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Title : An Enquiry Into The History of *Qat*

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For centuries the *qat* plant (*Catha edulis* f.) has been widely cultivated and its leaves consumed for their stimulating psychoactive effects in several African and Arabian countries, primarily Yemen, Ethiopia, Somalia and Kenya .

The plant is known by various names: *khat* in Somalia; *qat* or *k'at* in Arabic; *chat* in Amharic (Ethiopia); and *miraa* or *mirungi* in Kenya, with additional forms of these names also in common usage (Heacock 1974:64). The Arabic *qat* is obviously related to the Amharic chat. Tradition has it that the word chat in turn derives from an Arabic word *kut* meaning sustenance or driving principal; El Mahi (1962) suggests that the Arabic word *kahwa* (coffee) and *kafta* (the leaves of *qat*) derive from the place name 'Kafa' in Ethiopia where both plants flourish and perhaps originated (Getahun / Krikorian 1973:353).

The *qat* plant thrives on moist mountainous slopes at an elevation of between 5000 and 8000 feet, usually growing to a height of twenty feet, but occasionally reaching eighty feet or more (UN 1956:9). It grows wild in several highland areas of southwestern Asia. It is reported to occur sporadically in Turkestan, Afghanistan, Hadhramaut, and northern Hejaz. In Africa, *qat* grows wild in many of the eastern mountain regions from the Eritrean highlands near the Red Sea, to the Sneeubergen mountains of the Republic of South Africa including northern Ethiopia, Kenya, Uganda, Ruanda, Burundi, Tanzania, Zaire and Zimbabwe). Commercial *qat* cultivation is primarily limited to Ethiopia, Yemen and Kenya. In Ethiopia, *qat* is grown on small farm plots at elevations from about 5200 to approximately 8300 ft. The major center of *qat* production is the Harar Plateau in the eastern section of the central highlands of Ethiopia from 5600 to 7200 ft above sea level (Brooke 1960:52). In Yemen, the tree is planted in the moderately humid uplands, at somewhat higher elevations than in Ethiopia. *Qat* is also cultivated on the northeast slopes of Mount Kenya in the Meru district of central Kenya, but there its production is considerably smaller than in Ethiopia. Unsuccessful attempts at cultivation have been made in many other parts of the world, either in the open (Ceylon, Bombay district, Florida, Algeria, Portugal, France), or under glass in the various botanical gardens.

Qat is extremely perishable, lasting only three or four days, and its potency degenerates quickly. Users thus seek out the freshest leaves possible. *Qat* must be picked two or three times a week and immediately sent to the markets because it remains fresh for only a period of up to four days after picking. After this, it depreciates in potency and value. In Ethiopia, the bundles are wrapped first in green and then dry banana leaves, and tied with strips of fibre for transport. Their freshness is preserved with occasional moistening with water (Peters 1952:117). Because of this perishability, *qat* use has remained limited to areas close to centers of cultivation. In 1913 a London pharmacist named Martindale did begin marketing three products based on *qat* leaves as stimulants and laxatives, but with little success. In 1936 he observed the demand was "general but limited". An attempt to market a *qat* tonic in Lyons in 1910 also failed. Even within East Africa and Arabia, the major expansion of use and cultivation only occurred following World War II as a result of the speedier transportation which became available for exporting fresh *qat* to more distant locales.

It is extremely difficult to determine the antiquity of *qat* use. It seems likely that the plant, as well as coffee, was first domesticated in Ethiopia. Certain authors, like Trellu (1959:43), claim the plant was native to Arabia; in Yemen today three different species are cultivated in three different provinces. From there, Trellu feels it spread into Ethiopia in 1429. However, the earliest written reference to *qat* occurs in the 'Military Exploits of the Ethiopian King Aroda Sevon against the Muslims' (c. 1333), indicating that it was already in

widespread use in 14th century Ethiopia (van Donzel et al 1978:741). Several authors (Bally 1945:2, Heacock 1974:64) feel *qat* was introduced from Ethiopia into Yemen and the Arab world sometime during the 6th century, at a time when the Ethiopian Axumite kingdom held sway over the western part of the Arabian Peninsula. A popular tale explains the introduction into Yemen as the work of Sheikh Ibrahim Abu Zarbay around 1430 (Burton 1856:75-76, Moser 1917:741). An Arab chronicler's account attributes the introduction into Yemen to the mid-14th century (van Donzel et al 1978:741).

