

The Political Impact of Chewing Khat (Chat) on Chewers: In the Case of Woldia City Administration of North Wollo, Amhara National Regional State

Agenagn Kebede¹, Belay Asmare², Admasu Bogale³

¹Editor, Reviewer, Blogger, Mentor, SYRFM, and, Assistant Professor of Political Science

²Assistant Professor of Peace and Security Studies, Researcher, Department of Political Science and International Relations, Woldia University, Woldia, Ethiopia

³Lecturer of Civic and Ethical Education, Department of Civic and Ethical Education, Wolkite University, Wolkite, Ethiopia

Email: agenagnkebede@gmail.com, belayasmare@gmail.com, admasubogale@gmail.com

Abstract:

The main aim of this study was to investigate the political impact of chewing khat on the chewers in Woldia City Administration of North Wollo, Amhara National Regional State. As far as the researcher's reading, no research was conducted in Ethiopia dealing with the political impact of chewing khat on chewers. Accordingly, this study was conducted using qualitative methods of data collection. Semi-structured in-depth interview, focus group discussion (FGD), and complete observation were employed during data collection. The study used phenomenology design and the findings were analyzed thematically. The study found that khat chewers' political unconsciousness, utopian involvement in politics, and fail in conspired politics were associated with khat chewing practices. Based on this findings, the researchers recommend that awareness creation about the anxiety of khat in political life is in need.

Keywords:

khat; khat chewers; political impact

I. Introduction

Khat (*Catha edulis* Forsk) is a flowering evergreen tree, cultivated as a small tree and it was first identified by a botanist whose name was Forskal in 1762 in Yemen. Forskal categorized the plant in group Spinosa. However, currently, it is botanically classified under the family Celastraceae (Berhanu, Aregash, and Ali, 2014). Khat is a large green shrub that grows at a high altitude in the world extending from Eastern to South African, as well as on the Arabian Peninsula (Yeshalem, 2013).



Figure 1. Khat (*The Catha Edulis Shrub*)

Table 1. Some terms of khat as Advisory Council on the Misuse of Drugs (2005) Stated

| | | | |
|--------------|---------------|----------------------|---------------------------|
| Mirra | Qat | Catha | Bushman's tea |
| Jaad | Herari | Tschat | Flower of paradise |
| Kaad | Chat | Tohai | Abyssinian tea |
| Qaat | Gat | African salad | Tea of the Arabs |

Khat chewing is believed to be rapidly increasing worldwide. Throughout the world, it is estimated that 10 million people consume khat daily and this renders a certain influence on the physical and psychological wellbeing of the community (Asmamaw et al., 2013). Khat has been chewed for many years in East Africa and the Southern Arabian Peninsula. With the recent globalization, khat chewing has spread with African and Arabian immigrants to various Asian and European countries, and to Australia, as well as to the United States (Fujiwara et al., 2010). Khat is widely consumed among the youth of Ethiopia and it retains severe health, social and economic consequences (Yeshalem, 2013).

Chewing khat stimulates the inner nervous system. It increases alertness, euphoria, and occasionally psychosis and increases activity in the peripheral sympathetic nervous system leading to palpitation, increased blood pressure, large pupils, and red eyes. Long-term use of khat can cause insomnia, anorexia, gastric disorders, depression, liver damage, and cardiac complications, including myocardial infarctions (Aklilu, Anteneh, and Hiwot, 2014). Further, chewing khat reduces saving and nutritional standards of the family members (Kandari et al., 2014).

Generally, it is proved that chewing khat has socio-economic, health, physical and psychological impacts on those who are munching it. However, this study dedicated to assess the impact of chewing khat on the lives of khat chewers from the political point of view. Thus, assessing the impact of chewing khat on the political lives of khat chewers in the study area was the principal target of this study.

II. Research Methods

2.1 Study Area

North Wollo is one of the eleven Zones in Amhara National Regional State. North Wollo acquired its name from the former province of Wollo. North Wollo is bordered on the south by South Wollo, on the west by South Gondar, on the north by Wag Hemra, on the northeast by Tigray Region, and on the East by the Afar Region. Woldia is the province of North Wollo Zone.

