

CATHA EDULIS CONSUMPTION AND ITS EFFECTS ON ECONOMIC AND SOCIAL WELL-BEING IN YEMEN



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Abstract

This qualitative study investigates the impact of Catha edulis (qat) consumption on the economic and social well-being in Yemen, employing the Maqashid Syari'ah framework and a review of relevant literature. Based on secondary data from prior research and sources on Maqashid Syari'ah, the study reveals that qat consumption has significant negative effects on Yemeni society. Socially, it leads to diminished productivity, higher unemployment, and strained family relationships. Economically, the expense of qat diverts resources from essential needs, worsening poverty. Additionally, excessive qat use is linked to health issues, such as oral diseases and psychological problems, which further deteriorate societal well-being. The analysis, viewed through the Maqashid Syari'ah perspective which aims to protect and promote the well-being of individuals and society highlights a misalignment between qat's socio-cultural benefits and Shariah objectives of safeguarding health, wealth, and family integrity. The study concludes with recommendations for policy and community strategies to address the adverse impacts of qat and foster a more comprehensive approach to improving well-being in Yemen.

Abstrak

Studi kualitatif ini menyelidiki dampak konsumsi Catha edulis (qat) terhadap kesejahteraan ekonomi dan sosial di Yaman, dengan menggunakan kerangka kerja Maqashid Syari'ah dan tinjauan literatur yang relevan. Berdasarkan data sekunder dari penelitian sebelumnya dan sumber-sumber tentang Maqashid Syari'ah, penelitian ini mengungkapkan bahwa konsumsi qat memiliki dampak negatif yang signifikan terhadap masyarakat Yaman. Secara sosial, hal ini menyebabkan berkurangnya produktivitas, pengangguran yang lebih tinggi, dan hubungan keluarga yang tegang. Secara ekonomi, pengeluaran untuk qat mengalihkan sumber daya dari kebutuhan pokok, sehingga memperburuk kemiskinan. Selain itu, penggunaan qat yang berlebihan terkait dengan masalah kesehatan, seperti penyakit mulut dan masalah psikologis, yang semakin memperburuk kesejahteraan masyarakat. Analisis yang dilihat melalui perspektif Maqashid Syari'ah yang bertujuan untuk melindungi dan meningkatkan kesejahteraan individu dan masyarakat menyoroti ketidakselarasan antara manfaat sosial-budaya qat dengan tujuan Syariah untuk menjaga kesehatan, kekayaan, dan integritas keluarga. Studi ini memberikan rekomendasi untuk kebijakan dan strategi masyarakat untuk mengatasi dampak buruk qat dan mendorong pendekatan yang lebih komprehensif untuk meningkatkan kesejahteraan di Yaman.

INTRODUCTION

Plants are a blessing created by Allah SWT for humans to utilize in meeting their needs, such as being used as staple food, clothing, housing, medicines for health, feed for livestock, and so on. Unfortunately, some groups have diverted the benefits of certain plants from their original functions, for example, plants that should be used as medicines in the medical field are misused as illegal drugs, leading to addiction and dependence that eventually have a negative impact on the users. One example is the phenomenon of



the high consumption of the Catha Edulis (Qat) plant by the people of Yemen, which has been going on for centuries.

Studies indicate that Qat is still cultivated by the people and farmers in Yemen, even starting before the Islamic era. The green leaves of Qat are often chewed by more than 90% of the Yemeni population; these leaves contain alkaloids similar to caffeine, providing a pleasurable and slightly stimulating effect. However, the WHO has classified Qat (Catha Edulis) as a plant that is often misused and dangerous if consumed. Consumption of Qat results in a wide range of psychological dependence. Since 1956, Qat has been recommended to the United Nations as a Narcotic Drug, and its cultivation and sale have been banned in several ways, similar to hashish and opium, because of its significant impact on social life. Despite Qat being classified as a plant that is prohibited for cultivation, Yemeni farmers continue to grow it. According to research by M. M. al-Mawarni and C. Garforth, farmers conduct their own research to develop technology for Qat plantations, even though the government does not support them due to the controversy surrounding the plant. This indicates that the production and consumption levels of Qat remain very high, despite policies aimed at reducing the associated risks. Islam has regulated everything in human life; Allah SWT has clearly indicated in the Qur'an what is good and what is bad. Based on the above data, the author wants to understand the extent of the impact caused by the high consumption of Qat in Yemen on economic and social life using the maqashid shariah method to look from the perspectives of *Hifdzu ad-Din*, *Hifdzu An-Nafs*, *Hifdzu Aql*, *Hifdzu An-Nasl*, and *Hifdzu Maal*.

The objectives of this study are to understand the impact of high Qat consumption on the economic and social aspects of Yemeni society and to evaluate the long-term health risks associated with Qat consumption, including psychological dependence and other health effects from its alkaloid content. The study also aims to analyze the effectiveness of the Yemeni government's Qat prohibition policies and their impact on cultivation and consumption practices. Additionally, this research will apply the maqashid shariah method to assess the effects of Qat consumption from the perspectives of *Hifdzu ad-Din*, *Hifdzu An-Nafs*, *Hifdzu Aql*, *Hifdzu An-Nasl*, and *Hifdzu Maal*, in order to provide an Islamic perspective. The study also seeks to identify research gaps in the existing literature on Qat consumption, such as the lack of studies on the effectiveness of prohibition policies and their impact on social well-being, as well as the absence of maqashid shariah-based evaluations. By addressing these gaps, the research aims to offer more effective policy recommendations and support healthier alternatives for the Yemeni population.

