Hashish cultivation in the state of Southern Darfour, Sudan

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زراعة الحشيش في ولاية جنوب دارفور في السودان حامد منان محمد والفاتح إدريس عبد الكريم ومحمد إبراهيم محمد

خلاصة : بغية التوصل إلى رسم عملية تخطيطية وافية لمكافحة إنتاج الحشيش على نحو فعال وناجع، تم استقصاء مناطق زراعته في ولايتي جنوب دارفور وبحسر الغزال خلال فترة تهيئة الارض للزراعة في أيلول/ سبتمبر 1994. وقد جمعت بيانات عن إنتاج الحشيش وعن الأوضاع الاجتماعية والاقتصادية للسكان في منطقة إنتاجه. وتتناول هذه المقالة المحاولات التي جرت لمنع إنتاج الحشيش في المنطقة أثناء إحراء الدراسة وتناقشها. ثم تعرض ما تم التوصل إليه من نتائج مشفوعاً ببعض التوصيات.

ABSTRACT In an attempt to arrive at an adequate planning process for the effective and successful control of hashish production, cultivation areas in Southern Darfour and Bahr Elgazal States in Sudan were investigated during the cultivation period in September 1994. Data on hashish production and the socioeconomic status of the people in the area of production were collected. Attempts made at the prevention of hashish production in the area during the study are reported and discussed. The results of this work are presented together with some recommendations.

La culture du haschisch dans l'Etat de Darfour-Sud au Soudan

Résumé. Dans le cadre d'une tentative visant à adopter un processus de planification adéquat pour un contrôle efficace de la production de haschisch, les zones de culture des états de Darfour-Sud et de Bahr el-Ghazal au Soudan ont fait l'objet d'investigations en septembre 1994 pendant la période de culture. Des données relatives à la production de haschisch et à la situation socio-économique des populations dans la zone de production ont été recueillies. Des tentatives visant à arrêter la production du haschisch dans cette zone pendant cette étude sont rapportées et discutées. Les résultats de ces travaux sont présentés dans cet article avec quelques recommandations.

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Introduction

Drug consumption by the Sudanese is limited to only a small sector of the society, mainly labourers, and is mostly associated with the use of alcohol and hashish, as in other countries [1-4]. Police records for the period 1986–1990 show that the number of offences concerning hashish handling increased considerably over that period [2,5]. This increase was accompanied by an increase in the quantity of hashish seized and confiscated during the same period. However, this represents only a small part of the total amount of hashish produced annually in areas of cultivation in different parts of Sudan.

Sudan is considered to be one of the main production areas of hashish in Africa. The cultivation zones are located in Southern Darfour State, the southern states and the Blue Nile State in the eastern part of Sudan [6, 7]. The cultivation of hashish in these areas is steadily increasing. This has been attributed to the scarcity of resources, weak administration and ineffective security and preventive measures. Data obtained from the above-mentioned sources have shown that hashish is the most prevalent drug in terms of production and use.

Collection of data on hashish production and the socioeconomic status of the people in the areas of production is important for adequate planning and successful control efforts. In an attempt to achieve this, hashish cultivation areas in Southern Darfour State were visited several times; the results of these visits are the subject of the present report.

Methodology

A preliminary visit was made to the area in April and May 1994. The second visit was

carried out during the height of the rainy season, in September 1995. The visits were made by a group of researchers, including two social workers, two road guides and five former hashish farmers. For security reasons, it was escorted by armed soldiers.

The lack of paved roads in forest areas made it necessary to cover a distance of 1150 km on foot and on donkeys. About 32 hashish cultivation areas were visited and the harvest of hashish was confiscated. The actual area cultivated was measured and the average amount of processed hashish produced in a certain area was calculated; the figure obtained was used to estimate hashish production for other areas.

Results

History of hashish cultivation in the area

According to the survey conducted in the area and meetings held with village leaders and sheikhs, hashish production in the region dates back to the 1940s. El-Murraya village was the first to cultivate hashish in the region. It was introduced from Alzandy province, particularly the areas of Bazia, Basalia and Tumbra. The first merchant to introduce it was from the Runga tribe. Merchants from the Al-Tungur and Al-Barno tribes were also reported to have introduced the seeds to the area.

In the 1950s, traders from Al-Deain, Niyalla and Al-Obeid started to come to the area to buy hashish, and hashish production gradually spread to other villages in the area. In the 1960s, hashish cultivation spread to most neighbouring villages, including Al-Radom town. The existence of some of these villages (e.g. Al-Shargia, Tilaihon, Um Sinaina and Mulagah) was reported to be mainly associated with the production of hashish.