Woldia is a hillside market city capital of the Semien Wollo Zone, and Woreda in northern Ethiopia. Located north of Dessie and southeast of Lalibela in the Amhara Region, this city has a latitude and longitude of 11°50'N 39°36'E and an elevation of 2112 meters above sea level. Based on the 2007 national census conducted by the Central Statistical Agency of Ethiopia (CSA), this city has a total population of 46,139, of whom 23,000 are men and 23,139 women. The majority of the inhabitants practiced Ethiopian Orthodox Christianity, with 80.49% reporting that as their religion, while 18.46% of the population said they were Muslim.

2.2 Research Design

Taking the nature of the study, genuine information is required from the experiences of individuals to address the objectives. For this reason, phenomenology design used. Phenomenology means the study of phenomena. Phenomena is events, situations, concepts and experiences. Phenomenology can raise awareness of something and increases insight about the phenomena (Parshant, 2013). This design enabled the researcher to access profound data from those who had long experiences of khat chewing. Peoples may know what khat means but the impact of chewing khat on the political life of khat chewers was brief from the experiences of khat chewers. Accordingly that was the rational of using phenomenology design for this study.

2.3 Research Approach

Objectives of this research demanded to generate qualitative data. Taking in to account this rationale, the study applied a qualitative research approach. The issues which require qualitative research method collected using key informant interviews, FGDs, individual semi-structured interviews, and complete observation. Thus, diverse information on how chewing khat affect the political life of the chewers was prime issue for qualitative analysis.

2.4 Data Sources and Collection Instruments

The study utilized primary sources to obtain the necessary information. Primary data sources were interviewees, FGD, and observation. Semi-structured interview, key informant interviews, FGDs, and complete observation used to gather primary data.

2.5 Semi-Structured Interview

Interviews in general can be used as a primary data gathering methods to collect information from individuals about their own experiences, practices, beliefs or opinions. Semi-structured interview particularly helps the researchers to collect detailed information in a somewhat conversational style. In semi-structured interview the interview is prepared to be flexible in terms of the order in which the topics are considered and to allow the interviewee develops idea and speaks more widely on the issues raised by the researcher (Denscombe, 2007).

Thus, it help the researchers to delve deeply the topic and understand thoroughly the answers provided. In this interview, the researchers had a list of issues and questions to be covered, but might not deal with all of them in each interview. The order of question also changed depending on what direction the interview takes. Indeed, additional questions may be asked, including some which were unanticipated at the start of interview, as new issues arise.

Therefore, to gather the required data using this method, the researchers held discussions one-on-one between the interviewer and an individual participant to gather information on a specific set of the research topic. This individual face to face communication and conversation carried out with participants who selected purposively from the population in the study area. The interviewees proposed being khat chewers. Accordingly, women, youths, and adults who were chewing khat in the study area interviewed about the impact of chewing khat on their political life. The place of the interview decided by mutual agreement made by the researchers and interviewees.

2.6 Key Informants Interviews

Attempts to explore facts on the ground makes it a rational approach to include key informant interviews by involving selected group of individuals who are likely to provide needed information, ideas and insights on the proposed research. Accordingly, drug and substance abuse protection officers (to grasp the condition of chewing khat in the study area), political elites (to

analyze the political impact of chewing khat on the chewers) and individuals who were versed in chewing khat were key informants for this study whom they allowed the researchers collecting data on relevant and well-informed sources about the issue.

2.7 Focus Group Discussions

Focus group is “a way of collecting qualitative data, which essentially involves engaging a small number of people in an informal facilitated group discussion (or discussions), focused around a particular topic or set of issues” (Wilkinson, 2004). It provides valuable insights on how group participants’ view an issue with which they are confronted (Bryman, 2008). Therefore, the researchers conducted three FGDs in the town i.e. one for women, one for youth, and one for adult khat chewers’ separately to prevent domination of one section of the research participant over the other. Generally, there were three FGDs in Woldia City Administration containing ten members, in each group, in which researchers were facilitating the discussion.

2.8 Complete Observation

The researcher employed complete observation data in this study. As Howell stated, complete observation is important to be one in the participant; and feel experience, and know the case. The researchers can use this kind of observation when they are integrated in population of study beforehand (Howell, 1972). Accordingly, for long period of time before researchers think about this study and made pilot-study, among the researchers, one researcher had been in the drug of khat for more than six years. He was friendly with the participants in Woldia city administration. He was chewing khat with them and felt the impact of chewing khat on the political participation.