Although the antiquity of *qat* use and cultivation in Ethiopia is still a matter of speculation, its discovery and spread is tied very closely to that of coffee. They are indigenous to the same areas and many of the legendary stories or their origin are similar. A story is told, alternatively concerning coffee or *qat*, about a goat herder who noticed the effects of the *qat* leaves (or coffee beans) on his goats, tried them himself, and experienced added strength and wakefulness (Getahun / Krikorian 1973:353-355; Ukers 1935:10). Like coffee, it was first used to promote wakefulness during religious observances, and the use of both drugs came to be extended to similar medical, ceremonial, social, and business functions. Ukers (1935) suggests part of the controversy over the spread of coffee may have been related to the practice of combining coffee with *qat*, or to a confusion over the two substances.

The importance of *qat* is indicated by the many legendary stories told of its origin, by the reverence accorded it, and by the care taken to protect it. The Muslims of the city of Harar in Ethiopia tell a story of its being revealed to them by an angel in answer to prayers by two saints who appealed to Allah for something to keep them awake during the long prayers. According to another story, *qat* was introduced into Harar by the founding fathers of the city to offset the debilitating effects of the climate (Hill 1965). It is known that crops were heavily and jealously guarded by the Adare people of Harar and severe penalties were imposed on anyone giving a *qat* plant to neighboring Kotu or Galla farmers to grow. However, after the battle of Chellenko in 1887, where many Adaris lost their lives fighting against Emperor Menelik II, their widows took Kotu and Galla farmers as tenants. Thus with *qat* available to them, the cultivation of *qat* on a widespread basis in Ethiopia is said to begin (Getahun / Krikorian 1973:356). As discussed below, the major expansion of cultivation did not occur until following the Second World War.

Historically, the major cultivators have been Ethiopia, Yemen, and Kenya. Even in these countries cultivation remained limited until World War II because *qat's* extreme perishability prevented exportation far away. Following the war, international trade possibilities expanded rapidly because of speedier transportation. To fill the expanding demand, cultivation accordingly increased. In this spread, the close historic relationship between *qat* and coffee again has played an important role, both in promoting the conversion of coffee fields to *qat*, and, consequently, engendering considerable concern among some governments.

Fundamental to the historic relationship between coffee and *qat* is the requirement of the same general conditions of soil, altitude, and sun for cultivation. They therefore compete for the same land. They also resemble one another in that the first crop can be harvested approximately three years after planting. There are several differences that tend to determine the coffee / *qat* production ration at any given time. First, coffee can only be grown where there is a moderately good water supply, while *qat* will grow in areas of marginal water supply and requires less shade. During periods of drought, coffee production will generally be more affected. The two crops differ in that coffee is usually harvested once a year, and requires a complex international marketing structure. The *qat* tree, on the other hand, can be harvested up to three times a year, and requires no complex marketing structure as it is a local cash crop. Because the *qat* farmer can rotate his trees, he can harvest every day giving him a continuous cash income. The similarities in the agricultural requirements of the two crops account for the coffee / *qat* competition for available land, the differences, including marketing price, account for the tendency of farmers to plant coffee or *qat* at any given time (Hughes 1973:34).

On the Harar Plateau in Ethiopia climate and soils are favorable for the production of coffee as well as *qat*, and both plants are frequently a part of the cropping system of highland cultivators. Despite an uncertain market situation, it seems that *qat* cultivation is spreading in Ethiopia at the expense of coffee and other agronomical crops like sorghum and corn. The Harar Plateau has long been famous for its Arabica coffee, but during recent years *qat* has surpassed coffee in importance as a cash crop in this region (Brooke 1960:50). In 1962, *qat* accounted for 5.3% of the country's total returns from exports, ranking fifth among commodity groups. *Qat* furnishes a large percentage of the domestic revenue as well. Many of the inhabitants of the Dire Dawa-Harar area have come to rely on the cultivation of *qat* for their livelihoods in many places coffee trees have been replaced by *qat* (Darby 1959,169). Miller and Makonnen (1965) indicate that sorghum takes 33%- 53% of the cultivated land in Ethiopia and *qat* 13%. However, *qat* accounts for 30%-50% of the total cash income per year per family, or 40%-60% of the total value of home-produced food used by the farm family, and is thus an important crop item wherever it is grown. Farmers, when asked what revenue they receive from one *qat* tree, reportedly chuckled and replied, "At least \$10 (Ethiopian) yearly", as compared with \$ 1 from coffee. If their estimate is correct, a farmer with a few *qat* trees in his annually intercropped field obtains good cash yearly (Getahun / Krikorian 1973:367). In an area where there are no industrial jobs available, agriculture must absorb all people, and as a high cash income crop, *qat* seems partly to do this. Whenever farmers realize economic improvement, they are quickly to point out that it is due to *qat*. Thus, *qat* acts as a bridge by which many a farmer move from a grass thatched hut to a tin roof, from tenant-ship to landownership and perhaps to building a house in the nearest town and eventually owning a automobile (Getahun) Krikorian 1973:370).

