, 2008

According to key informant from the woreda education office, activities in relation to katikala production mostly create a burden on females. Hence female students are the ones that are directly affected by this workload as they are most of the time participants of katikala production. This workload in turn affects the educational performance of these students negatively through competing their time of studying, doing assignments and attending classes. In the worst condition katikala production related activities may force these students to drop their education and totally engage in to katikala production. The following photo elaborates the situation.

Photo 6 Individuals traveling to the market for selling katikala



Health problems are the other major problems of katikala production. As it is shown in table 19 only 25 % and 30% of rural and urban producers respectively were sick at least once in 12 months prior to the survey. Of these sick respondents most of them have got treatment after the cases were investigated by health professionals.

Table 19 Illness of the katikala producers in 12 months prior to the survey, getting medication for their illness and type of diseases of the producers as it was told to them by health professionals

Variable	Description	Rural		Urban	
		No. of respondents	%	No. of respondents	%
Illness of katikala producers	Yes	32	25	33	30
	No	96	75	77	70
	Total	128	100	110	100
Getting medication for their illness	Yes	30	93.8	29	87.9
	No	2	6.2	4	12.1
	Total	32	100	33	100
Type of diseases of the producers as it was told to them by health professionals	Kidney diseases	11	36.7	8	27.6
	Liver diseases	2	6.7	5	17.2
	Lung diseases	7	23.3	9	31
	Heart diseases	8	26.6	6	20.7
	Rheumatism	2	6.7	1	3.5
	Total	30	100	29	100

Source: Field Survey, 2008

According to key informant from the woreda health office, the health problem in relation to katikala production starts at the time of preparing inputs (e.g., preparing bekil-germinated wheat) due to its odor and invasion of rats. Then to produce katikala the households use fuel wood as a source of energy. And they are producing this katikala within a small house which causes indoor air pollution. In addition after the katikala has been produced the byproduct is used as a feed for animals. This may affect the sanitation of the town for instance because of improper usage of this byproduct and the waste of the livestock. As a result different activities of katikala production at different stages have a negative effect on the health of producers in particular and the community in general. Hence the key informant concludes: “even though katikala production has economic benefits if it’s social, health and environmental problems out weigh it should be replaced by other means of income generating activity.”

Photo 7 Existing katikala production process



In sum katikala production has both benefits and problems for the study area in general and the respondents in particular. These households are planning in the future to maximize benefits and minimize problems. Despite the fact that they are facing different problems, table 20 has shown that the majority of rural households (54.7 %) and urban households (43.6 %) had replied that they are planning to expand katikala production and start another business in addition to katikala production respectively. However, households seek assistance from government and non government organizations to avoid or minimize the early listed problems (health problems, losses, scarcity of inputs and high

expense of inputs). As a result most of the respondents (35.9 % of rural and 69.1 % of urban) prioritize improved technology. See also table 20 below.

Table 20 Future plan of the respondents and their expected assistance from government and NGOs

S.No	Description	Rural		Urban	
		No. of respondents	%	No. of respondents	%
Future plan of the respondents	Stopping katikala production	33	25.8	45	40.9
	Expanding katikala production	70	54.7	17	15.5
	Starting another business	25	19.5	48	43.6
	Total	128	100	110	100
Respondents expected assistance from government and NGOs	Improved technology	46	35.9	76	69.1
	Credit services	26	20.3	13	11.8
	Roads	10	7.8	-	-
	Technical support	35	27.4	5	4.6
	Market	11	8.6	16	14.5
	Total	128	100	110	100

Source: Field Survey, 2008

4.3 Benefits and problems of katikala consumption

According to some key informants and results of focus group discussion, katikala consumption is important for treating stomachache and to colorfully celebrate cultural festivals. As a result the researcher has interviewed woreda health professionals to confirm people's opinion, and it was investigated that there is no scientific evidence for its value as a medicine; however, it may give a relief to the pain for the time being because of its anesthetic nature.

On the other hand, interviewees responded that though it is indirect the existence of drinkers and local drink houses have a significant role for the source of income and employment creation for local drink house owners and waitresses.

Figure 3 Key informant –Local drink house owner

Key informant –Local drink house owner

W/ro Almaz is one of the local drink house owners in Arsi-Negele town. She has 6 members of the households. To support her family and because of lack of alternative income generating activity, she has engaged in selling katikala and local beer in a small house. For running this business two waitresses are hired in this local drink house. Consumers are frequently visiting the house that lets the owner to have a good market. This implies that the local drink house is both the source of income for the owner and creating employment for two waitresses due to the presence of drinkers.

However, katikala consumption has caused diverse problems such as poverty, unemployment, food insecurity, burden on health institutions and negative impacts on health status of the households & producers, family disorganization, and crimes and accidents. The findings of these problems have been presented and discussed as follows:

Poverty: As it was pointed by key informants and results of focus group discussion, katikala consumption takes a large proportion of income. They added this leads to shortage of money for satisfying basic needs, and inability of the household to engage in to other income generating activities using the savings. Moreover, katikala consumption leads to frequently being late from work places (for employed persons) that eventually create unemployment. This situation results in low wages/salaries, or no money in some cases. As a result individuals will be unable to cover their food item expenses and medical fees in case of sickness/illness.

