THE CHEWING OF KHAT (CATHA *EDULIS*) IN THE HORN OF AFRICA AND ARABIAN PENINSULA: ECONOMIC OVERVIEW

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Summery

Khat is an evergreen shrub, which is cultivated as a bush or small tree; some oral traditions claim that khat originated from Yemen. However the literature indicates that khat originated from Ethiopia, specifically in Hararghe with a gradual expansion to different parts of Ethiopia, Yemen and other parts of the world. Chewing khat is both a social and a culture-based activity; it is said to enhance social interaction, playing a role in ceremonies such as weddings. Generally, khat is considered as a major cash crop; its cultivation is a source of economic values in societies and nations involved. However, the micro-level economic burden on the khat chewers is substantially debatable and controversial; the indirect international economic benefit is also enormous in countries where Khat is legal.

Keywords: Khat; Africa; Arabian Peninsula; Economy

Introduction

Some oral traditions claim that khat originated from Yemen, however the literature indicates that khat originated from Ethiopia, specifically in Hararghe with a gradual expansion to different parts of Ethiopia, Yemen and other parts of the world (Lemessa, 2001). For over 1400 years, the chewing of fresh leaves of Catha edulis Forsk (figure 1), variously referred to as khat, chat, Abyssinian tea, etc. as a stimulant/euphoriant has been practiced in the Middle East, Somalia, Ethiopia and extending down to as far as the Cape in South Africa and Arabian Peninsula, mainly Yemen (Dhadphale et al, 1981; Cox & Rampes, 2003).

Khat is an evergreen shrub, which is cultivated as a bush or small tree. The leaves have an aromatic odour. The taste is astringent and slightly sweet. The plant is seedless and hardy, growing in a variety of climates and soils. Khat can be grown in droughts where other crops have failed and also at high altitudes. Khat is harvested throughout the year. Planting is staggered to obtain a continuous supply (Luqman & Danowski, 1976). Khat is mainly grown in Ethiopia, Kenya, Yemen, Somalia, Sudan, South Africa and Madagascar. It has also been found in Afghanistan and Turkestan. Previously, khat leaves were available only near to where they were grown. Recently, improved roads and air transport have allowed a much wider distribution. Khat

is harvested in the early hours of the morning and sold in markets in late morning. It is presented as a bundle of twigs, stems and leaves, wrapped in banana leaves to preserve freshness (Cox & Rampes, 2003)



Figure 1: Fresh Khat shrub/leaves

The phenylalkylamines (cathinone and cathine) and the cathedulins are the major alkaloids. These compounds are structurally related to amphetamine and noradrenaline. Cathinone is mainly found in the young leaves and shoots. During maturation, cathinone is metabolised to cathine; as cathinone is presumably the main psychoactive component of khat, this explains why fresh leaves are preferred and why khat is wrapped up in banana leaves to preserve freshness. (WHO 34th Expert Committee on Drug Dependence [WHOECDD], 2006; United Nation Drug Control Programme/Commission on Narcotic Drugs, 1996) Apart from the alkaloids, several other different compounds are found in khat including: terpenoids, flavonoids, sterols, glycosides, tannins, amino acids, vitamins and minerals (Cox & Rampes, 2003; Kalix & Braenden, 1985)

The chewing of khat leaves probably pre-dates the use of coffee. The earliest written record of the medical use of khat appears to be in the New Testament. Khat has been used to treat various ailments, including relieving the symptoms of depression. Some believe it to be a dietary requirement (Cox & Rampes, 2003). The vast majority of those ingesting khat do so by chewing. Only a small number ingest it by making a drink from dried leaves, or, even more rarely, by smoking dried leaves. The chewer fills his or her mouth with leaves and stalks, and then chews slowly and intermittently to release the active components in the juice, which is then swallowed

with saliva. The plant material is chewed into a ball, which is kept for a while in the cheek, causing a characteristic bulge (Nencini et al, 1984).

Chewing khat is both a social and a culture-based activity. It is said to enhance social interaction, playing a role in ceremonies such as weddings. In Yemen, Muslims are the most avid chewers. Some believe that chewing facilitates contact with Allah when praying. However, many Christians and Yemenite Jews in Israel also chew khat. Khat is a stimulant and it is used to improve performance, stay alert and to increase work capacity (Kalix & Khan, 1984). Workers on night shifts use it to stay awake and postpone fatigue. Students have chewed khat in an attempt to improve mental performance before exams. Yemeni khat chewers believe that khat is beneficial for minor ailments such as headaches, colds, body pains, fevers, arthritis and also depression (Kennedy et al, 1983).