This study aims to address several key issues related to Qat consumption in Yemen. Firstly, how does high Qat consumption impact the economic and social life of Yemeni society? Secondly, what are the long-term health risks associated with Qat consumption, including psychological dependence and other health effects? Thirdly, to what extent is the Yemeni government's policy on Qat prohibition effective in reducing cultivation and consumption practices? Fourthly, how can the maqashid shariah method be applied to evaluate the impact of Qat consumption from the perspectives of *Hifdzu ad-Din* (protection of religion), *Hifdzu An-Nafs* (protection of life), *Hifdzu Aql* (protection of intellect), *Hifdzu An-Nasl* (protection of lineage), and *Hifdzu Maal* (protection of wealth)? Lastly, what are the gaps in the existing research on Qat consumption and its prohibition policies, and how can these gaps be identified and addressed.

METHODS

This study aims to address several critical issues regarding Qat consumption in Yemen. Firstly, it will explore how high levels of Qat consumption affect the economic and social life of Yemeni society. This includes examining the broader implications for productivity, social structure, and overall well-being. Secondly, the research will investigate the long-term health risks associated with Qat consumption, particularly focusing on psychological dependence and other health effects related to the alkaloids present in Qat. Thirdly, the effectiveness of the Yemeni government's prohibition policies on Qat will be evaluated to determine their success in reducing both cultivation and consumption practices. Additionally, the study will apply the maqashid shariah framework to assess the impact of Qat consumption from various Islamic perspectives, such as the protection of religion (Hifdzu ad-Din), life (Hifdzu An-Nafs), intellect (Hifdzu Aql), lineage (Hifdzu An-Nasl), and wealth (Hifdzu Maal). Lastly, the research will identify gaps in the existing literature concerning Qat consumption and prohibition policies, aiming to highlight deficiencies in current studies and policy evaluations.

The primary objectives of this research are to gain a comprehensive understanding of how high Qat consumption influences economic and social aspects of Yemeni life and to evaluate the associated long-term health risks, including psychological dependence and other health-related issues due to Qat's alkaloid content. The study will also scrutinize the effectiveness of the Yemeni government's policies aimed at prohibiting Qat, analyzing their impact on cultivation and consumption. By applying the maqashid shariah method, the research aims to provide a detailed evaluation of Qat consumption from an Islamic perspective, addressing aspects such as the protection of religion, life, intellect, lineage, and wealth. Furthermore, the study will pinpoint research gaps in the existing literature, such as the need for more detailed studies on policy effectiveness and social impacts, as well as a lack of evaluations grounded in maqashid shariah principles. By addressing these gaps, the research intends to offer more effective policy recommendations and support for healthier alternatives within Yemeni society.

RESULT AND DISCUSSION

Yemen and Catha Edulis (Qat)

Yemen, officially known as the Republic of Yemen, is a country located in the southwestern corner of the Arabian Peninsula. It has an area of approximately 530,000 square kilometers, which accounts for about 15% of the total area of the Arabian Peninsula.¹ Yemen's territory includes around 200 islands, with the largest being Socotra, renowned for its unique biodiversity and often referred to as the "Galapagos of the Indian Ocean."² The population of Yemen is estimated to be around 34 million people. The country has a rich history that dates back to ancient times and has been a crossroads of various civilizations and trade routes. Yemen's diverse cultural heritage is reflected in its architecture, traditions, and linguistic diversity.³ Arabic is the official language, and Islam

¹ M. M. Al-Marwani, "Experimental Processes and Diffusion among Qat Farmers in Yemen," *Journal of the Faculty of Education* 1, no. 10 (January 21, 2023): 7–31, <https://doi.org/10.60037/edu.v1i10.1214>.

² Ahmed Al-Motarreb, Kathryn Baker, and Kenneth J Broadley, "Khat: Pharmacological and Medical Aspects and Its Social Use in Yemen," *Phytotherapy Research* 16, no. 5 (August 2002): 403–13, <https://doi.org/10.1002/ptr.1106>.

³ Kamal T. Chaouachi, "Qat Chewing and Water Pipe (Mada'a) Smoking in Yemen: A Necessary Clarification When Studying Health Effects on Oral Mucosa," *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology* 104, no. 6 (December 2007): 731–33, <https://doi.org/10.1016/j.tripleo.2007.08.030>.

is the predominant religion, with most Yemenis adhering to the Shafi'i and Zaidi branches of Sunni and Shia Islam, respectively.⁴ Yemen's economy is primarily based on agriculture, remittances, and the export of oil and gas. However, the country has faced significant challenges in recent years, including political instability, conflict, and humanitarian crises, which have severely impacted its infrastructure and economic development. The capital city of Yemen is Sana'a, known for its historic old city, which is a UNESCO World Heritage Site. Aden, another major city, serves as an important port and commercial center. Despite the ongoing challenges, Yemen's cultural and natural landscapes continue to be a testament to its historical significance and resilience. In the northern part of Yemen, spanning latitudes 12°–18° N and longitudes 42°–47° E, qat cultivation is prominent and can be classified into five distinct physiographic units. These include the Tihama coastal plain, a maritime plain stretching approximately 460 km along the Red Sea coast; the Red Sea coastal mountains, which rise between 300 and 1500 meters above sea level; the central mountains of Sanaa – Taiz, which range from 1500 to 3800 meters in elevation; Wadi El Jawf, situated in the eastern highlands with elevations between 1000 and 1200 meters; and the Empty Quarter, a vast desert region.