Key informant – katikala consumer

Eshetu is a 36 year old man with 3 family members. He is an employee of one government organization in the woreda with a monthly salary of 760 birr. Previously he was drinking katikala occasionally. However, since the beginning of 2007, with unknown reason, Eshetu becomes a heavy drinker of katikala. As a result he was forced to allocate a large proportion of income for purchasing katikala without a significant change in his

income. Thus Eshetu becomes unable to manage his family, and he himself and his family members face shortage of money to fulfill the basic needs

Unemployment: Katikala consumption has been creating unemployment because of frequent absence from work places (for employed persons), conflict with coworkers /employers, poor performance, and losses.

According to key informants there is a high rate of unemployment in the country and another aggravating factor is added to the case of this woreda. As a result some of the previously employed persons in different organizations of both government and private are becoming unemployed due to their late entrance to the work and frequent absence from the work places. They added, this will force these individuals to chew chat, drink katikala, and finally commit unsafe sex and crimes. The unsafe sex may expose these individuals to the deadly disease, HIV/AIDS, which in turn causes the loss of the human resource /capital.

Food insecurity: Focus group discussion and key informant interview were held to assess the impact of katikala consumption through the use of majority of katikala and other incomes for drinking rather than purchasing food stuffs, and most of them confirmed that such households are suffering from food insecurity. In addition to this focus group discussion participants and key informants also mentioned that there is a price rise for food stuffs due high demand for katikala production which makes difficult for some households to purchase these food items with the money remaining from drinking katikala.

Burden on health institutions and creating problems on health status of consumers: There is a resource scarcity in the woreda, said key informants & focus group discussion participants. The use of these scarce resources for treating katikala related problems such as accidents and chronic diseases create in turn a problem of inability of providing basic health services like treating malaria that is a number one disease of the ten top diseases of the woreda. Katikala consumption also creates a health problem on consumers as follows.

Key informant – Woreda health office expert

According to this key informant, high volume of katikala consumption may cause loss of

appetite, liver diseases and aggravate the spread of sexually transmitted infections. Loss of appetite leads to inability of eating the available food at the right time. This results in the difficulty of preventing diseases. Sexually transmitted infections on the other hand occur due to unsafe sex after katikala consumption. Besides their effect on individuals, these conditions cause a burden on health institutions by using the available resources (professionals, equipment, medicine, etc.) for this alcohol induced health problems.

Family disorganization: As it was indicated by key informants and focus group discussion participants, katikala consumption usually leads to domestic violence, child abuse and neglect, divorce, and widow. Thus, key informants and focus group discussion participant said there is a high occurrence of the aforementioned problems even though it is difficult to figure out the prevalence of these problems because of the sensitiveness of the issue.

Figure 4 Key informant –Divorced woman

Key informant-Divorced woman

According to this key informant, she was married and has two children. However, even though her ex-husband was drinking katikala occasssionally, he has increased the daily consumption of katikala through time and then started to disturb the family. The woman said, I was trying to tolerate all inconveniences, but before a year that is one year prior to interview, one event occurs in which he came at night and severely beat me and the innocent children. The next day morning I have gone to a health institution and get medication. Later on the part of body which was injured during beating has returned back to the normal position but not the love that I had to him. For this reason I decided to divorce him.

Crimes and accidents: According to the woreda police commander, there are different kinds of crimes existing in the woreda especially in relation to katikala consumption. These are physical abuse, homicide, theft, robbery, arson, rape, and abduction. As a result it has created a burden on the criminal justice system including police, courts, and

correctional institutions such as prison. Moreover, the key informant said that individuals usually drink katikala after they chew chat, and there must be employment access and recreational sites for youth to prevent them from alcoholism and committing crimes.

Thus the findings of this part of study shows that the socio economic benefits and problems of katikala consumption is consistent with that of the findings of the socio economic benefits and problems of alcohol found by previous researchers in different parts of the world that were indicated in the literature review .

Chapter 5 Conclusion and Recommendations

5.1 Conclusion

The main objective of the study was examining the socio economic benefits and problems of katikala production and consumption in Arsi-Negele woreda. To critically examine its benefits and problems theoretical framework that has considered different factors in relation to katikala production and consumption was employed. Using different methods (household survey, observation, key informant interview and focus group discussion) data was gathered from 238 respondents, 14 key informants, and 4 focus groups to investigate the benefits and problems through analysis. After thorough examination of the findings in the analysis the researcher has made the following conclusions.

As it was indicated in the findings, all of the producers are females, and most of them are wives who have dropped their education due to high labor demand of katikala production and financial constraints. The majority of urban katikala producers particularly are migrants that come from different parts of Ethiopia. It was also found that most of the katikala consumers are low in educational and income status which makes them unable to drink or purchase industrially produced alcohol. Therefore it can be concluded that katikala production and consumption has negative or positive influence on gender issues, migration, education and other factors.