In Yemen production has also emerged as an important economic institution. Again, it competes with coffee for Yemen's limited supply of well-watered mountain terraces. While most *qat* is consumed locally, Yemen's coffee or mocha is world famous and brings in foreign currencies thus the shift from coffee to *qat* cultivation has caused considerable concern. As early as the 1940s, whole acres of coffee plants in Yemen were uprooted and planted with *qat* because it was more profitable. Before the civil war began in 1962, coffee was a \$ 6.000.000 a year export, but in 1971 it amounted to slightly less than a million dollars. Although *qat* exports did produce some foreign exchange (\$ 0.5 million in 1971), this was viewed as inadequate compensation for Yemen's lost coffee revenue. Hughes (1973) attempted to reconstruct a history of *qat* production in Yemen for recent years based on interviews with knowledgeable individuals. These interviews suggest that the outbreak of the revolution in 1962, followed by the civil war which lasted until 1968, disrupted the transportation and marketing structure for the nation's coffee export. Most coffee farms converted to *qat* because this provided a cash crop that could be marketed locally. Following the war, the government encouraged farmers to return to coffee production and in 1969 requested World Food Program assistance in these efforts. Few farmers returned to coffee production for several reasons. First, a severe drought during 1969, 1970, and 1971 encouraged continued production of *qat* because of the coffee tree's greater requirements for water. Second, there is a waiting period of three years before any newly planted coffee trees yield a marketable crop. Third, the government did not receive the requested international aid to reestablish the necessary marketing infrastructure for large scale coffee exports and to feed the farmers during the three year transitional period when they would be without income (Hughes 1973:34).

In all countries where *qat* is used, adult males are the predominant consumers. In Yemen, it is generally estimated that 80% of urban men use *qat* daily or at least very frequently. For *qat*-producing villages, estimates of 90% are given; use is much less common in villages where it is not grown (Hughes 1973:40). Estimates of 30% - 50% to 60% have been given for regular use among women in areas of high use (Hughes 1973:40) van Donzel et al. 1978:741). Increased use by urban women has also been reported in Djibouti and Aden. In geographical areas where prevalence of use is high, all economic classes are equally affected. Even men in lower income groups are able to chew by buying lower quality *qat* or sharing a portion. Higher education and professional occupation appear to be associated with lower prevalence of use. This applies in particular to physicians and to those who have traveled outside Yemen. When these individuals were

interviewed, they reported that there were too many demands on their time to permit the leisure time required for *qat* use (Hughes 1973:40).

In the village, where *qat* use is usually seen as a sign of adulthood, boys are introduced to the practice by their families at around age 12, although in some *qat* growing areas five or six years can be a starting age. In the cities, young people tend to be introduced to *qat* at a later age and by their peers. There is no evidence of epidemic incidence trends; these initiation patterns appear to vary little from year to year, except for the obvious disruptive influence of war or drought.

In Ethiopia, *qat* leaves have always been chewed as a masticatory, predominantly by Muslims, although some Christian Ethiopians have been reported to use it as an ingredient in preparing certain intoxicating beverages (Peters 1952:53). Elderly men, unable to properly chew, pound *qat* leaves in a small mortar and drink the juice of the plant (Brooke 1960:53). It is held that prior to the introduction of coffee, people in Yemen made a decoction of *qat*, and that it was due to the disappearance of the *qat* plant for a time that coffee drinking was initiated (Vaughn 1852:270). However, *qat* chewing came to predominate in Yemen by the turn of the 20th century (Moser 1917:183). In certain parts of Arabia, *qat* is smoked like tobacco or cannabis, the ends of the twigs and the leaves first being crushed and then rolled in cigarettes (no mention of *qat* smoked in a *narghile* has been found) (UN 1956:12).