In the beginning, hashish processing was carried out using the leafy parts of both male and female plants, and the size of the processed hashish piece (gandoul) was large (about 340g). However, after discovering the exact part of the plant which is most effective, the processing procedure was changed to include the upper leafy part of the female plant only. Consequently, the size of the gandoul decreased gradually until it finally reached about 57 g.

Socioeconomic data

The inhabitants of these villages are of tribal origin. The villages are usually small and the houses consist of small huts made of wood and dry grass. Some of them came into existence as a result of the migration of tribes from the north, especially after Kafia Kingi village was burned down in 1930. More villages sprang up on the arrival of some tribes following the drought that affected most of the northern parts of the country in 1984. Members of some of these tribes were good farmers and they introduced the cultivation of consumable crops to the area, such as beans, chickpeas, rice, sorghum, sugar cane and fruit. The areas of land cultivated were between 0.4 and 6.3 hectares. The harvest of each hectare of these farms, particularly in the area of Dafag, was very high (13 sacks of rice, 8 of chickpeas, 5 of sesame seeds and 6 of maize). However, due to the lack of transportation and consumer markets, some of the farmers abandoned these crops and started to cultivate hashish, which is funded by hashish traders.

As in other tribal areas, the inhabitants of El-Radom area are under the influence of mayors (umdahs) and religious leaders (sheikhs) who have administrative and judicial power. Most of the inhabitants (> 90%) are illiterate and the educational

level of the rest is low. There are few primary schools in the area, especially in the hashish production areas. There are neither intermediate nor secondary schools in the whole area of El-Radom. The schools that are found are either incomplete or improperly built and they lack both teachers and educational facilities. In addition, the students usually leave school midterm to work on hashish farms.

Health services in the area are very poor and the number of medical workers is extremely small; only one medical assistant is available. Infectious diseases are common due to the lack of proper medical services and low standards of living, e.g. filariasis, malaria, diarrhoea, leprosy, dysentery and scabies.

The inhabitants of El-Radom area work mainly as cultivators of hashish and other crops. The soil is very fertile and the rain levels are suitable for the cultivation of hashish. The land in the northern part of El-Radom is sandy and is suitable for the cultivation of millet (dukhun), peanuts and beans. In the southern part, the land is muddy and is suitable for cultivation of sorghum, maize, rice, sugar cane, broad beans, beans and fruit. These crops are usually cultivated on small farms (less than half a hectare each), mainly because of the difficulties inherent in the proper weeding of troublesome plants that grow as a result of heavy rains.

Some of the inhabitants also work in animal husbandry, fishing or collecting honey and skins of wild animals. However, veterinary medical care is lacking in the area. Therefore, some of these animals are smuggled to neighbouring countries (e.g. Central Africa) where medicines are available and the market demand is encouraging.

Hashish cultivation

The climate of the state of Southern Darfour makes it a suitable place for hashish production. The chain of mountains, the huge valleys with numerous streams, the extensive bushy vegetation, long grass, water pools and heavy rains make this area almost completely isolated during the rainy season. It is a remote area isolated from densely populated villages and the control of government authorities. All these factors make the area attractive for unlawful activities, including hashish production.

Hashish production in the area is encouraged by traders who provide the funds and other necessary requirements. The farmers, in turn, receive small loans from the traders which cover only a tiny part of their living expenses. They are also given a percentage of the hashish grown. Their share of hashish is sold cheaply to the trad-

ers. Eventually, the money obtained is just enough to clear the loan given. Most of their living requirements, including sorghum, are obtained at high prices from remote areas. Preparation of the land usually starts between May and June at the beginning of the rainy season.

Buram province is notorious for hashish cultivation and is used for the storage and distribution of hashish to different markets in Sudan. Due to increased police activities, hashish cultivation has shifted from the nearby villages to remote areas like Bahr El-Gazal State and has crossed the border to Central Atrica. In both cases, the hashish farmers are actually residents of the El-Radom area.