Among these units, the central mountains of Sanaa – Taiz offer the most favorable environment for qat cultivation due to their unique climatic conditions. This region benefits from relatively high rainfall, ranging from 329 to 839 mm annually in Sanaa and Taiz, with the most significant precipitation occurring between April and July. The area's air temperatures vary considerably, with the lowest temperatures ranging from –1.0°C to 9.2°C, while the highest temperatures range from 21.1°C to 35°C. In addition to rainfall and temperature, the central mountains experience a wide range of relative humidity levels. Humidity in the region fluctuates from a minimum of 10% to 11.1%, reaching a maximum of 98%, with annual averages between 51.2% and 59.0%. These climatic factors collectively create an optimal environment for qat cultivation, contributing to its prevalence in the region. Based on the geographical conditions of high mountain peaks, isolated cliffs, steep slopes, and rocky terrain, Yemen presents a unique environment with soil that is notably rich in nutrients.⁵ The soil in these areas typically has a pH greater than 7, indicating an alkaline nature, and an organic matter content exceeding 3%, which contributes to its fertility. These conditions are further enhanced by the presence of non – intrusive vegetation that helps protect the soil from erosion and degradation. The combination of these factors creates a fertile environment that is highly conducive to agriculture, particularly for crops that thrive in well – drained, nutrient – rich soils.⁶

One of the most significant crops cultivated in these regions is qat (*Catha edulis*), a plant whose leaves are chewed for their stimulant effects. The intensive cultivation of qat is well – suited to the high – altitude and nutrient – dense soils found in Yemen's mountainous terrain. The plant's deep – rooting system benefits from the soil's richness in organic matter, which supports its growth and productivity. Additionally, the alkaline pH level of the soil aligns well with the requirements of qat, allowing it to thrive and yield

⁴ M.A. Zahran et al., "Qat Farms in Yemen: Ecology, Dangerous Impacts and Future Promise," *Egyptian Journal of Basic and Applied Sciences* 1, no. 1 (March 2014): 107 – 14, <https://doi.org/10.1016/j.ejbas.2013.09.002>.

⁵ Mohammed D Al Shubbar, "Understanding Khat: Its Sociocultural and Health Implications in Saudi Arabia," *Cureus*, March 21, 2024, <https://doi.org/10.7759/cureus.56657>.

⁶ Workineh Getahun, Teferi Gedif, and Fikru Tesfaye, "Regular Khat (*Catha Edulis*) Chewing Is Associated with Elevated Diastolic Blood Pressure among Adults in Butajira, Ethiopia: A Comparative Study," *BMC Public Health* 10, no. 1 (December 2010): 390, <https://doi.org/10.1186/1471-2458-10-390>.

high-quality leaves.⁷ Despite the controversies surrounding qat cultivation due to its social and economic impacts, it remains a critical component of Yemen's agricultural landscape, deeply intertwined with the country's cultural and economic fabric.

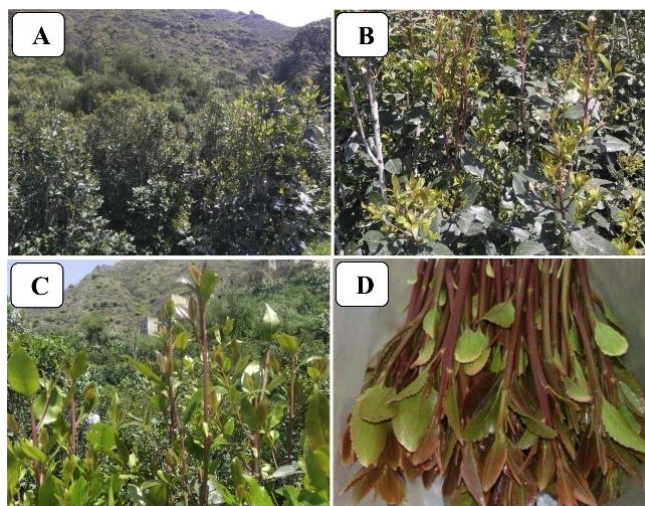


Figure 1. Qat Plants and Trees

Qat (*Catha edulis* Forsk.), a member of the Celastraceae family, is also known by many other names such as khat and miraa. Its tender green leaves (Figure 1) have an astringent taste and aromatic smell and are consumed by chewing. In terms of distribution, qat is widely cultivated in several African countries and Yemen. It is believed to have originated in Ethiopia and was brought to Yemen during trade journeys from Africa.⁸ The habit of chewing qat has significantly increased among various groups in Yemen and Africa, turning into a social custom that has spread to neighboring countries where qat chewers reside. In Yemen, the qat cultivation sector is divided into three main groups: 1. Qat farmers, 2. Qat traders, and 3. Qat consumers. The qat farmers and consumers are among the wealthiest in Yemeni society, representing less than 5% of the total population.⁹ Many of them are also qat consumers, including men and women, rich and poor, young and old. They believe that they cannot maintain a good quality of life without chewing qat leaves daily. They also consider their strong desire to chew qat leaves not as an addiction, but as a bad habit similar to smoking.¹⁰ Convincing them to change this belief is extremely difficult, especially when Yemeni Muslim leaders (Sheikhs) also enjoy chewing qat leaves. Therefore, qat cultivation in Yemen is more than just a traditional or conventional crop; it is highly profitable and not advisable to replace it with low-profit coffee cultivation.

⁷ Sadeq Ali Al-Maweri and Ghadah Al-Sufyani, "Prevalence of Oral Cancer, Potentially Malignant Lesions and Oral Habits among Patients Visiting Dental School, Sana'a University," *Oral Oncology* 49 (May 2013): S59, <https://doi.org/10.1016/j.oraloncology.2013.03.152>.

⁸ Mohammed Sultan Al-ak'hali, Khaled Abdulsalam Al-haddad, and Nezar Noor Al-hebshi, "Oral Plasma-Cell Mucositis Exacerbated by Qat Chewing - A Case Series," *The Saudi Journal for Dental Research* 6, no. 1 (January 2015): 60-66, <https://doi.org/10.1016/j.sjdr.2014.05.001>.