Although Christian Ethiopians traditionally have not used *qat*, it occupies a position of importance in the daily activities of Ethiopian Muslims, especially among the agricultural eastern Galla people of the central highlands near Harar. Births, marriages, and religious festivals are celebrated by the chewing of the leaf. During *wadaja*, a ceremony of group prayer performed in times of illness, death, or calamity, participants chew large amounts of *qat* and most become intoxicated. Even in the case of informal visits by friends, the courteous host is expected to provide each of his guests with a handful of leaves. It has been used as grave offerings in northern Kenya, Ethiopia, and Somalia (Margetts 1967:359). In Ethiopia, small groups of farmers assemble at various places near fields each morning to rest, converse, and chew the leaf for an hour or two before noon. In Yemen, the typical *qat* party is held in a private house, begins around 3 pm. after work, and might last until 6 pm. or 7 pm. It is the major social and recreational institution for male Yemenis. Among Yemeni adolescents, boys chew *qat* with their male age mates; girls tend to chew with adult women of their families (Hughes 1973:45). So important is *qat* to the social life of the city of Sana (Yemen), that in this very conservative Muslim country it has caused a change in the traditional times for prayer. The Muslim prayer times are dawn, noon, mid-afternoon, sunset and evening. The *qat* eaters say their noon and afternoon prayers all in one, before a party, and their sunset and evening prayers together after the party (Robertson 1942:53).

Qat plays a critical role in these cultures as a recreational stimulant, an aid to work and religious practices, an appetite suppressant, a source of nutrition, and as a general medicine. Consumers attribute many wonderful effects and properties to its use, "It enables us to pray without becoming drowsy during the nights of Ramadan (the Muslim Holy month), and to work without tiring from noon to night"; "it keeps our bodies cool when working in the fields even during the hottest days"; "We honor *qat* above all other plants because it is *kutamomia* (that which is blessed by God and given to men through his favor) (Brooke 1960:53). In Ethiopia, it is believed to cure 501 different kinds of diseases (Getahun / Krikorian 1973:370). It has also been used as a diuretic in the treatment of gonorrhea; as a prophylactic against malaria, asthma, coughing and diseases of the chest, stomach trouble and even as a preventative against the plague (UN 1956:12). In Somalia, *qat* is used to stimulate urinary activity and to aid in the treatment of genito-urinary diseases, such as retention of urine and gonorrhea. There is a belief that the chewing of *qat* leaves affords protection against malaria. In South Africa, an infusion of *qat* is used as a remedy for coughs, asthma, and other chest ailments, while in Tanzania, the leaves are used for influenza, and the roots are also eaten to cure stomach ache (Peters 1952:36).

One of the primary uses of *qat* is as a general stimulant to ward off fatigue, as in its original application as an aid to prayer. It has been used for a long time by couriers carrying urgent messages as sustenance during the journey when there was no time to eat or sleep (UN 1956:12). Among Yemeni students, *qat* use has been found to increase at examination time to promote alertness during long hours of studying (Hughes 1973:40).

Earlier pharmacological studies (1887, 1900, 1911, 1950) identified tannins and cathine as active ingredients in *qat*. In 1930, the potency of cathine was estimated to range between caffeine and amphetamine (Halbach 1979:318). In 1949, the British 'Pharmaceutical Index' referred to *qat* as one of the "substitutes and adulterants of tea". A 1978 study (Braenden 1979) isolated a new compound whose chemical structure was established and which was called cathinone. This cathinone is now thought to be the major psycho stimulant component of *qat* and of high importance in producing the medical effects of the chewing of *qat* leaves. Cathinone is as potent as amphetamine in increasing locomotor activity in mice it increases oxygen consumption like amphetamine, and is more potent than amphetamine in limiting food intake. A cross tolerance between cathinone and amphetamine has been established. Resemblances with amphetamine have also been seen in the psychic as well as the somatic effects, which include a usually moderate degree of central stimulation, with ensuing elation and removal of fatigue, besides suppression of hunger, and sometimes, libido.