2.9 Selection of the Study Sites

The rationale for the choice of Woldia for this study was purposive. Because it assumed (the researchers’ observation) that in this city excessive amount of khat was circulated and numerous khat chewing houses existed. Ease of accessibility and market access of khat from both Bahir Dar and Hayq were also considered as additional criteria’s to select the city as the research site. However, the specific study sites or streets selected following the reconnaissance survey of Kebeles where the people were chewing khat.

2.10 Data Summarizing and Analysis Techniques

Data, which collected from informant interviewees, FGDs, and complete observation, were summarized and analyzed in team. Outstanding and prominent issues screened by checking how many of the speakers had reiterated the same issue in the process of the interview. Both diverging and converging issues on particular issues identified and used for analysis in the context of the research objectives through thematic analysis.

Trust worthiness, reliability and validity of the research outcome. To ensure trust worthiness of the research, the researchers pursued factors like credibility, transferability, dependability, and conformability of the research findings.

Credibility refers to whether the findings are based on and supported by the data collected. To address credibility, the researchers employed triangulation of data which collected via interviews, FGDs, key informant interviews and document reviews; and direct quotation of participant's idea will be used in the study.

Transferability refers to the applicability of the research finding to another context. It is up to the reader, rather than the researcher, to determine whether the findings are transferable or

applicable to other settings. To such a degree, to address issues of transferability, this study provided thick descriptions of the phenomenon under study including background information.

Dependability refers to the stability or consistency of the findings over time. The researchers made detailed descriptions about the data collection and analysis procedures to address issues of dependability.

Conformability refers to objectivity or the extent to which the findings are shaped by the data and not researcher bias or interest. The researchers used peer reviews and explain the findings of the study to the participants to address the issue of conformability.

2.11 Ethical Considerations

Permission to conduct the research sought from the respective university research coordinator. Voluntary consent obtained from the participants. Purpose of the study, its benefits and risks clearly explained to the participants. Confidentiality of all information gathered guarantee, and used only for the stated research purposes.

Disseminating the research output. Community research projects are often initiated with action and change in mind. That is, the knowledge generated is intended to be used towards specific ends for strengthening community programs, improving public policy, sharing vital information with community members.

Dissemination ways depended on the availability of possible dissemination methods: Community, university, or private meetings/presentations. Formal research reports, online outlets (web sites, blogs, e-mail networks), Press (newspapers, radio, television), Professional or academic conferences, journals, articles, One-to-one meetings with community members, Art or multimedia (installations, videos) and others.

III. Discussion

3.1 The Impact of Khat Chewing on the Political Participation of the Chewers

Chewing khat affected political participation of respondents, negatively. Chewing khat caused political unconsciousness, utopian involvement in politics, and fail in conspired politics among khat chewers. Chewing khat enabled participants to be reluctant in political party formation, from active participation of public meeting, in attending political issues through media, in political election and on peaceful demonstration. This indicates that khat seriously challenges the politics of the given country. Right now, in khat cultivated country, khat chewing sessions are more important than the political issues.

3.2 Political Unconsciousness

The researchers acquaint of that chewing khat had influence on political participation. Key informants and participants of FGDs stated that chewing khat had negative influence on khat chewers. Khat addicted individuals were unconscious about politics and are indecision to participate in political issues. As citizens of the country, khat chewers did not know the political issues of the country. They did not understand what administration the country has exercised. Even the see-sawing politics of the country, exist ethnic conflicts, corruption, and struggle for power in Ethiopia were not their interest. What surprises here is that, some of them were new for the governmental administration wings.

Related to this one of the key informants had this to say:

Politics has not been my issue. Even, I have never thinking about what politics mean. I heard that peoples are talking about conflicts, mal administration, and violations on Ambara ethnic group but I have never interested to know about it.

Other key informant also added this:

When I meet friends in my village, they talk about various political issues. They discuss is-of the conflict between Abiy's administration and Tigray People's Liberation Front (TPLF). Even some of them are articulated the interest of Western and America in Ethiopian domestic politics in better way. They better know how Western have worked to return TPLF remnants to power. Albeit, I have no idea to say something on such political issues since most of my times are annihilated for not learning and attending political issues but for khat chewing.