⁹ G. A. Balint and Erica E. Balint, "On the Medico-social Aspects of Khat (*Catha Edulis*) Chewing Habit," *Human Psychopharmacology: Clinical and Experimental* 9, no. 2 (March 1994): 125-28, <https://doi.org/10.1002/hup.470090206>.

¹⁰ Andrine M. Lemieux, Bingshuo Li, and Mustafa al'Absi, "Khat Use and Appetite: An Overview and Comparison of Amphetamine, Khat and Cathinone," *Journal of Ethnopharmacology* 160 (February 2015): 78-85, <https://doi.org/10.1016/j.jep.2014.11.002>.

The Impact of Qat Consumption on Health

The high consumption of qat by the Yemeni population has attracted many researchers interested in discussing the short – term and long – term impacts of qat. After reviewing several previous studies, the author found several facts in the field, namely that qat affects a person's health. These health issues not only impact physical health but also have mental health consequences.¹¹ Research conducted by Mohammed A. Al – Duais and Yahya S. at the LBB University in Yemen involved 440 male students aged between 18 and 25 years, of whom 360 agreed to complete the study.¹² In addition to providing psychological support and therapy, integrating social assistance into rehabilitation programs is crucial for achieving comprehensive and lasting recovery from qat dependence. Social assistance includes a variety of support services such as skills training, which helps individuals acquire the vocational skills necessary for stable employment, and job placement opportunities that provide a pathway to financial independence. Financial aid is also a key component, offering immediate economic relief to those transitioning away from qat dependence. This multifaceted approach addresses not only the psychological aspects of addiction but also the socioeconomic factors that often contribute to and perpetuate dependence. By addressing these broader needs, rehabilitation programs can create a more supportive environment that enhances the likelihood of successful recovery.

Research supports the effectiveness of combining social support with medical rehabilitation in improving recovery outcomes. A study by Sana'a University reveals that programs incorporating both social assistance and medical treatment achieve significantly higher success rates in reducing qat consumption and improving individuals' quality of life. This study demonstrates that when individuals receive comprehensive support ranging from vocational training and job placement to financial assistance they are better equipped to overcome addiction and build a healthier, more productive life. The integration of social assistance into rehabilitation not only facilitates immediate recovery but also fosters long – term stability and personal growth, providing a holistic solution that addresses both the psychological and practical aspects of overcoming qat dependence.

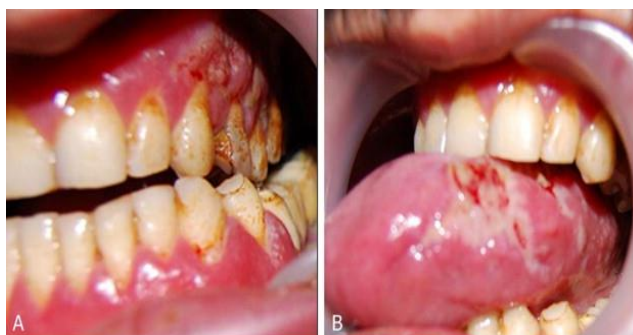


Figure 2. Infection and Inflammation in the Mouth of Patients

The conditions reported by the patients included very red tissue in the oral cavity with a velvety appearance and sometimes a bumpy or nodular surface. Symptoms included

¹¹ Tadesse Misgana et al., "Khat Use and Associated Factors during Pregnancy in Eastern Ethiopia: A Community – Based Cross – Sectional Study," *Frontiers in Global Women's Health* 3 (December 2, 2022): 941300, <https://doi.org/10.3389/fgwh.2022.941300>.

¹² Mohammed A. Al – Duais and Yahya S. Al – Awthan, "Association between Qat Chewing and Dyslipidaemia among Young Males," *Journal of Taibah University Medical Sciences* 14, no. 6 (December 2019): 538 – 46, <https://doi.org/10.1016/j.jtumed.2019.09.008>.

pain, dysphagia, and hoarseness.¹³ The study subjects ranged in age from 20 to 33 years. After investigating potential causes or contributing factors to the oral inflammation, the researchers found that all eight patients had a habit of chewing qat. The long – term habit of chewing qat likely caused an allergic reaction in the oral tissue, leading to inflammation. Chewing qat also poses risks to pregnant women, similar to excessive caffeine consumption. Research indicates that women who chew qat during pregnancy have a five times higher risk for the fetus. Besides these issues, qat consumption can lead to other health problems, including a history of gastritis and insomnia. In males, it is associated with anorexia, constipation, headaches, and general respiratory difficulties.¹⁴ Consuming qat not only impacts physical health but also affects mental health. The addictive substances and stimulant effects of qat cause extreme mood fluctuations. Initially, the intention behind consuming qat is to induce a pleasurable feeling, but these extreme mood swings can also exacerbate anxiety symptoms and lead to depression.¹⁵ The effects of qat consumption, which cause insomnia or poor – quality sleep, further deteriorate mental health and increase the risk of emotional disturbances. Additionally, qat use can lead to dependency or addiction, which affects overall mental health. Dependency on qat can cause stress and psychological issues, as well as worsen the quality of life.

