

# 6

## The growth of cannabis cultivation: Explanations for import substitution in the UK

*Garfield (Gary) Potter*

### **Abstract**

*Cannabis cultivation in the United Kingdom has, seemingly, been on the increase. From the 'traditional' situation where most cannabis on the British market would have been imported we now have a situation where sources suggest that over 60% of the cannabis consumed in the UK is grown here. At the same time we have seen ongoing debate surrounding UK cannabis laws. In January 2004 cannabis was 'downgraded' from a Class B to a Class C drug. Recently these calls to reverse this liberalisation have been coming to a head. There are many reasons behind this call. Some of these relate to the proliferation of domestic cultivation. This chapter aims to describe the apparent shift from an import-led market to one drawing largely on domestic production and to explore the reasons behind this shift. It is argued that the change in policy has only been a minor influence in this respect.*

### **1 Introduction – The law relating to cannabis cultivation**

The cornerstone of UK drugs law is the 1971 Misuse of Drugs Act (MDA). The MDA brought UK law into line with the United Nations Single Convention on Narcotic Drugs (1961). The MDA provides for controlled drugs to be listed as 'Class A', 'Class B' or 'Class C' with, in theory at least, Class A drugs being those that are most harmful and Class C drugs the least harmful. Sentencing

*Garfield (Gary) Potter*

---

for different offences under the act is supposed to reflect these differences, with higher statutory maximum sentences for Class A drugs than for Class C drugs. Class A drugs include Heroin, Cocaine, MDMA (3,4-methylenedioxy-N-methylamphetamine; 'ecstasy') and LSD (Lysergic acid diethylamide; 'Acid'). Penalties for Class A drugs are up to seven years imprisonment, an unlimited fine, or both, for possession offences, and up to life imprisonment, an unlimited fine, or both for dealing (supply related) offences. Class B drugs include Amphetamines (Speed), barbiturates and codeine. Maximum penalties for possession are five years imprisonment or an unlimited fine or both; for dealing they are up to 14 years imprisonment, an unlimited fine, or both. Class C drugs include Cannabis (at the moment – see below), ketamine and GHB (Gamma hydroxybutyrate; 'liquid ecstasy'). Possession carries a maximum sentence of two years in prison or an unlimited fine, or both. For dealing this goes to 14 years in prison, an unlimited fine, or both.

The MDA specifically outlaws the importation and exportation (section 3 of the act); the production and supply (section 4), and; possession and possession with intent to supply (section 5) of controlled drugs. Section 6 also specifically outlaws the cultivation of cannabis plants<sup>1</sup>.

From the above it will be seen that growing cannabis is prohibited under two different sections of the 1971 Act. Production is prohibited under section 4 and cultivation under section 6. The key difference is that being charged for production constitutes a trafficking offence under and for the purposes of the Drug Trafficking Act 1994. This means that anybody convicted under section 4 is liable to asset confiscation and, on a third such conviction, is subject to a mandatory seven-year prison sentence. Neither element holds for charges brought under section 6. It is of course also illegal to possess, supply, or intend to supply cannabis. Growing cannabis is de facto possession of the drug and growing in any quantity may be taken as evidence of intent to supply.

After the recent downgrading of cannabis from a class B drug to a class C drug the maximum prison sentence for possession of cannabis stands at two years, and at 14 years for production or supply. It is worth noting that when cannabis was downgraded the maximum sentences for supply-related offences for class C drugs were raised from 5 years to 14 years, the same as for class B drugs. As such although the maximum sentences for possession of cannabis were dropped from 5 years (for class B drugs) to 2 years (for class C) there was no reduction in the maximum sentences for trafficking offences. Whilst the

---

<sup>1</sup> There are legal exceptions for most of these which allow for certain authorised persons to possess, supply and produce controlled drugs in certain circumstances. Those who use, supply and cultivate cannabis as a recreational drug do not fall into this category.

---

*The growth of cannabis cultivation: Explanations for import substitution in the UK*

---

change in law may have signalled a liberalisation of policy in relation to cannabis possession it did not liberalise the position in relation to cannabis supply.