Khat has recently expanded into a global market, provoking calls for its prohibition. Khat now occupies an ambiguous category - banned in some countries, whilst legal in others. However, some argue that qat harms the economy by encouraging laziness and absenteeism: as workers go to lunch and then engage in qat sessions and do not return. An estimate suggests that over 4 billion hours of work a year were lost as a result of qat chewing (Anderson & Carrier, 2006). This paper examines the economic aspect of this dramatic expansion, looking at the globalization of khat consumption in terms of international debates about drug use. The paper is to focus on the economic status of Khat in regions or countries where Khat usage is legal.

African economy of Khat

Khat is native to the eastern and southern regions of Africa, but it has grown extensively as a cash crop in Ethiopian and the northern provinces of Kenya. It is also socially and economically important in the neighboring areas of Somalia and Djibouti. Khat is freely available in Ethiopia and is a highly valued export commodity in that country (Baasher, 1980). However, studies have reported a contrary notion that, regular consumption of khat is associated with a variety of social and economic problems affecting the consumers and their families (Nencini, 1986). It is reported that habitual khat chewing has led to decreased productivity in Ethiopia, Somalia, Uganda and Kenya (Giannine & Castellani, 1982). Others argue that moderate khat use improves their performance and increases work output, owing to the stimulant and fatigue-postponing effects. Consequently, working hours and possibly productivity can decrease when khat is not used, because of energy and reduced motivation (Kalix & Khan, 1984). It has been estimated that in Djibouti nearly one-third of all wages spent on Khat. Many men secure their daily portion of khat at the expense of vital needs, indicating dependency. Family life is harmed because of neglect, dissipation of family income and inappropriate behaviour. Khat is quoted as a factor in one in two divorces in Djibouti. Acquisition of funds to pay for khat may lead to criminal behaviour and even prostitution (Elmi, 1983).

The supply of domestic, regional and international markets is providing a boost to rural producers across East Africa. The entire commodity chain is in the hands of regional entrepreneurs, in contrast to coffee, tea and cocoa, where multinational companies possess

monopoly over export and processing. Khat is not cultivated in developed countries; hence agricultural subsidies in the developed world are inapplicable. Though farmers in Ethiopia do not receive direct support from government institutions, the khat industry has become the second largest foreign exchange earner nationally, and the first in eastern Ethiopia. Khat tax revenue as a share of GDP in Ethiopia averaged 1.7 per cent for the 1990s while public health expenditure as a share of GDP averaged 1.2 per cent, which means khat revenues finance health expenditure. Nationwide, the contribution of khat to development finance and employment opportunities cannot be overemphasized (Anderson & Carrier, 2006; Anderson et al, 2006)

The employment opportunity created through the cultivation of khat is very high in that large numbers of people are involved in growing, harvesting, sorting, packing, transporting, loading and unloading the commodity. The wood of the plant is commonly used for fuel and due to its resistance to termite is used in the construction of houses and fencing. It is also used for making rafters, handles of farm tools (hammers and chisels) and handles of household articles such as pots and pans, rolling pins, and to make forks, combs, spoons and for rulers(Anderson & Carrier, 2006; Anderson et al, 2006)

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In Ethiopia khat is used for direct consumption, local sale and for export. It is estimated that 85 to 90% of khat production is sold; the rest is used for local consumption. Information obtained from one of the khat exporting enterprises in town called Dire Dawa showed that out of 99,432 kg of bulky khat purchased in December 2000, 71% of the material was qualified and presented for export to Djibouti. The quality, prices and taxation rate of export khat are quite high as compared to that used for local consumption. For example, the tax for locally used khat is Birr 2 per kg while the levy for exportable khat is Birr 5 per kg. Khat appears to make a significant contribution to the foreign currency earnings of Ethiopia. It is exported to various parts of the world including: Djibouti, UK (London), Somalia, and a number of Arab Countries. Since the formal export to Aden in 1942, markets were developed (when exports totalling 1,485.8 metric tons valued over Birr 6.4 million were recorded) and exports have increased dramatically. In 1999/2000 Birr 0.464 billion worth of khat was exported to different countries and ranked second replacing hides and skins in export revenue (The Reporter, 2000; Lemessa, 2001). The above figures do not, however, include the huge volume of khat smuggled to different countries (Lemessa, 2001).

Currently, there are over 5 registered and official khat exporting enterprises in Ethiopia. Despite the economic benefits drawn from khat, some countries, including the Ethiopian government, have repeatedly attempted to limit the production and export of khat and forced replacement of the crop with coffee, in accordance with proposals made by the United Nations Commission on Narcotic Drugs (Lemessa, 2001).