The Impact of Qat Consumption on Social and Economic

Qat was first introduced to Yemen from Ethiopia between the first and sixth centuries. Since then, qat cultivation has spread widely, replacing coffee tree cultivation, which has almost completely disappeared except for a few trees hidden among the dense qat vegetation. More than 97% of qat leaf production is consumed locally in Yemen. This, of course, has a negative impact on Yemen's economy, which used to export high – quality coffee beans abroad. Consuming qat requires significant costs. According to data from various reports, the average expenditure on qat can reach 20% to 30% of a household's monthly income. This can result in a heavy economic burden, especially for low – income families. Many families allocate their budget for qat, which can reduce the funds available for other basic needs such as food, education, and healthcare.¹⁶ Diseases and health disorders resulting from qat consumption, such as heart problems, digestive issues, and mental disorders, increase healthcare costs. The government and health institutions have to address health problems related to qat consumption, adding to the burden on the healthcare system. Mental health issues due to qat consumption, such as anxiety and depression, require medical attention, which can increase healthcare costs.¹⁷ Research shows that qat use can lead to decreased work productivity. Workers who consume qat may experience reduced focus and performance, as well as increased absenteeism due to

¹³ Maged El – Setouhy et al., "Khat Dependency and Psychophysical Symptoms among Chewers in Jazan Region, Kingdom of Saudi Arabia," *BioMed Research International* 2016 (2016): 1 – 6, <https://doi.org/10.1155/2016/2642506>.

¹⁴ A. Al – Motarreb, M. Al – Habori, and K.J. Broadley, "Khat Chewing, Cardiovascular Diseases and Other Internal Medical Problems: The Current Situation and Directions for Future Research," *Journal of Ethnopharmacology* 132, no. 3 (December 2010): 540 – 48, <https://doi.org/10.1016/j.jep.2010.07.001>.

¹⁵ Mustafa Ahmed Alshagga et al., "Khat (Catha Edulis) Upregulates Lipolytic Genes in White Adipose Tissue of Male Obese Mice (C57BL/6J)," *Journal of Ethnopharmacology* 262 (November 2020): 113187, <https://doi.org/10.1016/j.jep.2020.113187>.

¹⁶ Sharoen Yu Ming Lim et al., "Effect of 95% Ethanol Khat Extract and Cathinone on in Vitro Human Recombinant Cytochrome P450 (CYP) 2C9, CYP2D6, and CYP3A4 Activity," *European Journal of Drug Metabolism and Pharmacokinetics* 44, no. 3 (June 2019): 423 – 31, <https://doi.org/10.1007/s13318-018-0518-2>.

¹⁷ Sharoen Yu Ming Lim et al., "CYP Gene Expression and In Vivo Biological Effects of Khat Ethanol Extract, Cathinone and Cathine in Caenorhabditis Elegans," *Progress In Microbes & Molecular Biology* 6, no. 1 (September 1, 2023), <https://doi.org/10.36877/pmmb.a0000344>.

health problems related to qat consumption. In some areas, dependence on qat can lead to unemployment if individuals are unable to work effectively or lose their jobs due to health issues related to qat consumption.¹⁸ With the numerous effects it causes, qat consumption is often associated with social conflicts, including family disputes and other social issues. Dependence on qat can cause tension in interpersonal relationships and social conflicts in the community. Qat consumption can affect the safety and well-being of society in general, especially if dependence on qat influences individual behavior and social interactions.¹⁹

The Maqashid Shariah Perspective on the High Consumption of Qat in Yemen

Based on the data presented above, the author finds that consuming qat violates the principles of Maqashid Shariah and brings about numerous harms. Qat consumption often disrupts religious activities, making it inconsistent with the principle of protecting religion (*Hifz ad-Din*).²⁰ Field data shows that many qat users experience a decline in participation in routine worship activities such as the five daily prayers and fasting during Ramadan. The stimulant effects of qat cause users to experience mood and energy fluctuations, which can lead them to miss worship times or perform their religious duties without proper devotion. This neglect contradicts the Shariah's goal of preserving and properly fulfilling religious obligations. The principle of *Hifz ad-Din* emphasizes the importance of maintaining and practicing the core tenets of Islam. When qat consumption interferes with these practices, it undermines the individual's spiritual health and communal religious life. For instance, individuals who are under the influence of qat may find it challenging to maintain the concentration and serenity required for prayer, or they may lack the physical stamina needed to observe fasting during Ramadan. Furthermore, this habitual negligence can lead to a weakened sense of religious identity and commitment over time. Therefore, the pervasive use of qat poses a significant threat to the religious well-being of the community, violating the Maqashid Shariah principle of protecting and upholding religious duties and values.

Consuming qat also contradicts the principle of protecting life (*Hifz an-Nafs*).²¹ Research in Yemen shows that regular consumption of qat can lead to various physical health issues, such as heart problems, hypertension, and digestive disorders. According to a study conducted by the Yemeni Ministry of Health, more than 50% of qat users report experiencing significant health problems, which increases the risk of premature death. This contradicts the Shariah's goal of protecting human life and health. Qat consumption is also associated with mental disorders such as anxiety and depression. Data from a study at Sana'a University shows that more than 40% of qat users experience significant symptoms of depression and anxiety. Excessive qat use leads to dependence, which can worsen the user's mental condition, contradicting the Shariah's goal of maintaining mental

¹⁸ Abdulsamad Alsalahi et al., "Conflicting Reports on the Role of the Glycemic Effect of Catha Edulis (Khat): A Systematic Review and Meta-Analysis," *Journal of Ethnopharmacology* 186 (June 2016): 30–43, <https://doi.org/10.1016/j.jep.2016.03.045>.

¹⁹ Chepukosi Kennedy et al., "Coenzyme Q10 Nullified Khat-Induced Hepatotoxicity, Nephrotoxicity and Inflammation in a Mouse Model," *Heliyon* 6, no. 9 (September 2020): e04917, <https://doi.org/10.1016/j.heliyon.2020.e04917>.

²⁰ Azizah Putri Irmayanti et al., "Urgensi Hukum Islam Dan Maqashid Syari'ah Dalam Pendidikan Agama Islam," *Ta Dib Jurnal Pendidikan Islam* 13, no. 1 (February 11, 2024), <https://doi.org/10.29313/tjpi.v13i1.13289>.