In the theoretical framework of this study, it was assumed that katikala production might have problems and benefits based on the information obtained from literature review about the benefits and problems of alcohol production in general. Accordingly data/information was gathered and analyzed to investigate these assumptions, and it was found that katikala production is an income generating activity for producers, source of revenue for municipality through taxation, employment creation for some segment of population, and securing food with the earned income. However it was also found that katikala production causes environmental degradation, food insecurity, poor educational performance of students, and health problems of individuals who participate in the

production process. Thus the study has concluded that katikala production has both benefits and problems.

The theoretical framework of the study also assumed that katikala consumption might have benefits and problems based on the information obtained in the literature review about the benefits and problems of alcohol consumption in general in different studies around the world. Thus information was gathered and analyzed to examine the benefits and problems of katikala consumption in the study area, and it was found that katikala consumption is used in colorfully celebrating cultural festivals, and income generating and employment creation for local drink house owners and waitresses. Nevertheless, it has caused poverty, unemployment, food insecurity, alcohol addiction, burden on health institutions, health problems on drinkers, family disorganization, and crimes and accidents. Hence it has been concluded that katikala consumption has benefits and problems.

Thus from the findings of this study it can be concluded that both katikala production and consumption had benefits and problems. However, the extent of these benefits and problems are subjected to time. Meaning as it was found from the analysis katikala production is the main or supplementary means of livelihood for most of respondents currently. But it was also found that katikala production and/or consumption leads to deforestation (because of high consumption of fuel wood) which in turn causes environmental degradation, chronic diseases and other problems which are long term problems. As a result the benefits are greater than the problems currently whereas the problems could be severe after some time. Thus the study forwarded recommendations that would take these situations into consideration.

5.2 Recommendations

As it was indicated in the previous parts of this study katikala production and consumption has both benefits and problems. When the benefits and problems are examined critically currently the benefits outweigh the problems. However the problems might outweigh the benefits in the long run. Thus the following recommendations are suggested

to maximize the benefits and minimize the problems of katikala production and consumption in the study area.

Since katikala production in coalition with others is a means of livelihood for most of the households, it is difficult to withdraw these households from this activity in the short period of time. Thus different strategies that improves or maintains the existing benefits of katikala production with the minimization of the prevailing problems should be designed and implemented. Some of these strategies could be introducing alternative energy source, introducing improved technology of katikala production, and separating the katikala production place from the residence of the households themselves.

On the other hand as it was indicated in various studies alcohol/katikala production and consumption causes chronic diseases, natural resource depletion and others in the long run. Hence strategies that avoid problems of katikala production and consumption by maintaining or improving the benefits of the households that were gained from katikala production and consumption should be designed and implemented. Some of these strategies could be promoting alternative means of income generating and employment creation activities to withdraw the households from katikala production, and bringing behavioral change towards katikala consumption and associated life threatening activities such as unsafe sex, crimes and accidents.

Both short term and long term recommendations seek the participation and cooperation of producers, consumers, communities, various sectoral offices of government, NGOs and any other concerned organs.

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Appendix 1: Instruments Used for Data Gathering

A. Household Survey Questionnaire

Introduction

Here is a questionnaire designed to study the socioeconomic benefits and problems of katikala production and consumption in Arsi-Negele woreda. It will be conducted by Endalew Addis from Addis Ababa University, College of Development Studies, and department of Development Studies for the partial fulfillment of Master of Arts in Development Studies.

The main objective of this study is to identify and assess the social, economical and health impacts of katikala production and consumption. The findings of this study are very important to examine the existing situations of producers, consumers, and different social institutions such as family, education, healthcare, economy and criminal justice system. Thus it is necessary to propose valuable recommendations which is in turn important to design new strategies or modify the existing ones of katikala production.

The result of this study is entirely dependent on your response .Therefore, try to answer all questions correctly as much as possible .Your name will not be included in the study and every information that you give for this study will be kept confidential.

Lastly, if you feel inconvenience before or during the interview, you have the right to withdraw yourself from the study.

Date of interview _____

Name of the interviewer _____

S.No of the questionnaire _____

Type of the kebele _____

Name of the kebele _____

Part I. Background Information

1. Name / Identification number of the household head _____
2. Sex _____ 1. Male 2. Female
3. Age _____
4. Educational level _____
 1. Illiterate 3.1-4 5.9-12
 2. Read and write 4. 5-8 6.12+
5. Family size _____ 1. Male _____ 2. Female _____
6. Ownership status of the house in which you are producing katikala
 1. Own house 2. Government rented
 3. Private rented 4. Others, specify _____
7. Religion
 1. Muslim 2. Orthodox
 3. Protestant 4. Catholic
 5. Others, specify _____
8. Ethnicity
 1. Oromo 2. Amhara
 3. Tigre 4. Gurage
 5. Others, specify _____
9. Name of the producer _____
10. What is the relationship to the household head?
 1. Wife 2. Daughter(s)
 3. Maid servant 4. Others, specify _____
11. Age _____
12. Educational status _____
 1. Illiterate 3.1-4 5.9-12
 2. Read and write 4. 5-8 6.12+
13. Health status
 1. Not sick for the last 12 months 2. Sick every month
 3. Sick every week 4. Others, specify _____