In addition to this, our FGD with adult came with this findings. One adult participant argues that I afraid to engaged in politics and hate to hear about politics. I think this happens because long time chewing khat makes me weak to deal with politics.

Further, during FGD with women, one participant contended in such way: I have no idea on the political issue of this country. Still know, I have not entertained in community meeting. I have not participated in electoral process. In short, I think and worrying about the way of getting money to buy khat and I have wasted my days for thinking khat, only.

Moreover, the complete observation confirmed that most khat chewers have not political awareness. They are very reluctant to know about politics and political case. Added to this, they are not participant in decision making, in community meeting, in local public meeting, in election, and in peaceful demonstration. Thus, politics has not place in the room of khat chewers.

According the information obtained from key informants, FGDs, and complete observation, khat chewers were unconscious in politics. They did not know the political issue of the country. This mind had not space for politics. What wonder is that during the complete observation, the researchers witnessed that some of them were new for the word "politics".

3.3 Utopian Involvement in Politics

We take the word "Utopian" from Karl Marx who coins this word to express the previous socialists idea as unrealistic or fanciful (Michael, 2005). Similarly, chewers' idea of politics were utopian. Even some of them were good to analyze, articulate, and imagined politics when they were in the condition of chewing khat, they could not implement it in real world. Chewers showed interest and eagerness to participate in politics when they got the alertness of mind during chewing khat but this will be day dream after the khat chewing session.

Related to this, one key informant had this to say:

Khat chewers may talk a lot about the current political issues of their country in the khat chewing room. But they are reluctant to put in to practice their political positions and believe by taking part in different forms of political participation.

Other key informant said this, too:

Khat causes moroseness for me. I incapable to communicate with any college. I cannot head my family. When I am chewing khat, I mind politics, as if I can participate in my community issues but this thinking cannot stay with me longer. In normal condition, I have not taken part in any kind of political life since khat takes my confidence of taking part in politics.

One key informant explained his experience as follow:

We can say that chewing khat has effect on active political participation. Khat addicted individuals are passive in their political participation. They are not active participant in political issues of the community. khat chewers spend their precious time in khat chewing houses and they have developed lower sense of responsibility to get involved in the political affairs of their country at different levels. They lack courage and commitment to make meaningful political participation as active citizens. Chewers are passive and have on-off position to participate in public meeting, to form political parties, to participate in political elections, to follow political issues via media and to participate in peaceful-demonstrations because they slaved themselves for khat.

One more, the other key informant also added this:

Khat users focus on what the rumor has stated rather than actively participate in political issues of the community. They do not know what is going in the country. Few of them participated in peace demonstration and watch out political issues on television, however, this has not continuity since the pushing factor behind this is Mirkana (alertness of mind after chewing khat).

FGD with youth, adult, men, and women chewers strength the above findings. During FGDs with youths' khat chewers, one participant spoke his experience. He said that when I was in the mood of chewing khat, my confidence grew up. I counted myself as politicians. I dreamed of fighting for truth, freedom. I thought about the way of preaching to the neo-colonialism conspiracy of my country. But, this all were unpracticed in the normal mood.

FGD with women also come with this truth. During FGDs with women, one participant said that in chewing khat time, it is common to watch different political issues on various television channel and to talk with different political theories and the current world order but none of us remember and discuss over again on the issues that we raise during khat chewing mood.

In other FGD, one adult argued in such way: During my chewing khat session, I think of how I will be one among those who fight for the right of human rights, democracy, right of women, and right of child. I think of how I will have my political parties. I think of how I will be one who contributes prodigious role in solving of community issues. Albeit, this will stay as wish. I lack confidence and I afraid to change my thinking to reality.

The complete observation gives additional prove for the above findings. Some khat chewers seemed having political knowledge and skill. They forwarded smart idea on politics. They illustrated their interest to participate in local, national, and international political issues but this could never described on earth.

Thus, from the above findings, we can infer that initiated by the alertness of mind (In Amharic: Mirkana), chewers manifested themselves as political analysts and political experts. In addition to this, they showed eagerness to participate in different political issues but this never achieved when they were in normal tone since they had not knowledge and skill of politics. Even if few of them had knowledge of politics, they lacked confidence to take part in it. Their wish was not practical in reality.