²¹ Ahmad Harisul Miftah, "Pencegahan Kematian Balita Dalam Perspektif Maqashid Asy-Syari'ah," *Syaksia: Jurnal Hukum Perdata Islam* 23, no. 1 (June 30, 2022): 70–87, <https://doi.org/10.37035/syaksia.v23i1.6464>.

health.²² Qat contains stimulant substances that affect the brain, causing a decline in cognitive abilities such as concentration, memory, and clear thinking. Data from a survey conducted among workers in Yemen shows that 30% of qat users report a decline in work performance and cognitive abilities. This decline is highly detrimental, especially for those working in fields requiring high concentration. Such cognitive impairments can lead to significant mistakes, reduced productivity, and increased workplace accidents, posing serious risks not only to the users themselves but also to their colleagues and the overall efficiency of the organization. This decline in cognitive function directly contradicts the Shariah's goal of protecting and maintaining the intellect (Hifz al – Aql).

The principle of Hifz al – Aql in Maqashid Shariah emphasizes the importance of safeguarding one's mental faculties and cognitive health. The detrimental effects of qat on cognitive abilities undermine this principle, leading to long – term consequences for individuals and society.²³ When individuals are unable to perform their tasks effectively due to impaired cognitive functions, it affects their professional growth and economic stability. Moreover, a population with widespread cognitive decline can hinder societal progress, innovation, and development. Thus, the widespread use of qat not only violates the Shariah's intent to preserve intellectual capabilities but also jeopardizes the broader socio – economic health of the community.²⁴ Addressing this issue is crucial for aligning daily practices with the foundational goals of Shariah, which seek to promote and protect the well – being of individuals and society as a whole. Consuming qat during pregnancy poses high risks to the fetus. A study conducted by Aden University found that pregnant women who consume qat are five times more likely to experience pregnancy complications, such as premature birth and low birth weight. These complications can have serious and long – lasting effects on the health and development of the child. Premature birth can lead to a range of health issues, including respiratory problems, developmental delays, and increased susceptibility to infections. Low birth weight is associated with higher risks of chronic conditions later in life, such as diabetes, heart disease, and cognitive impairments. The consumption of qat during pregnancy thus directly endangers the well – being of the unborn child, placing them at a significant disadvantage from the very start of their lives.

This adverse impact on fetal health contradicts the Shariah's goal of protecting progeny (Hifz an – Nasl) and ensuring a healthy future generation.²⁵ Maqashid Shariah emphasizes the importance of safeguarding future generations by promoting practices that ensure their well – being and development. The widespread use of qat among pregnant women in Yemen undermines this principle by exposing the next generation to preventable health risks. Ensuring the health of future generations is not only a religious and ethical obligation but also a critical factor in the socio – economic development of the community. A healthy, well – developed population is essential for the progress and prosperity of society. Therefore, addressing the consumption of qat during pregnancy is

²² John P. Kelly, "Cathinone Derivatives: A Review of Their Chemistry, Pharmacology and Toxicology," *Drug Testing and Analysis* 3, no. 7 – 8 (July 2011): 439 – 53, <https://doi.org/10.1002/dta.313>.

²³ Samud Samud, "Maqashid Syari'ah Dalam Pembaharuan Hukum Ekonomi Islam," *Mahkamah : Jurnal Kajian Hukum Islam* 3, no. 1 (June 8, 2018): 45, <https://doi.org/10.24235/mahkamah.v3i1.2750>.

²⁴ Azwar Iskandar and Khaerul Aqbar, "Green Economy Indonesia Dalam Perspektif Maqashid Syari'ah," *Al-Mashrafiyah: Jurnal Ekonomi, Keuangan, Dan Perbankan Syariah* 3, no. 2 (October 1, 2019): 83, <https://doi.org/10.24252/al – mashrafiyah.v3i2.9576>.

²⁵ Azwar Iskandar and Khaerul Aqbar, "Green Economy Indonesia Dalam Perspektif Maqashid Syari'ah," *Al-Mashrafiyah: Jurnal Ekonomi, Keuangan, Dan Perbankan Syariah* 3, no. 2 (October 1, 2019): 83, <https://doi.org/10.24252/al – mashrafiyah.v3i2.9576>.

crucial for aligning community practices with the goals of Shariah and fostering a healthier, more prosperous future for Yemen.

According to data from national economic reports, the average family in Yemen spends 20% to 30% of their income on buying qat. This significant expenditure diverts crucial financial resources away from other essential needs such as food, education, and healthcare. As a result, many families find themselves living in difficult economic conditions, struggling to meet their basic needs. The high cost of qat places a heavy burden on household budgets, leading to food insecurity, poor educational outcomes, and inadequate access to medical care. Children in these families are particularly affected, as limited resources mean they often go without proper nutrition, education, and healthcare, which are vital for their development and future prospects.²⁶

This wastefulness strongly contradicts the Shariah's goal of protecting wealth (Hifz al-Mal) and ensuring the wise and beneficial use of resources. Maqashid Shariah emphasizes the importance of managing financial resources responsibly to ensure the well-being and stability of the family and community.²⁷ The excessive spending on qat undermines this principle by promoting financial mismanagement and depriving families of the means to achieve a decent standard of living. Furthermore, the economic strain caused by qat consumption perpetuates a cycle of poverty and dependency, making it difficult for families to improve their economic situation. By redirecting resources towards more productive and beneficial uses, such as education and healthcare, families can work towards a more secure and prosperous future, in line with the Shariah's objectives of protecting wealth and promoting overall well-being. Qat consumption also affects work productivity. Data from worker surveys show that qat use leads to increased absenteeism and decreased performance. Workers addicted to qat often cannot work effectively or lose their jobs due to health problems related to qat consumption. This decline in productivity hampers economic growth and the financial stability of individuals and families.