14. Marital status
- | | |
|--------------|--------------------------|
| 1. Unmarried | 4. Widowed |
| 2. Married | 5. Separated |
| 3. Divorced | 6. Others, specify _____ |
15. Religion
- | | |
|--------------------------|-------------|
| 1. Muslim | 2. Orthodox |
| 3. Protestant | 4. Catholic |
| 5. Others, specify _____ | |
16. Ethnicity
- | | |
|--------------------------|-----------|
| 1. Oromo | 2. Amhara |
| 3. Gurage | 4. Tigre |
| 5. Others, specify _____ | |
17. Place of birth
- | | |
|----------------|--------------------------|
| 1. Arsi-Negele | 2. Others, specify _____ |
|----------------|--------------------------|
18. If you born and grow outside of Arsi-Negele, why you came here?
- | | |
|---------------------------------|------------------------------------|
| 1. To get job | 2. To earn a better income |
| 3. Because of friends/relatives | 4. Conflict at the place of origin |
| 5. Others, specify _____ | |

Part II. Benefits and problems of katikala Production

19. What is your means of livelihood?
1. katikala production and mixed farming
 2. katikala production and cattle fattening
 3. katikala production and other incomes
 4. katikala production only
 5. Others, specify _____
20. What is your main reason for katikala production ?
- | | |
|--------------------------|--|
| 1. Lack of land | 2. Shortage of finance to perform other things |
| 3. Easy accessibility | 4. Lack alternative income generating activities |
| 5. Others, specify _____ | |

21. What is the role of katikala production in your household?
1. Income generating
 2. Employment creation
 3. Food security
 4. Others, specify _____
22. How many times do you produce katikala per week?
1. Once
 2. Twice
 2. Three times
 4. Others, specify _____
23. What is the amount and cost of different inputs for the one time production of katikala?

S.No	Type of input	Amount in different units	Cost	Remarks
1	Maize			
2	Wheat			
3	Gesho			
4	Fuel wood			
5	Others, specify			

24. How much did you sell the katikala that is produced once? _____
25. Is this income enough to secure your livelihood?
1. Yes
 2. No
26. If your answer for question 25 is No, what are the major reasons for this insufficiency?
1. Health problems
 2. Losses
 3. Scarcity of inputs
 4. High expenses of katikala production
 5. Others, specify _____
27. What are the associated problems of this insufficiency?
1. Food insecurity
 2. Inability to cover medical expenses
 3. Taking unplanned credits
 4. Inability to save money
 5. Others, specify _____
28. If your answer for question 29 is food insecurity, how many months in the year?
1. 6-12 months
 2. 3-6 months
 3. 1-3 months
 4. Others, specify _____
29. What are the solutions of this food insecurity?
1. Stopping katikala production
 2. Expanding the production
 3. Starting another business to get additional income

30. Do you have children who are attending school?
 1. Yes 2. No
31. If you reply yes for question 33 yes, do your children's education negatively affected by katikala production?
 1. Yes 2.No
32. If your answer for question 34 is yes, in what ways?
 1. Collecting fuel wood 4.Selling katikala
 2. Fetching water 5.Drinking katikala
 3. Producing katikala 6.Others specify_____
33. Are you or any member of the household has got illness for the last 12 months?
 1. Yes 2. No
34. If your response for question 33 is yes, have you gone to health institutions for diagnosis?
 1. Yes 2. No
35. If your answer for question 34 is yes, what were the main causes of the illness in relation to katikala production as it was diagnosed by the health professionals?
 1. Kidney diseases 2.Liver diseases
 3. Lung diseases 4.Others, specify_____
36. To address and /or solve the above problems and benefits what is your future plan?
 1. Stopping katikala production 2.Expanding the production
 3. Starting another business 4. Others, specify _____
37. What type of assistances are expected from government and non-government organizations to maximize benefits and minimize problems?
 1. Improved technology 2. Roads
 3. Credit services 4. Market
 5. Technical support 6. 7. Others, specify_____

B. Observation Checklists

I. Households/families

1. Solidarity/disorganization
2. Food security/insecurity condition: No. of meals, quantity and quality of food
3. Poverty situation
4. Employment /unemployment status
5. Health statuses
6. Educational statuses
7. katikala producing or distillation processes

II. Market places

1. Market of fuel wood: who are mostly doing this activity?
2. Market of katikala: Which segments of the population are involved in this activity?
3. Market of cattle's: who sells the cattles?
4. Market of cereals: which food stuff is usually needed by households?

III. Work places (like health and educational institutions)

1. Relationship of alcoholic workers with non-alcoholics
2. Productivity and/or effectiveness of alcoholic workers
3. Burden on health institutions
4. Disturbance on educational institutions
5. Workload on criminal justice system

IV. Bars and local drink houses

1. Pattern and volume of drinking
2. Drinkers' relationship with waitresses or waiters: do they rush for sex after drinking katikala?
3. Their relationship with other drinkers
4. Crimes, accidents and health problems after/during drinking
5. Ways of managing these crimes and accidents

V. *Natural resources*

1. Natural resource base: depletion
2. Who are collecting the fuel wood?
3. Availability of recreational sites
4. Mechanisms of managing wastes

C. Key Informant Interview Guides

This will be held with fourteen key informants:

I. *Woreda labor and social affairs expert*

A. Benefits of katikala Production

1. Employment creation for katikala producers and fuel wood sellers
2. Income generation for the household through sale of the katikala produced, and the Woreda municipality through taxation
3. Poverty reduction through the earned income

B. Problems of katikala Production and its Probable Solutions

1. Health problems due to indoor air pollution as it is explained by katikala distillers and Health professionals
2. Impact on children's educational performance by wasting their time to collect fuel wood and fetch water
3. Family disorganization by not giving enough time for the spouse and the children
4. Creation of more drinkers due to its availability, lack of recreational sites etc.
5. Attraction of immigrants leading to population growth, availability of bar ladies that increases the tendency of HIV/AIDS expansion
6. Factors that hinder the starting and expansion of katikala production (finance, labor, raw materials, housing etc.)