Farmers generally sell their khat to buyers who directly come to the field and negotiate a price with the producer. When farmers take the commodity to local whole sale markets they mostly do not sell it directly to traders, rather they sell through regular brokers (locally known as qabqabii) who negotiate on the price on behalf of the farmer/owner. Each trader has a number of brokers

and operates through them. After negotiation on the price with the buyer, if the farmer agrees to the offer by the buyer, the broker sells the material to the buyer and receives a 10% commission from the farmer/seller but allegedly not from the buyer (Lemessa, 2001).

Every year, Djiboutians spend \$170 million on khat, according to the United Nations Office on Drugs and Crime. For an average family, that's between \$700 and \$1,800 per year—10 percent to 19 percent of a household's income, the agency says. There's a leaf for every household budget in a country where the unemployment rate is 50 percent. The cheapest bundles go for as low as \$1, while some men spend as much as \$20 on a day's supply. Khat production totals perhaps \$900 million at wholesale prices almost all in Ethiopia (\$500 million), Kenya (\$300 million) and Somaliland (\$50 million) (Bengali, 2006).

Arabia Peninsula economy of Khat

In Yemen, khat users are spending much time on buying and chewing khat leaves, which affect theirs working hours and time with family (Kelix & Braenden, 1985). Furthermore, for few chewers the daily expense for the khat habit exceeds the cost of feeding their entire family. Khat is profitable to the huge number of people involved in its production and marketing including farmers, distributors and merchants. Taxes upon it are an important source of revenue to the governments as well. In Yemen, its estimated in the early 1980s, i.e. before oil production commenced, attributed 30% of the gross domestic product (GDP) to khat (Kennedy, 1987). However, now in Yemen khat is not exporting commodity, therefore it's not playing a significant role in their economic development concern which in contrast to Ethiopia. At the micro level, particularly family level; Khat may be affecting monthly budgets, especially among the poor. In the late 1980s Kennedy (1987) estimated that 10% of the Yemeni population suffered economic hardship due to khat use; the figure must have increased by now due to economic deterioration since the early 1990s. Khat chewing leads to many setbacks such as loss of work hours decreased economic production, malnutrition and diversion of money in order to buy further khat, which is linked to absenteeism and unemployment. This may in turn result in a fall in overall national economic productivity.

Studies have reported a contrary notion that, regular consumption of khat is associated with a variety of social and economic problems affecting the consumers and their families (Dhaifalah & Santavy, 2004). In Yemen, khat users are spending much time on buying and chewing khat leaves, which affect theirs working hours and time with family (Kalix & Braenden, 1985). Furthermore, for few chewers the daily expense for the khat habit exceeds the cost of feeding their entire family.

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International link

Khat trade is legal in the UK, and it is known that there is a market and distribution network for the khat and in certain locations the use of this plant is substantial (Drake, 1988). khat is now an international commodity, traded and consumed in the cities of Western Europe and North America. Each day cargo flights carry freshly harvested khat from Yemen and eastern Ethiopia to London, Toronto, Rome and other cities in the developed world. And throughout the Islamic diaspora, from Cape Town to Cairo and from Tangiers to Jakarta, khat consumers are to be found. With this globalisation of khat consumption, the stimulant has found new markets, both within the region of production and internationally. In response to increased demand, more and more farmers in the red Sea region are giving up other crops to concentrate upon khat (Herbold, 1999).

Though the UK's large community of Somalis, Ethiopians, Yemenis and Kenyans constitute one of the largest markets in terms of volume, much of the khat offloaded at Heathrow is in transit to other destination. Since the collapse of the Somali state Somalis have dispersed all over Europe, Canada, the US, and Australia. They are the main customer for khat imports, driving the process of global the global khat trade. Whereas the export described so far and the importation into London but also the Netherlands is entirely within legal bounds, yet often outside mainstream channels, a major transformation occurs to the onward trade (Herbold, 1999).