3.4 Fail in Conspired Politics

As previously seen, in reality, most that chewers were not interested to attend and participate in political issues, even they did not give a shit for political issues concerning with them. The curiosity here is that few of them were participated in politics but they could easily misguided by the conspiracy politics of others.

According to the information obtained from one key informant:

Few khat chewers were motivate to make practical involvement in the conspired politics of the country, unknowingly. Westerns, Americans, different rebellion and terrorist group used khat chewers as a means to generate chaos and conflict in Ethiopia. Khat chewers who inevitably thought and worried about how to get money for buying khat for satisfying their physiological and psychological needs, could easily sellout to the enemy in the destruction of the country.

Other key informant had this to say:

In order to make meaningful and legal participation on the political spheres, first khat chewers need to liberate themselves from the yoke of khat addiction. When we assed different criminal who participated in the destruction of public properties and ethnic conflicts, we found that most youths in such case were khat addicted. That mean that khat chewers were used by others who run conspiracy politics in this country because khat paralyzes them and made unable to see things critically and rationally.

During FGD with women khat chewers, one participant said that agents of TPLF selected few chewers that I knew to lead chaos in Woldia city. For selected youth khat chewers, they told that youths should fight for rights and for this they promised to provide asked money. Focuses on the money that promised khat drugged youths were directed to create conflict and chaos during the event of mob supporting of Prime Minister Abiy's administration via peaceful demonstration even though such event this ceased to function because of strong assessment security.

The other FGD with youths came with this findings. One youth participant contended that I myself was the victim of conspired politics. By giving few amount of money for khat drugged individuals, TPLF remnants were created disunited society. Some of the stratum of society stand for Islam, the other for Wollo; the other attached itself with Amhara; and few of the stratum of society related itself with Oromo. This happened because paid khat chewers preached different parts of the social by telling that its manifestation of identity is harassed by the others. For Muslims, they told Islamic religion is attacked by fundamentalist of Orthodox fellow. For those who flagged Wolloness as identity, they told being Wollo is the cause of being neglecting from economy and politics. For those who considered themselves as Oromo, they told that Wollo is blamed as non-Amhara because of its Oromo identity. For those who affiliated

with the identity of Amharaness, they told that Wollo is the origin of Amhara. Owing to this, khat chewers who were the tool of conspired politics caused political fragment in the society.

The findings from the complete observation ensured this. Khat chewers were utilized by politicians who wish to dismantle this country and want to craft conflict in every corner of the country. Chewers were not only emotional but also easily used by others. They did not think critically and loyal to their community or country. For the sake of their drug, they could exchange their country by money.

Thus, khat chewers of the studied area were easily fail in the conspiracy politics. They deceived by others and misled their fellows, and finally this will lead to conflict. This findings go in line with Walls (2009) who stated that chewers are the passive political participant and even if they engaged in political activities, they will be the pint to misguide their fellows toward chaos. Emotion, unhealthy alertness of mind, and needing of money to by khat caused themselves to get in the trap of conspired politics to misguide themselves and others to the down-hill politics.

IV. Conclusion

4.1 Conclusion

In this research, the researchers identified that khat chewing is an insidious habit that affects political aspects of chewers' life. Majority of the participants reported that khat consumption causes individuals to be submissive on political issues, like, community meeting, on political party formation, on political election and so on. Further, even if few of them were good in politics, they could fail in corrupted politics.

4.2 Recommendations.

The Amahara Regional State encounters complex problems, problems like social, political and economic. Within the existence of such problems, having drug addicted individuals make the problems more critical. Therefore, by considering this, the Amahara Regional State shall develop rules related with chewing khat. It is good for local and regional administration to draft a legal document on the protection of chewing khat since chewers of khat have heinous contribution on political issues. On the other hand if males, females, youths, elders, Christians and Muslims disconnect themselves from khat, they will benefit themselves, the community and the region.