C. Benefits of katikala Consumption

1. Sociability
2. Prevention or alleviation of some diseases: stomachache and parasites
3. Means of income for certain segments of the community: bar owners and ladies

D. Problems of katikala Consumption and its Possible Solutions

1. Unemployment

The presence of unemployed person in the household

Rate of unemployment in the woreda

The main causes and solutions for these unemployment

2. Family disorganization

Domestic violence

Child abuse and neglect

Divorce

Widow

3. Crimes and accidents

Common types of crimes in the woreda

Common kinds of accidents in the woreda

The main causes and possible solutions for these crimes and accidents

Their burden on the criminal justice system (police, courts and correctional institutions such as prison)

The probable solution to avoid or minimize this burden

II. Agriculture and rural development office expert

A. Benefits of katikala Production

1. Employment creation for katikala producers and fuel wood sellers
2. Income generation for the household through sale of the katikala produced, and the woreda municipality through taxation
3. Poverty reduction through the earned income
4. Coping mechanism for food insecurity by covering food shortages
5. Use of residue for cattle fattening to get additional income
6. Means of livelihood for those who do not have any other source of income

B. Problems of katikala Production and its Probable Solutions

1. Natural resource depletion through fuel wood collection

2. Use of the available food stuff for katikala production; leading to food insecurity
3. Factors that hinder the starting and expansion of katikala production (finance, labor, raw materials, housing etc.)
4. Back ward technology: use of more resources such as fuel wood and cereals
5. Impact of choice of cropping

C. Problems of katikala Consumption and its Possible Solutions

1. Poverty

The percentage or amount of income in which drinkers spend for katikala consumption

The magnitude of absenteeism from work and its consequences in resulting low wages and unemployment

Medical expenses

Sickness/illness of the breadwinner

2. Unemployment

The presence of unemployed person in the household

Rate of unemployment in the woreda

The main causes and solutions for these unemployment

3. Food insecurity

Unable to purchase food items by using the money for drinking katikala

Sale of the food stuff to buy katikala

Not preparing food for children in the right times

4. Low productivity

Absenteeism or being late

Work accidents

Conflict with coworkers

Health problems (illness/sickness)

III. Woreda health office expert

A. Problems of katikala Production and its Probable Solutions

1. Perceived health problems due to indoor air pollution
2. Creation of more drinkers due to its availability, lack of recreational sites etc.
3. Attraction of immigrants leading to population growth, availability of bar ladies the tendency of HIV/AIDS expansion

B. Benefits of katikala Consumption

Prevention or alleviation of some diseases: stomachache and parasites

C. Problems of katikala Consumption and its Possible Solutions

Health status of households and the burden on health institutions

Households' health status (any kind of illness in the last 12 months and its possible causes)

Getting health services for these illnesses, if not why?

Common cases that come to this health institution for the last 12 months

Their burden on health professionals and/or available resources

Possible solutions for these problems

IV. Woreda education office expert

A. Problems of katikala Production and its Probable Solutions

1. Impact on children's educational performance by wasting their time to collect fuel wood and fetch water
2. Back ward technology: use of more resources such as fuel wood and cereals

B. Problems of katikala Consumption and its Possible Solutions

Poor performance of students in education

Causes of teachers' incompetence

Causes of students' incompetence

Sources of disturbance on teaching-learning process

Causes of school dropouts

Solutions for these problems

V. *Woreda criminal justice system experts*

A. **Problems of katikala Consumption and its Possible Solutions**

Crimes and accidents

Common types of crimes in the woreda

Common kinds of accidents in the woreda

The main causes and possible solutions for these crimes and accidents

Their burden on the criminal justice system (police, courts and correctional institutions such as prison)

The probable solution to avoid or minimize this burden

VI. *Woreda trade and industry office expert*

A. **Benefits of katikala Production**

1. Employment creation for katikala producers and fuel wood sellers
2. Income generation for the household through sale of the katikala produced, and the town municipality through taxation
3. Poverty reduction through the earned income
4. Coping mechanism for food insecurity by covering food shortages
5. Use of residue for cattle fattening to get additional income
6. Means of livelihood for those who do not have any other source of income

B. **Problems of katikala Consumption and its Possible Solutions**

Low productivity

Absenteeism or being late

Work accidents

Conflict with coworkers

Health problems (illness/sickness)