The question of whether *qat* is an addiction producing drug was placed on the agenda of the UN Narcotics Commission in April 1957, and is under study by a committee of the WHO. Because of the low concentration of active substances in the leaf, and the physical limitations of the amount of leaves that can be chewed, the chronic use of *qat* appears to be a much less damaging form of drug dependence than chronic use of amphetamines or cocaine. That there is no *qat* addiction has been confirmed by observation in hospital wards. Most of the hundreds of sick persons who were treated for various complaints and studied during a UN survey in Djibouti Hospital were *qat* users who were physically run down and had suddenly been deprived of the drug. After several days they started to put on weight and did not seem to be affected by withdrawal of the drug. Deprivation of *qat* was not associated with any morbid condition. No drug withdrawal psychosis was observed; there is no real craving. Based on these findings, drug dependence of the *qat* type, under the circumstances of its traditional consumption by chewing, were characterized by: moderate but often persistent psychic dependence as long as its maintenance is at all practicable; lack of physical dependence; absence of tolerance (Halbach 1965:65).

EI-Guindy's (1971) experiments on 30 Yemeni men, ages 20 to 65, indicated that the effects of *qat* chewing are thirst, euphoria, exaltation, and an initial alertness lasting up to two hours. Complaints were anorexia, constipation, and insomnia. He also indicated an increase of pulse rate by 18 beats/min. (average) and an increased body temperature by 0.6 degrees Celsius.

Alles, Fairchild and Jensen (1961), in their chemical analysis of *qat* for ephedrine and like bases, indicated the total percentage of bases for various Ethiopian grades of *qat* varied between 11% and 16%, while samples from Florida and California (in botanical gardens) had only 2%, though the tannins extracted were roughly of similar percentage, ranging from 5.5% to 7.9%. Experiments on dogs, atropinized under pentobarbital anesthesia indicated a prompt, sharp, but transient rise in blood pressure accompanied by corresponding stimulation of respiratory rate and amplitude, then a slowly increasing and relatively prolonged rise in blood pressure without notable changes in respiration. Experiments with human subjects in this same study with detanated extract indicated 10 - 16 mm in systolic and 6 -12 mm in diastolic pressures with a change of 4 - 6 pulse per minute, which are not outside normal variations. Some gastrointestinal discomfort and loss of appetite occurred and opening of the nasal airway and dryness of the throat were evident.

Among medical ailments, intestinal tract disturbances are the most often described in chronic *qat* users, possibly from the astringent characteristics of the tannins contained in the leaf. They would appear to

account for the periodontal disease, stomatitis, esophagitis and gastritis. Reports of cirrhosis of the liver may be due to high ascorbic acid content which is said to have a hepatotoxic effect. Constipation, the most common complaint of *qat* users, may be contributed to by both the tannins and cathine (norpseudoephadrine) in *qat* (during the ban on *qat* imposed in 1957 in Aden the sale of laxatives decreased by 90%). Anorexia is also associated with *qat* chewing, it is attributed to the cathine, as this is a common side effect of amphetamine type drugs. A foreign national physician at the Yemen Republic hospital in Taiz reports he found reduced sperm counts in chronic *qat* users, and there is a common complaint about possible effects of *qat* use on sexual activity (it is constantly reported by both *qat* users and their wives that the users evidence decreased sexual activity (Hughes 1973:41; Fellows 1967:25; Margetts 1967:359). It does seem that *qat* has a high food value and could be beneficial in supplementing what might normally be a minimum or deficient diet. Since a bundle of *qat* may weigh as much as 500 g and some individuals are known to chew as many as five of these in a day, *qat* may represent a major portion of the daily food intake of heavy *qat* chewers (Darby et al. 1959:167).

Although *qat* has been tolerated for centuries, it has not been without controversy. Disagreements over whether its use was permitted by the Koran to Muslims date back to at least the 16th century when, as with coffee, a debate raged over whether it should or should not be classified as an intoxicant in the same category as wine and thus forbidden. In 1567, it was classified as a substance from which one should refrain but which was not forbidden. D'Herbelot (1777) asserts that *qat* was prohibited in Yemen because of its effects on the brain; the ban was either localized or short lived as in 1819 use was officially authorized. In 1826 a Muslim synod declared use lawful, but in 1891 the Mahdi of Sudan forbade his followers to use it during their rebellion against the British (EAMJ 1945:1). Much of the early 20th century control legislation was passed by European colonial governments (mainly for economic reasons), but not all. In 1934/1935 the native council in Meru, Kenya, banned its use to all but inveterate consumers. A 1957 ban in Aden was passed on the initiative of Arab and Indian council members. Several anti-*qat* restrictions were passed in the 1950s and 1960s when use and cultivation began to markedly increase following World War II.