- It is a widespread belief among consumers of khat that it has spread because of unemployment. Therefore, stakeholders shall increase employment opportunities which will automatically lead to khat addicted declines.
- Based on these findings it is recommended that the stakeholders should prepare open forums, regular workshops and conferences to create understanding on the ill effects of khat chewing in collaboration with psychiatrists and psychologists.
- For drug addicted individuals, at different level, the regional state shall consider the incumbent of treatment organization, like, hospital for drug addicted, ASAP.
- Scholars, politicians, policy makers and physician should design strategies to handle the production, usage and distribution of khat in local level.

References

Advisory Council on the Misuse of Drugs. (2005). Khat (Qat): Assessment of risk to the individuals and communities in the UK.

- Aklilu Sinshaw, Anteneh Messele & Hiwot Kassa. (2014). Prevalence and associated factors of khat chewing among Atse Fasil campus students, University of Gondar, North West Ethiopia. *Journal of Psychology and Clinical Psychology*, 1(6).
- Alem A, Kebede D, Kullgren G. (1999). The prevalence and socio-demographic correlates of khat chewing in Butajira, Ethiopia. *Acta Psychiatr Scand Suppl*, 84-91.
- Asfaw Getnet, Berhanie Getnet, Simegn Sendel & Daniel Tsehay. (n.d.). Khat Use Prevalence Causes and Mental Health, Bahir-Dar, North West Ethiopia. *European Scientific Journal*.
- Amsalu Taye, Wondemagegn Melese, & Kelemu Tilahun. (2017). Perceived Psychological Economic and Social Impact of khat chewing among Adolescents and Adults in Nekemte Town: East Wollega Zone: West Ethiopia. *BioMed Research International*.
- Asmamaw Zeleke, Worku Awoke, Endalew Gebeyehu & Fentie Ambaw. (2013). Khat chewing practice and its perceived health effects among communities of Dera Woreda, Amhara-Region, Ethiopia. *Open Journal of Epidemiology*, 3(4).
- Awell Yahya, Yeria Rajeshwar, Tadele Eticha, Getu Khasay. Dagim Ali & et al. (2016). Socio-economic and health effects of khat chewing in Mekelle, Tigray Region, Ethiopia. *International Journal of Pharmacy and Pharmaceutical Research*, 8(1).
- Berhanu Megersa, Aregash Esayas & Alyi Mohamed. (2014). Socio-economic impact of khat in Mana district, Jimma Zone, South Western Ethiopia. *Journal of Agriculture and Food Sciences*, 2(2).
- Bizuayehu Walle Birhane, Muluken Walle Birhane, Kidest Reba Lebeta. Effects of Khat Chewing Behaviors on Health Outcomes among Male Khat Chewers in Bahir Dar, North West Ethiopia. *American Journal of Biomedical and Life Sciences*. Vol. 2, No. 4, 2014, pp. 89-97. Doi: 10.11648/j.ajbls.20140204.15
- Bryman, A. (2008). *Social Research Methods* (3rd Ed.). Oxford: Oxford University Press.
- Beckerleg, S. (2008). Khat in East Africa: taking women into or out of sex work? *Substance Use*.
- Central Statistical Agency of Ethiopia, ICF international: Ethiopia Demographic and Health Survey 2011. 2012th edition. Addis Ababa, Ethiopia: Central Statistical Agency; 2012.
- Chabai, P. (1989). *Africa Works: Disorder as Political Instrument*. Oxford, England.
- Creswell, W.J. (2003). *Research Design: Qualitative, Quantitative, and Mixed methods approaches*.
- Dawson, C. (2002). *Practical Research Methods: A user-friendly guide to mastering. Research techniques and projects*.
- Denscombe, M. (2007). *The Good research guide for small-scale social research projects*. England: McGraw-Hill Education, Open University Press.
- Erica B, George F, Gabor B. Khat-a controversial plant. *Wien Klin Wochenschrift the Middle European J Med*. 2009;121:604–14.
- Feyissa, A.M., Kelly, J.P. (2008). A Review of the Neuropharmacological Properties of Khat. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, pp. 1147–1166.
- Fujiwara Koji, Kroll Jerome, Yusuf Ismail. (2010). Psychoses, PTSD and depression in Somali Refugees in Minnesota. *Soc Psychiat Epidemiol*.
- Gashaw Garede and Teshome Gensa. (2019). Impact of Chronic khat (*Catha edulis* Forsk) Chewing on Pulmonary Function Test and Oxygen Saturation in Humans. *SAGE Open Medicine*, 7, 1-7.
- Giannini AJ, Castellani S. A manic like psychosis due to khat. *J Clin Toxicol*. 1982; 19:455–459.
- Green, R. H. (1999). *Review of African Political Economy*, 26, 33-49.
- House, C.C. (2001). *Statistical Aspects of a Census: Conference on Agricultural and Environmental Statistical Applications*. Rome, Italy.
- Howell. (1972). *On Research: Observation*.
- Javed, A, Sadaf, S., and Luqman, M. (2006). Rural Women's Participation in Crop and Livestock Production Activities in Faisalabad-Pakistan. *Journal of*