VII. Woreda women's affair office expert

A. Benefits of katikala Production

1. Employment creation for katikala producers and fuel wood sellers
2. Income generation for the household through sale of the katikala produced, and the woreda municipality through taxation
3. Poverty reduction through the earned income
4. Coping mechanism for food insecurity by covering food shortages
5. Use of residue for cattle fattening to get additional income
6. Means of livelihood for those who do not have any other source of income

B. Problems of katikala Production and its Probable Solutions

1. Perceived health problems due to indoor air pollution
2. Impact on children's educational performance by wasting their time to collect fuel wood and fetch water
3. Natural resource depletion through fuel wood collection
4. Family disorganization by not giving enough time for the spouse and the children
5. Use of the available food stuff for katikala production; leading to food insecurity
6. Creation of more drinkers due to its availability, lack of recreational sites etc.
7. Attraction of immigrants leading to population growth, availability of bar ladies the increase tendency of HIV/AIDS expansion
8. Factors that hinder the starting and expansion of katikala production (finance, labor, raw materials, housing etc.)
9. Back ward technology: use of more resources such as fuel wood and cereals

C. Benefits of katikala Consumption

1. Sociability
2. Prevention or alleviation of some diseases: stomachache and parasites
3. Means of income for certain segments of the community: bar owners and ladies

D. Problems of katikala Consumption and its Possible Solutions

1. Poverty

The percentage or amount of income in which drinkers spend for katikala consumption

The magnitude of absenteeism from work and its consequences in resulting low wages and unemployment

Medical expenses

Sickness/illness of the breadwinner

2. Unemployment

The presence of unemployed person in the household

Rate of unemployment in the woreda

The main causes and solutions for these unemployment

3. Food insecurity

Unable to purchase food items by using the money for drinking katikala

Sale of the food stuff to buy katikala

Not preparing food for children in the right times

4. Health status of households and the burden on health institutions

Households' health status (any kind of illness in the last 12 months and its possible causes)

Getting health services for these illnesses, if not why?

Common cases that come to this health institution for the last 12 months

Their burden on health professionals and/or available resources

Possible solutions for these problems

5. Poor performance of students in education

Causes of teachers' incompetence

Causes of students' incompetence

Sources of disturbance on teaching-learning process

Causes of school dropouts

Solutions for these problems

6. Low productivity

- Absenteeism or being late
- Work accidents
- Conflict with coworkers
- Health problems (illness/sickness)

7. Family disorganization

- Domestic violence
- Child abuse and neglect
- Divorce
- Widow

8. Crimes and accidents

- Common types of crimes in the woreda
- Common kinds of accidents in the woreda
- The main causes and possible solutions for these crimes and accidents
- Their burden on the criminal justice system (police, courts and correctional institutions such as prison)
- The probable solution to avoid or minimize this burden

VIII. Town municipality

A. Benefits of katikala Production

1. Employment creation for katikala producers and fuel wood sellers
2. Income generation for the household through sale of the katikala produced, and the woreda municipality through taxation
3. Poverty reduction through the earned income
4. Coping mechanism for food insecurity by covering food shortages
5. Use of residue for cattle fattening to get additional income
6. Means of livelihood for those who do not have any other source of income

IX. Drinkers

A. Benefits of katikala Consumption

1. Sociability
2. Prevention or alleviation of some diseases: stomachache and parasites
3. Means of income for certain segments of the community: bar owners and ladies

B. Problems of katikala Consumption and its Possible Solutions

1. Poverty

The percentage or amount of income in which drinkers spend for katikala consumption

The magnitude of absenteeism from work and its consequences in resulting low wages and unemployment

Medical expenses

Sickness/illness of the breadwinner

2. Unemployment

The presence of unemployed person in the household

Rate of unemployment in the woreda

The main causes and solutions for these unemployment

3. Food insecurity

Unable to purchase food items by using the money for drinking katikala

Sale of the food stuff to buy katikala

Not preparing food for children in the right times

4. Health status of households and the burden on health institutions

Households' health status (any kind of illness in the last 12 months and its possible causes)

Getting health services for these illnesses, if not why?

Common cases that come to this health institution for the last 12 months

Their burden on health professionals and/or available resources

Possible solutions for these problems

5. Poor performance of students in education

Causes of teachers' incompetence

Causes of students' incompetence

Sources of disturbance on teaching-learning process

Causes of school dropouts

Solutions for these problems

6. Low productivity

Absenteeism or being late

Work accidents

Conflict with coworkers

Health problems (illness/sickness)

7. Family disorganization

Domestic violence

Child abuse and neglect

Divorce

Widow

8. Crimes and accidents

Common types of crimes in the woreda

Common kinds of accidents in the woreda

The main causes and possible solutions for these crimes and accidents

Their burden on the criminal justice system (police, courts and correctional institutions such as prison)

The probable solution to avoid or minimize this burden

X. *Local drinks house owners*

A. Benefits of katikala Consumption

Means of income for certain segments of the community: bar owners and ladies

XI. Waitresses

A. Benefits of katikala Consumption

Means of income for certain segments of the community: bar owners and ladies

XII. katikala producers

A. Benefits of katikala Production

1. Employment creation for katikala producers and fuel wood sellers
2. Income generation for the household through sale of the katikala produced, and the woreda municipality through taxation
3. Poverty reduction through the earned income
4. Coping mechanism for food insecurity by covering food shortages
5. Use of residue for cattle fattening to get additional income
6. Means of livelihood for those who do not have any other source of income