Strategies for Reducing Qat Consumption in Yemen

Reducing qat consumption in Yemen requires a holistic and integrated approach due to the complex roots of the issue involving health, social, economic, and cultural aspects. Here are several strategies that can be implemented:

1. Education and Awareness

The government can play a pivotal role in mitigating the negative impacts of qat consumption by launching comprehensive health awareness campaigns. These campaigns should leverage a variety of media channels, including television, radio, and social media platforms, to reach a broad audience. By utilizing these diverse media, the campaigns can effectively disseminate information about the detrimental effects of qat on both physical and mental health. Additionally, integrating health education into school and community programs can further enhance outreach efforts, ensuring that individuals of all ages are informed about the risks associated with qat consumption. To provide targeted support, the campaigns could include training sessions and workshops designed specifically for different communities. These educational programs would focus on how to maintain a healthy lifestyle without reliance on qat. Topics covered might include proper nutrition, mental health strategies, and alternative recreational activities that do not involve qat. By equipping

²⁶ Waheeda Binti Abdul Rahman, "Al Qur'an Dan Wawasan Ekologi Perspektif Maqashid Syari'ah," *Tasyri' : Journal of Islamic Law* 2, no. 1 (January 30, 2023): 119–39, <https://doi.org/10.53038/tsyr.v2i1.71>.

individuals with knowledge and practical tools for healthy living, these initiatives aim to foster a better understanding of the risks associated with qat and encourage healthier choices.

Evidence of the effectiveness of such campaigns is supported by data from a 2020 survey conducted by the Yemeni Ministry of Health, which revealed that over 70% of the population had been exposed to information about the health risks of qat through mass media. In addition to mass media efforts, campaigns can also utilize seminars and workshops held at schools, universities, and community centers. For example, Sana'a University hosted more than 50 seminars in 2021 that addressed the negative effects of qat on mental and physical health. These seminars not only educated participants but also created platforms for ongoing dialogue about qat's impact, reinforcing the campaign's message and encouraging community engagement.

2. Economic Intervention and Empowerment

Efforts to encourage and support farmers in transitioning from qat cultivation to more profitable and environmentally friendly crops are crucial. The government and NGOs can provide incentives, training, and market access for alternative crops. Pilot projects have been launched to replace qat cultivation with alternative crops. Data from the Yemeni Ministry of Agriculture shows that projects in Taiz Province successfully reduced qat cultivation by 15% in the first two years. Crops like coffee, grapes, and vegetables have been promoted as qat alternatives. A study conducted by Aden University in 2022 found that farmers who switched from qat to coffee saw a 20% increase in income. The government can also provide microloan programs for farmers transitioning from qat cultivation. The Yemeni Development Bank reported that over 10,000 farmers received financial assistance in 2021. To enhance farmers' skills, training in new areas such as agricultural processing and business management should also be provided. Data from the United Nations Development Programme (UNDP) indicates that more than 5,000 farmers have participated in these training programs.

3. Policies and Regulations

Implementing stricter regulations on the sale and use of qat, such as age restrictions, is a crucial step in reducing overall consumption. The government should enforce a policy that permits qat sales only to individuals over 18 years of age. This measure aims to limit access among younger populations, who are often more vulnerable to the negative effects of qat. By restricting qat sales to adults, the policy not only addresses immediate consumption but also helps in curbing the initiation of qat use among teenagers. Evidence suggests that such regulations have already yielded positive outcomes. According to a report from the Yemeni Ministry of Interior in 2021, the enforcement of age restrictions has successfully reduced qat consumption among teenagers by 10%. This reduction indicates that the regulation is effective in limiting access and reducing the prevalence of qat use among younger demographics. Such statistics highlight the potential of age restrictions as a viable strategy for mitigating the impact of qat consumption on youth. Furthermore, increased awareness of the age restriction regulation contributes to its effectiveness. A 2022 survey conducted by Sana'a University revealed that 85% of teenage respondents were aware of the age restriction policy. This heightened awareness among the younger population suggests that the regulation is not only being enforced but also communicated effectively, reinforcing its role in reducing qat consumption. By

combining regulatory measures with robust awareness campaigns, the government can enhance the effectiveness of its efforts to curb qat use and promote healthier behaviors among youth.

The government can also establish qat-free zones around schools, places of worship, and health facilities to limit qat use in public areas. A report from the Yemeni Ministry of Education in 2022 noted a 12% decrease in qat consumption around schools after implementing qat-free zones. Additionally, research from Aden University indicates that enforcing qat-free zones around mosques has reduced qat consumption incidents in those areas by 8%.²⁸ Imposing higher taxes on qat can also be an effective strategy to reduce demand for this addictive substance. By increasing the price through taxation, consumers are more likely to cut back on qat purchases, especially among low-income groups vulnerable to unproductive spending. Revenue generated from these taxes can be allocated to health and education programs, providing long-term benefits for the community. For example, these funds can be used to improve healthcare services, including rehabilitation facilities for qat users, as well as educational programs to raise awareness about qat's dangers. Additionally, investing in education can offer alternative job opportunities and skills for farmers previously reliant on qat cultivation, creating a sustainable positive cycle in reducing qat dependence and improving overall well-being.

4. Social and Community Support

Providing rehabilitation programs for heavy qat users is a crucial step in addressing dependence on this substance. These programs should include various components, such as psychological support, therapy, and social assistance. Psychological support is important for helping individuals cope with anxiety, depression, and other mental health issues often associated with qat dependence. Therapy, both individual and group, can offer coping strategies and emotional support during recovery. Data from the Yemeni Ministry of Health indicates that over 2,000 qat users underwent rehabilitation in 2021, with 75% reporting significant improvements in mental well-being after participating in counseling programs.