In 1994, hashish cultivation covered 32 areas comprising 182 farms (Tables 1 and 2). The total area of these farms was estimated at 100 hectares and the production of

Table 1 Amount of hashish confiscated during the study in some areas in Southern Darfour and Bahr El-Gazal States, 1994

Area	Distance and location relative to El-Radom town	Number of farms	Area (hectares)	Amount of hashish (kg)
Bejara	200 km west	12	6.0	4411.6
South Ummsofa	200 km south-west	10	6.2	3421.3
Sharagana	120 km south-west	8	6.2	4028.9
Kakar Ahmer	100 km west	2	0.7	0429.8
Kapa Leila	130 km south-west	3	2.4	1556.9
Dahal Masakha	70 km south	3	1.0	0675.1
Umm Sharaia	90 km east	12	4.8	3078.7
Deim Bishara	68 km west	3	1.1	0680.4
Cheili	89 km west	1	0.4	0272.0
El-Murraya	20 km east	1	0.1	0068.0
Bugoduh	120 km north-west	5	2.7	1769.3
Ablanda	110 km south-east	5	4.2	2703.1
Duhol Bandala	160 km south-east	2	1.1	0680.4
El-Ardeib	135 km south-west	4	2.1	1360.9
Beer Elgantour	90 km north-west	4	2.1	1360.9
Total		75	41.1	26497.3

processed hashish was estimated at 64 385 kg. This was valued at about 26.1 billion Sudanese pounds, equivalent to US\$ 47 million at that time.

Hashish processing would normally be carried out on the farms but, for security reasons, it is transported to hidden locations to be processed and stored. Vehicles are used in the summer to carry the product from these parts to the consumption areas. Quantities that are ready for the market are stored in concealed areas inside houses; lots requiring longer storage are kept in sacks buried in the ground. This method entails separating the sacks used from the surrounding ground by insecticide-treated sorghum kernels to prevent damage by insects.

Attempts at prevention

In addition to the conventional hashish production areas in Southern Darfour State, the visits in 1994 revealed that other areas in the northern part of Bahr El-Gazal State and across the border inside Central Africa were also cultivated.

Hashish production areas reached during the visit included 15 zones with 75 farms (Table 1), with an area of about 41 hectares. The entire production of these farms was confiscated and was estimated to be 26 497 kg, worth 10.7 billion Sudanese pounds, equivalent to US\$ 19.5 million. The amount of processed hashish seized during transportation and storage was 1644 kg, valued at 666 million Sudanese

Table 2 Estimated amount of hashish produced by farms in the area not reached during the study in 1994 $\,$

Area	Distance and location relative to El-Radom town	Number of farms	Area (hectares)	Amount of hashish (kg)
East Umm-Sofa	160 km south-east	18	9.5	6124.9
Andurnah	100 km south-east	10	5.3	3402.7
Duhol Forogi	130 km east	12	6.3	4083.1
El-Bashama	40 km east	5	2.7	1769.3
Umm-Baganah	120 km south	4	2.4	1548.9
Kiralai	160 km south-west	3	1.7	1088.9
Kafiange	190 km south-west	3	1.5	0952.4
Beher El-Kook	250 km south-west	15	8.0	5172.0
J. Marfaien	280 km south-west	2	1.1	0680.4
Malamat Chei	150 km south-west	3	3.2	2041.3
Angargato	100 km south-west	3	1.7	1088.9
AbuKauri	110 km south-east	4	2.1	1360.9
Dahal El-Kauir	80 km south	4	2.1	1360.9
Dakik	90 km south	5	2.6	1701.3
Katta	190 km south	9	4.7	3130.2
Thatimerah	230 km south	4	2.1	1360.9
Minamba	240 km south-east	3	1.6	1020.9
Total		107	58.6	37887.0

pounds, equivalent to US\$ 1.2 million. This represented only 2.5% of the total hashish produced, while that confiscated inside the farms during the period of cultivation represented 41%. These figures indicate that prevention after the harvest or during transportation and storage is ineffective and that the best time for prevention would be during the period of cultivation when all hashish cultivated could be confiscated, or during preparation of the land for cultivation when cultivation would be interrupted.

Formation of local committees

Prevention of hashish production by casual police operations, either during the peak or towards the end of the rainy season, has proved difficult if not ineffective. This is mainly due to the inaccessibility of this remote part of the country, which has harsh climatic conditions, particularly during the rainy season. Moreover, at the end of the rainy season anyone reaching the area would find that most of the cultivated hashish had been harvested and moved away for processing or storage. Therefore, effective prevention of hashish growing requires the involvement of the local inhabitants in prevention efforts.

Hashish dealers, including workers, farmers and traders in each village were released during the visits, under oath not to work on hashish production again and to work towards its prevention. Several meetings with the people of each village were held. In these meetings, people were informed of the hazards of hashish use for the community and the criminal law on hashish, which imposes severe punishment on hashish cultivators and dealers. The religious view on hashish handling and use was also explained. It was demonstrated that hashish production is not beneficial; it brought only poverty and led to the deterio-

ration of the health, living standards and social conditions of the community. In addition, the advantages of other crops were highlighted by former hashish farmers who had shifted to growing other crops (e.g. sorghum). These arguments convinced most people there of the importance of directing their efforts towards the prevention of hashish cultivation and trying alternative crops.