B. Problems of katikala Production and its Probable Solutions

1. Perceived health problems due to indoor air pollution
2. Impact on children's educational performance by wasting their time to collect fuel wood and fetch water
3. Natural resource depletion through fuel wood collection
4. Family disorganization by not giving enough time for the spouse and the children
5. Use of the available food stuff for katikala production; leading to food insecurity
6. Creation of more drinkers due to its availability, lack of recreational sites etc.
7. Attraction of immigrants leading to population growth, availability of bar ladies the tendency of HIV/AIDS expansion
8. Factors that hinder the starting and expansion of katikala production (finance, labor, raw materials, housing etc.)
9. Back ward technology: use of more resources such as fuel wood and cereals

XIII. Divorced woman

1. Family disorganization

Domestic violence

Child abuse and neglect

Divorce

Widow

XIV. ANCEDA Manager

A. Benefits of katikala Production

1. Employment creation for katikala producers and fuel wood sellers
2. Income generation for the household through sale of the katikala produced, and the woreda municipality through taxation
3. Poverty reduction through the earned income
4. Coping mechanism for food insecurity by covering food shortages
5. Use of residue for cattle fattening to get additional income
6. Means of livelihood for those who do not have any other source of income

B. Problems of katikala Production and its Probable Solutions

1. Perceived health problems due to indoor air pollution
2. Impact on children's educational performance by wasting their time to collect fuel wood and fetch water
3. Natural resource depletion through fuel wood collection
4. Family disorganization by not giving enough time for the spouse and the children
5. Use of the available food stuff for katikala production ;leading to food insecurity
6. Creation of more drinkers due to its availability, lack of recreational sites etc.
7. Attraction of immigrants leading to population growth, availability of bar ladies the increase tendency of HIV/AIDS expansion
8. Factors that hinder the starting and expansion of katikala production (finance, labor, raw materials, housing etc.)
9. Back ward technology: use of more resources such as fuel wood and cereals

C. Benefits of katikala Consumption

1. Sociability
2. Prevention or alleviation of some diseases: stomachache and parasites
3. Means of income for certain segments of the community: bar owners and ladies

D. Problems of katikala Consumption and its Possible Solutions

1. Poverty

The percentage or amount of income in which drinkers spend for katikala consumption

The magnitude of absenteeism from work and its consequences in resulting low wages and unemployment

Medical expenses

Sickness/illness of the breadwinner

2. Unemployment

The presence of unemployed person in the household

Rate of unemployment in the woreda

The main causes and solutions for these unemployment

3. Food insecurity

Unable to purchase food items by using the money for drinking katikala

Sale of the food stuff to buy katikala

Not preparing food for children in the right times

4. Health status of households and the burden on health institutions

Households' health status (any kind of illness in the last 12 months and its possible causes)

Getting health services for these illnesses, if not why?

Common cases that come to this health institution for the last 12 months

Their burden on health professionals and/or available resources

Possible solutions for these problems

5. Poor performance of students in education

Causes of teachers' incompetence

Causes of students' incompetence

Sources of disturbance on teaching-learning process

Causes of school dropouts

Solutions for these problems

6. Low productivity

- Absenteeism or being late
- Work accidents
- Conflict with coworkers
- Health problems (illness/sickness)

7. Family disorganization

- Domestic violence
- Child abuse and neglect
- Divorce
- Widow

8. Crimes and accidents

- Common types of crimes in the woreda
- Common kinds of accidents in the woreda
- The main causes and possible solutions for these crimes and accidents
- Their burden on the criminal justice system (police, courts and correctional institutions such as prison)
- The probable solution to avoid or minimize this burden

D. Focus Group Discussion Checklists

This will be held with four groups:

- 1. Women (urban and rural)**
- 3. Youth (urban and rural)**

I. Benefits of katikala Production

1. Employment creation for katikala producers and fuel wood sellers
2. Income generation for the household through sale of the katikala produced, and the woreda municipality through taxation

3. Poverty reduction through the earned income
4. Coping mechanism for food insecurity by covering food shortages
5. Use of residue for cattle fattening to get additional income
6. Means of livelihood for those who do not have any other source of income

II. Problems of katikala Production and its Probable Solutions

1. Perceived health problems due to indoor air pollution
2. Impact on children's educational performance by wasting their time to collect fuel wood and fetch water
3. Natural resource depletion through fuel wood collection
4. Family disorganization by not giving enough time for the spouse and the children
5. Use of the available food stuff for katikala production; leading to food insecurity
6. Creation of more drinkers due to its availability, lack of recreational sites etc.
7. Attraction of immigrants leading to population growth, availability of bar ladies the tendency of HIV/AIDS expansion
8. Factors that hinder the starting and expansion of katikala production (finance, labor, raw materials, housing etc.)
9. Back ward technology: use of more resources such as fuel wood and cereals
10. Impact of choice of cropping

III. Benefits of katikala Consumption

1. Sociability
2. Prevention or alleviation of some diseases
3. Means of income for certain segments of the community

IV. Problems of katikala Consumption and its Possible Solutions

1. Poverty

The percentage or amount of income in which drinkers spend for katikala consumption