- Agricultural and Social Sciences, 3, pp. 150-154. Retrieved from <http://www.fspublishers.org>
- Kandari L, Hiranmai Y, Ashok T & Tripti K. (2014). Chat (*Catha edulis*): A socio-economic crop in Harar Region, Eastern Ethiopia. Licensee Springer.
- Kebede Y: Cigarette smoking and Khat chewing among college students in North West Ethiopia. *Ethiop J Health Day* 2002, 16(1):9–17.
- Kroll J, Yusuf AI, Fujiwara K: Psychoses, PTSD, and depression in Somali refugees in Minnesota. *Soc Psychiatry Psychiatr Epidemiol* 2011, 46:481–493.
- Mekasha, A. (1983). Clinical aspects of khat (*Catha edulis forsk*). International Symposium on Khat, (pp. 77-83).
- Mekonnen G. (2006). Prevalence of Khat Induced Psychotic Reaction among College Students in Jimma University College of Agriculture. *Discourse Journal of Agriculture and Food Sciences*.
- Michael, N. (2005). *Socialism: A very Short Introduction*. New York: Oxford University Press.
- Michael O, Axel K, Nasir W. (2011). Khat use in Europe: implications for European policy. In Marie-Christine A, eds. *Drugs in focus*. Office for Official Publications of the European Communities. United Kingdom.
- Minilek Kefale, Tadesse Desalegn, Ahmed Yimam & Dawit Tsegaye. (2012). The status of member's participation in seed producer and marketing cooperatives in Amhara Region, Ethiopia. *Global Advanced Research Journals*, 1(1), pp. 009-014. Retrieved From <http://garj.org/garjb/index.htm>.
- Negeanwa. (2013). *Impact of Khat Cultivation on Educational Performance among Upper Primary School*. Nairobi: Kenyatta University.
- Park A, Sher KJ, Krull JL. (2009). Selection and socialization of risky drinking during the college transition: the importance of micro-environments associated with specific living units. *Psychol Addict Behav*, pp. 404–414
- Parshat Kumar (2013). Qualitative research design: A conceptual frame-work. *International Journal of Social Science and Interdisciplinary Research*, 2(1).
- Patel. (2000). Mechanism of action of cathinone: the active ingredient of khat (*Catha edulis*). *East Afr Med*, pp.329–332.
- Patton, M. (1990). *Qualitative evaluation and research methods*. Beverly Hills, CA: Sage: CA: Sage.Rahama
- Toennes SW, Kauert GF: Driving under the influence of khat–alkaloid concentrations and observations in forensic cases. *Forensic Sci Int*, 2004, 140:85–90.
- Walls, M. (2009). The Emergence of a Somali State: Building Peace from Civil War in Somaliland. *African Affairs*, 371-359.
- Wendy Sykes, N. C. (2010). *Perceptions of the Social Harms Associated with Khat Use*. Home Office. Crown.
- Wilkinson, S. (2004). *Qualitative research: Theory, method and practice*. London: Sage.
- Yeshalem Mulugeta (2013). Khat Chewing and Its Associated Factor among College Students in Bahir Dar Town, Ethiopia. *Science Journal of Public Health*, pp. 209-214.
- Yeshigeta Gelaw, A. H.A. (2004). Khat chewing and its Socio-demographic Correlates among the Staff of Jimma University. *Journal of Health Development*, 18(3).
- Yin. (2003). *Applied Social Research Method Series*. International educational and Professional Publisher: London.
- Zahran, A. K.A. (2014). Qat farms in Yemen: Ecology, dangerous impacts. *Egypt Journal of Basic and Applied Science*, 1-8.