No matter what has been attempted, restrictions seem to have had little effect or have been generally ignored. The habit was too ingrained and users consider *qat* as a relatively harmless stimulant like coffee and tea. Muslims do not consider it as prohibited by the Koran, but in fact as a divine gift (UN 1956:12). In 1972, the Yemeni prime minister began a campaign to reduce use which included ending cultivation on government lands and dismissing government employees found chewing it. The latter policy, however, does not seem to have been enforced, as it would have resulted in the dismissal of an estimated 80% of government officials (Hughes 1973:33,42). Another significant factor in undercutting the control efforts to ban imports in French Somaliland and Aden in 1957 was the pressure placed on these governments by neighboring Ethiopia, on whose resources these countries depended and to whom *qat* exports were a major source of income. Darby (1959:169) argues that because of the economic importance of *qat* to Ethiopian cultivators, any closing of the *qat* market would be a financial disaster which would adversely effect the nutritional status of the people.

In the 1960s, newly independent Kenya discussed the question of *qat* cultivation, but its concern seems to have centered less on the domestic harms or benefits of *qat* than around international pressure. As described by Fellows (1967:30), while *qat* plays a less important role in the economic affairs of Kenya than in Ethiopia, the Kenyan government seemed to be of two minds about the expansion of *qat* cultivation. It worried about the hostile reaction of states trying for years to get *qat* branded a harmful and wasteful drug, and it worried about missing the opportunity to get into a wide open and growing export trade. Officials in the Ministry of Health were embarrassed by the growing trade and tried to discourage talk of expansion, but officials in the Ministry of Economic Planning and Development and the Ministry of Agriculture were openly for it. By 1974, *qat* was exported on a large scale to the neighboring countries of Tanzania, Uganda, Zambia, Zaire, the Sudan, and Somalia as well as to Arab countries in the Middle East. Hjort (1974:30) claims that restrictions on consumption in Tanzania and Somalia in 1974 (*qat* consumption was allowed only on Fridays in Somalia and a total ban was imposed in Tanzania) lowered the Kenya income officially by 1.6

million Ksh (c. \$ 200,000). (However, there doesn't seem to have been any serious effort on the part of the Somali government to enforce their restriction as *qat* was still chewed daily.)

Government officials from the regions of widespread *qat* use report that their concerns are rooted less in the direct psychoactive effects of *qat*, which are viewed as analogous to excessive use of caffeine, than in the wide range of indirect health, social, and economic consequences of chronic *qat* use (Hughes 1973:32). The literature suggests that *qat* use contributes to family instability because of the economic drain on the family resources and the absence of the father from participation in family life (due to his presence in the evening *qat* parties). Work productivity is said to be reduced as a result of absenteeism, tardiness, and the depressed mood of the *qat* chewers. Currently, a major concern among importing consumer nations is the cost of *qat* use both to the individual and to the country as a whole due to specie drain. In those countries where *qat* imports account for the loss of a sizable portion of the national income, there is a serious balance of payments problem (Hughes 1973). Concerns in Yemen over the spread of *qat* cultivation in the 1960s centered around the substantial loss in revenues that occurred when coffee fields were converted to *qat*.

A 1956 UN FAO report appears to contain the first mention in the literature of institutional change as a strategy for reducing high prevalence of *qat* use. It recommended extending the work day or providing alternative recreation in the afternoon. The pharmacodynamic basis for this strategy lies in the assumption that *qat* chewers would not consume the drug during the evening hours because the prolonged stimulant effect would make sleep impossible. While this strategy bears some resemblance to the alternative activity programs held in the US for adolescent drug users, *qat* chewing in the afternoon represents a much more radical and complex institutional change. It would require restructuring of the adult working day and the elimination of the dominant recreational activity for men. While this approach was discussed in Yemen, it was seen to be difficult to achieve, with the additional consideration of other unforeseen and serious consequences as a result of tampering with a society's basic social and economic institution.

In 1983, the president of the Somali Democratic Republic, Muhammed Siyad Barre, called on Somali academicians specializing in various fields of social education to be in the forefront of a national campaign to eradicate *qat*. At a national symposium held at the National University in Mogadishu in September, 1983, he mentioned *qat* had led to the total stagnation of the Somali nation's economic development programs and had destroyed society's moral fibre. *Qat* has been officially banned in Somalia from March, 1983.

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