The magnitude of absenteeism from work and its consequences in resulting low wages and unemployment

Medical expenses
Sickness/illness of the breadwinner

2. Unemployment

The presence of unemployed person in the household
Rate of unemployment in the woreda
The main causes and solutions for these unemployment

3. Food insecurity

Unable to purchase food items by using the money for drinking katikala
Sale of the food stuff to buy katikala
Not preparing food for children in the right times

4. Health status of households and the burden on health institutions

Households' health status (any kind of illness in last 12 months and its possible causes)
Getting health services for these illnesses, if not why?
Common cases that come to this health institution for the last 12 months
Their burden on health professionals and/or available resources
Possible solutions for these problems

5. Poor performance of students in education

Causes of teachers' incompetence
Causes of students' incompetence
Sources of disturbance on teaching-learning process
Causes of school dropouts
Solutions for these problems

6. Low productivity

Absenteeism or being late
Work accidents
Conflict with coworkers
Health problems (illness/sickness)

7. Family disorganization

Domestic violence

Child abuse and neglect

Divorce

Widow

8. Crimes and accidents

Common types of crimes in the woreda

Common kinds of accidents in the woreda

The main causes and possible solutions for these crimes and accidents

Their burden on the criminal justice system (police, courts and correctional institutions such as prison)

The probable solution to avoid or minimize this burden

Appendix 2 List of key informants & focus group discussion participants

A List of key informants

- | | | |
|----|-----------------|--|
| 1. | Dekebo | ANCEDA manager |
| 2. | Alemu | Agriculture and Rural Development Office |
| 3. | Mulugeta Habeno | Woreda police commander |
| 4. | Feyissa Gossie | Woreda health office expert |
| 5. | Kenno Shuno | Woreda education office expert |
| 6. | Jemila Gelgelu | Woreda women affairs expert |

B List of focus group discussion participants

I. Rural women

1. Bekelu Balcha
2. Genet Ayalew
3. Mesay Getachew
4. Fantu Girma
5. Beletu Asseme
6. Aberash Bane
7. Azalech Gobena

II. Urban women

1. Tigist Tadesse
2. Mulumebet Fantahun
3. Bizunesh Ketema
4. Tsigie Wondimu
5. Mulu Bekele
6. Asregeedu Tamirat
7. Firehiwot Birhanu
8. Yekite Abebe
9. Bayush Eshetu

III. Rural Youth

1. Tadelech Dabessa
2. Taffa Regassa
3. Adanu Tekilu
4. Messeret Getu

5. Bedassa Tulu
6. Daba Gemechu

IV. *Urban Youth*

1. Tiringo Mengistu
2. Hiwot Kebede
3. Mengistu Tarekegne
4. Tolla Ibsa
5. Sisay Tadesse
6. Aster Bareka
7. Ephrem Takele
8. Wosenie Girma
9. Emebet Teshome
10. Feyissa Biru

Appendix 3 Population Distributions of Arsi-Negele woreda

No	Name of kebeles	Number of HHHs	Population
1	Mudhi Arjo	1005	5175
2	Alge	514	2648
3	Shala Bila	782	4024
4	Gode Ganna	1505	7743
5	Daka Hor/kadho	796	4096
6	Gale and Qelo	350	1802
7	Daka Dalu	353	1816
8	Hada Boso	695	3576
9	Kararu	785	4037
10	Adaba Tita	999	5140
11	Danshe	916	4713
12	Watera	811	4172
13	Gonde Gurate	1109	5708
14	Bombaso Regi	1305	6716
15	Gambelto	1066	5484
16	Rafu Hargesa	796	4097
17	Gorbi Darera	914	4702
18	Gorbi Arba	978	5032
19	Gubeta Arjo	357	1839
20	Sirba Lenda	795	4088
21	Tulu Kado	879	4521
22	Chiri Lalu	995	5120
23	Lephis	919	4730
24	Baseku Ilala	1977	10173
25	Aga	424	2180
26	Ashoka	1144	5888
27	Marero Hawilo	1364	7018
28	Mako Oda	953	4904
29	Ali Wayo	909	4675
30	Edo Jigesu	566	2911
31	Karsa Maja	597	3073
32	Karsa Gara	1256	6462
33	Karsa Ilala	732	3766
34	Turge Qello	952	4898
35	Sayo Maja	780	4015
36	Dawe	618	3182

No	Name of kebeles	Number of HHHs	Population
37	Ambogoda Sade	915	4708
38	Buku Walda	1255	6459
39	Tufa	616	3171
40	Dagaga	1421	7313
41	Sanbaro Rogicha	1153	5931
42	Shoba Bultum	1525	7847
43	Argeda Shaldo	1327	6829
	Rural sub total	40108	206382
44	Arsi-Negele kebele 01	2044	10518
45	Arsi-Negele kebele 02	1631	8389
46	Arsi-Negele kebele 03	2748	14138
47	Goljota	783	4029
	Urban sub total	7206	37074
	Grand Total	47314	243456

Source: Arsi-Negele Woreda Finance and Economic Development Office: 2007