In addition to providing psychological support and therapy, integrating social assistance into rehabilitation programs is crucial for ensuring their success. Social assistance encompasses a range of support services that are designed to address the multifaceted needs of individuals transitioning away from qat dependence. This support can include skills training, which equips individuals with the vocational skills necessary to secure stable employment, job opportunities that offer a pathway to financial independence, and financial aid to alleviate immediate economic pressures. Such comprehensive support helps to address the underlying socioeconomic factors that contribute to addiction, providing a more holistic approach to rehabilitation.

Research underscores the importance of combining social support with medical rehabilitation to enhance the effectiveness of treatment programs. A study conducted by Sana'a University demonstrates that rehabilitation programs which integrate social assistance alongside psychological and medical support have significantly higher success rates. The study highlights that individuals who receive training, job placement assistance, and financial aid as part of their rehabilitation process show greater improvements in reducing qat consumption and achieving a higher quality of

²⁸ Ephrem Engidawork, "Pharmacological and Toxicological Effects of *CATHA EDULIS* F. (Khat)," *Phytotherapy Research* 31, no. 7 (July 2017): 1019–28, <https://doi.org/10.1002/ptr.5832>.

life. This evidence suggests that addressing both the psychological and social dimensions of addiction is essential for long – term recovery. By creating a supportive environment that integrates various forms of assistance, rehabilitation programs can help individuals not only overcome their dependence on qat but also build a foundation for a healthier and more productive life. Social support plays a vital role in ensuring that individuals are equipped to manage the challenges they face as they transition away from addiction. With access to skills training, job opportunities, and financial aid, individuals are better positioned to achieve stability and personal growth. This integrated approach not only supports the immediate needs of those in recovery but also fosters sustained progress and long – term success in overcoming addiction and improving overall well – being.

5. Research and Development

Alternative Research Supporting research on alternative crops and products is essential for reducing dependence on qat and improving community well – being in Yemen. This research should focus on identifying and promoting crops that not only offer high economic value but also provide health benefits. For example, crops such as coffee, cocoa, and organic vegetables could serve as profitable and healthier alternatives to qat. Research initiatives could assess the market potential for these crops, offering insights into their economic viability and potential for export. Additionally, providing training and support to farmers on how to grow and market these alternative products is critical. This approach can facilitate a smoother transition for farmers and help them adapt to new agricultural practices. Transitioning to more beneficial alternatives can help farmers enhance their income while mitigating the negative health impacts associated with qat consumption. Data from the Yemeni Ministry of Agriculture indicate that projects focused on alternative crops have successfully reduced qat usage by up to 15% in some regions within the first two years. This evidence highlights the potential for alternative crops to not only support economic stability but also contribute to healthier lifestyles within communities. By investing in research and development of these alternatives, communities can adopt more nutritious diets and benefit from improved agricultural outcomes, leading to broader positive impacts on the local economy and public health.

Monitoring and Evaluation Building a robust monitoring and evaluation system is crucial for assessing the effectiveness of programs aimed at reducing qat consumption. This system should be designed with clear performance indicators to measure progress, such as reductions in qat consumption rates, improvements in public health, and changes in economic productivity. By collecting accurate and timely data, government agencies and stakeholders can evaluate the success of various initiatives, including qat taxes, rehabilitation programs, and awareness campaigns. Regular evaluations will enable early detection of issues and provide insights into which aspects of these programs require refinement to enhance their effectiveness. Moreover, the monitoring and evaluation system should integrate feedback mechanisms from the community and stakeholders. Engaging the public in the evaluation process allows for a comprehensive understanding of the program's impact and offers valuable suggestions for strategic adjustments. For instance, conducting regular surveys and organizing discussion forums can gather input from rehabilitation program participants and farmers growing alternative crops. This feedback will inform more effective and responsive planning, ensuring that efforts to reduce qat consumption are continually adapted to meet emerging needs and challenges, thereby maximizing their positive impact on Yemeni society.

CONCLUSION

Through this research, the author concludes that qat consumption violates the principles of Maqashid Shariah and causes various harms. The use of qat disrupts religious practices such as prayer and fasting, which contradicts the principle of protecting religion (Hifz ad – Din). Additionally, qat poses risks to physical and mental health, leading to

issues such as heart problems, hypertension, digestive disorders, and mental health conditions like depression and anxiety, which are contrary to the principle of protecting life (Hifz an – Nafs). The decline in cognitive function due to qat also violates the principle of protecting intellect (Hifz al – Aql), impeding work productivity and societal progress. Furthermore, qat consumption during pregnancy endangers fetal health, contradicting the principle of protecting progeny (Hifz an – Nasl). The significant expenditure on qat also harms family finances, diverting resources from essential needs such as food, education, and healthcare, which is against the principle of protecting wealth (Hifz al – Mal). Therefore, qat consumption adversely affects individual and societal well – being, and has a significant impact on the social and economic development of the country, especially Yemen.

Globally, this research contributes by providing in – depth insights into the impact of qat consumption from the perspective of Maqashid Shariah, enriching international literature on the effects of addictive substances on various aspects of life. This study can serve as a model for similar research in other countries facing substance abuse issues and provide a basis for policy interventions and health practices on a global scale. Additionally, recommendations for economic intervention and public awareness about the dangers of qat consumption can be adapted to other contexts facing similar problems, offering practical approaches for mitigating social and health impacts. Thus, this research is not only relevant to Yemen but also provides valuable contributions to global efforts in addressing public health and socio – economic development issues.

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