In the UK and the Netherlands khat consumption is centred on the *mafrish*, a café like establishment, where customers recline on sofas to chew their bundle of khat, drink sweet tea and smoke cigarettes or water pipes. In Sweden by contrast, khat is bought in a car park and then chewed while walking the streets of Rinkeby, a suburb of Stockholm. A shift in the khat trade has taken place since the completion of the bridge linking Sweden to Denmark in 2003. Most khat now enters Scandinavia by car or van driven up from the Netherlands. In 2004 some 9 tons of khat were seized mainly on the road and in a number of cases in mixed consignments. Since the imposition of sharper penalties for khat dealing, importers have diversified into cannabis and cocaine. Ethiopia uses perhaps half its output exporting the remainder to Somaliland, Djibouti, London, Yemen and Somalia. Kenyan use perhaps a fifth of output with the balance exported to Somalia and London. Somaliland is a user/importer (about one quarter domestically produced), Djibouti and the diaspora (to the extent Khat is available) are importers and users (Herbold, 1999)

Conclusion

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chewers is substantially debatable and controversial. The indirect international economic benefit is also enormous in countries where Khat is legal.

References

Anderson D. and Carrier N, 2006. 'Flowers of paradise' or 'polluting the nation'? Contested narratives of Khat consumption', in Brewer J. and Trentmann F. (eds), consuming cultures, global perspectives: historical trajectories, transnational exchanges. Oxford and New York: Berg.

Anderson D, Beckerleg S, Hailu D & Klein A, 2006. The Khat Controversy: Stimulating the Debate on Drugs. Oxford and New York: Berg.

Baasher TA, 1980. The use of khat: A stimulant with regional distribution in drug problem in the socioocultural context. In: Edwards G, Arif A. A, eds. Basis for policies and programme planning. Geneva: World Health Organization, pp. 86-93.

Bengali S, 2006. Khat dominates male life in the tiny Muslim nation of Djibouti. http://search.mywebsearch.com/mywebsearch/SNdns.jhtml?id=GRxdm047YYNG&ptb=IlPvuhJC9yksv8ihLACX8Q&ind=2011012007&ptnrS=GRxdm047YYNG&si=&n=77dd9ba7&psa=&st=dns&searchfor=search.mywebsearch.com

Cox G & Rampes H, 2003. Adverse effects of khat: A review. Advances in Psychiatric Treatment. 9, 456-463.

Dhadphale M, Mengech HNK & Chege SW, 1981. Mira (Catha edulis) as a cause of psychosis. The East Afr Med J. 58(2):130-135.

Drake PH, 1988. Khat-chewing in the Near East (letter). Lancet. I, 532–533.

Elmi AS, 1983. Khat and blood glucose level in Man. J. Ethnopharmacol. 3; 8: 331-334.

Giannine AJ & Castellani FS, 1982. A manic-like psychosis due to khat (catha edulis) Journal of Toxicology. 19: 455-9.

Herbold GR, 1999. Khat & the realities of Somalis: Historic, social, household, political & economic. Review of African Political Economy v26n (79): 33-49

Kalix P & Braenden O, 1985. Pharmacological aspects of the chewing of khat leaves. Pharmacol Rev. 37, 149 -164.

Kalix P & Khan I, 1984. Khat: an amphetamine-like plant material. Bulletin of the World Health Organization. 62: 681–686.

Kalix P & Khan I, 1984. Khat: an amphetamine-like plant material. Bulletin of the World Health Organization. 62: 681–686.

Kennedy G, 1987. The flower of paradise. The institutionalized use of the drug qat in North Yemen. Dordrecht D: Reidel Publishing Compan, pp. 176-177.

Kennedy JG, Teague J, Rokaw W, Cooney E, 1983. A medical evaluation of the use of qat in North Yemen. Soc Sci Med. 17, 783-793.

Lemessa D, 2001. Khat (Catha edulis): Botany, Distribution, Cultivation, Usage and Economics in Ethiopia UN-Emergencies Unit for Ethiopia. Addis Ababa,

Luqman W & Danowski TS, 1976. The use of khat in Yemen. Social and medical observations. Annals of Internal Medicine. 6;85(2):246-249.

Nencini P, Ahmed AM, Amiconi G, Elmi AS, 1984. Tolerance develops to sympathetic effects of khat in humans. Pharmacology. 28, 150-154.

Nencini P, Ahmed AM & Elmi AS, 1986. Subjective effects of khat chewing in humans. Drug and Alcohol Dependence. 18: 97–105.

The Reporter, 2000. Khat. Vol. V No. 219, dated 15 November Addis Ababa, Ethiopia.

United Nation Drug Control Programme/Commission on Narcotic Drugs, 1996. Amphetamine-like stimulant: A global review [Online]. [Cited 2008 Aug 5]; Available from URL; http://www.unodc.Drg/pdf/technical_series_1996-01-01-1.pdf.

WHO 34th Expert Committee on Drug Dependence, 2006. Assessment of khat (catha edulis). World Health Organization Technical Report Series. 916.i-25. 2006. Hand book.