After these meetings, a local committee for the prevention of hashish cultivation was formed in each village. Thirty-four local committees were formed in 17 villages in the area, comprising about 595 members. All the committees embarked on their work immediately. In addition, a higher local committee for the prevention of hashish growing based at El-Radom town was also formed. The responsibility of this committee is to develop a plan of action and supervise the work of the different local committees.

Following the formation of these committees, a voluntary collection of hashish and seeds in the possession of local people was initiated. Large quantities were collected in a very short period of time, estimated at 890 kg and valued at 360 million Sudanese pounds, equivalent to US\$ 655 000. In addition, missions were assigned to some of the committees, which were successfully carried out. In these missions, large amounts of hashish were collected and the product of a number of hashish farms was confiscated.

The performance of these committees has demonstrated the importance of their role in the effective and successful prevention of hashish growing.

Communication activities

Several face-to-face meetings were held with the people, the sheikhs, the *umdahs* of

the villages and most of the officials in the state. Indirect meetings through the mass media were also held and a series of programmes on hashish prevention were recorded for the local radio and television.

In these meetings and broadcasts, the problem and serious threat of hashish production and use were addressed. Some emphasis was given to the importance of increased awareness of the new criminal law on hashish. Sermons reflecting the religious opinion on hashish use and handling were also given by religious leaders in the area.

To demonstrate police work in the area, samples of the different types of hashish plants, together with the amount of processed hashish and seeds seized during the visit, were shown at exhibitions held at Al-Radom and Buram towns.

Conclusions

Involvement of the local communities in the prevention of hashish production is of paramount importance for effective prevention on a continuous basis. If local committees were given full authority, proper training and the required facilities for prevention, complete eradication of hashish production in the area would be possible.

Attempts made at the prevention of hashish cultivation during the study proved to be effective; their effectiveness was demonstrated by the sharp increase in the price of hashish at Al-Deain and Niyalla hashish markets.

Previous control measures taken for the prevention of hashish growing have been unsatisfactory since the amount of hashish seized or confiscated annually represented only a small part of the total amount of hashish produced.

The consumption of hashish by Sudanese communities is high as most of the total hashish produced is marketed locally and only a small part is smuggled to the Libyan Arab Jamahiriya and Egypt via the Sahara.

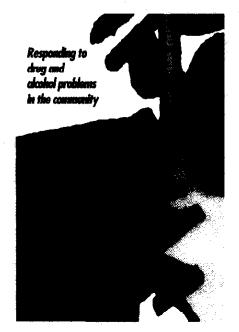
Recommendations

- Care should be taken to improve the health and social welfare of the people of the area.
- Farming resources and facilities should be provided to all farmers who opt for alternative crops.
- Agriculturists should be sent to the area for consultation and supervision of crop production.
- Transportation should be provided to take the product of these farms to areas of consumption.
- The experiment with local committees was a success and should be followed in all hashish-producing areas in Sudan.
- It is important to build police stations at Al-Radom, Raja and Al-Deain towns and provide them with the necessary equipment and vehicles to control the production, storage and passage of hashish to areas of consumption.
- Permanent and mobile police points at Katta village and the rural parts around Al-Radom should also be established.
- Field prevention in controlling hashish production during land preparation, in the period from May to August, should be given some consideration.
- Serious and strict security measures should be applied in the prevention of hashish growing in the area.

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Drug and alcohol abuse is increasing almost everywhere and constitutes a serious public health and socioeconomic problem in many parts of the world. The problem needs to be tackled at the community level, using an integrated approach that combines medical, psychological, and social interventions to treat individual patients, provide support to them and their families, and mobilize the community to take appropriate action.

This manual describes how members of the primary health care team can respond more effectively to drug and alcohol problems in their community, and provides simple guidance on assessing and managing substance abuse problems at individual, family and community levels. It also explains how primary health care services can best be organized and how they can be complemented by other community activities, including those involving the law enforcement sector. Finally, guidelines are given on evaluating drug and alcohol programmes, and on using the manual in training programmes for health workers.

This publication can be ordered from Distribution and Sales Unit, World Health Organization, 1211 Geneva 27, Switzerland. Telephone: (22) 791 2476; Fax: (22) 791 4857. Price Sw.fr. 21.-(In developing countries: Sw.fr. 14.70. Arabic available from WHO Regional Office for the Eastern Mediterranean, PO Box 1517, Alexandria 21511, Egypt. Price US\$ 4.50.