Downgrading was introduced mainly on the grounds that, in terms of relative harms (to physical and mental health, and to society more generally), cannabis was seen as being significantly less harmful than other Class B drugs. Downgrading was introduced by the Labour government following an on-going debate<sup>2</sup> most recently reignited by the Police Foundation Report (2000). The decision was broadly supported by the Liberal Democrats but opposed by the Conservative opposition. However within all three main parties there are MPs who supported and opposed downgrading.

Since cannabis was downgraded on the 29<sup>th</sup> January 2004 there has been a continuing clamour to get this decision reversed. Opponents of downgrading have various arguments. It is claimed that downgrading has led to an increase in use of the drug; has contributed to the increase in domestic production of cannabis; has seen a greater involvement of organised crime groups in distribution; has left many people confused with some (particularly the young) now think cannabis is legal; that downgrading should be reversed because of the supposed link between cannabis and health problems (especially mental health problems), or; that downgrading should be reversed because it sends out the wrong message to people about cannabis use. Exploring all of these arguments is beyond the remit of this paper, but we will look at the apparent proliferation of cultivation and some related factors.

The arguments about downgrading have been coming to a head as I write this. Monday 28<sup>th</sup> April 2008 saw the Advisory Council on the Misuse of Drugs<sup>3</sup> report to the Home Secretary (Jacqui Smith) on the harm associated with cannabis (ACMD, 2008). As with an earlier review of downgrading (ACMD, 2005), and the report that preceded the decision to downgrade in the first place (ACMD, 2002), the recommendation is that cannabis should be a Class C drug in reflection of its relative dangers. As with previous reports the ACMD make it clear that they do not think cannabis is harmless, merely that it is significantly less harmful than other drugs currently classified as Class B. Prime Minister Gordon Brown has suggested that regardless of the most recent report he is in favour of tightening the laws on cannabis (i.e. re-upgrading) and Jacqui Smith announced on 7<sup>th</sup> May 2008 that cannabis would be returned to Class

---

<sup>2</sup> This decision came on the back of many years of debate about reclassification. Debates about the legal status of cannabis go back many decades, but this particular round of debate can be seen to have started in the late 1990s in the period leading to the publication of the Police Foundation Report (2000) which recommended downgrading.

<sup>3</sup> A statutory body set up by the MDA to advise the government on drugs legislation.

B despite the ACMD recommendations. This is still subject to parliamentary approval.

The main reasons given by the Prime Minister and the Home Secretary are that cannabis is stronger now than when it was downgraded, and the link to mental health problems is much more problematic because of this increased strength. The 2008 ACMD report also flags up the concern that more and more cannabis is supplied by domestic cannabis farms, with an increasing involvement of organised crime networks. This chapter will examine the claim that cannabis is increasingly sourced domestically (rather than being imported), explore the argument that this has been caused (at least in part) by the liberalising of the cannabis laws in the UK, and offer alternative explanations for the expansion of domestic cannabis production.

## 2 Methodology

This chapter draws primarily on research conducted for the author's PhD. At the time of embarking on the PhD research there was no published academic work looking at cannabis cultivation in the UK, and precious little elsewhere in the world. Domestic cannabis cultivation as a phenomenon was beginning to come to light in the news media and through official bodies (primarily the Police) and as identified by the Independent Drug Monitoring Unit (IDMU, see below), but the people involved in this criminal activity were, largely, a hidden population. With the topic under consideration being both an un-researched area and one concerning a hidden population the initial research was very much exploratory in nature. The aim was to find out as much as possible about this population and their activities, drawing on whatever sources proved to be available.

The initial research was ethnographic in approach. A population of cannabis growers in South Yorkshire, England was accessed through opportunity sampling and snowballing techniques. Interviews were conducted with as many of the individuals as possible. An interview schedule (semi-structured) consisting of a list of topics was drawn up. For some respondents formal, recorded interviews took place – for others the schedule was worked through (as far as possible) over a number of informal interviews and conversations. Supplementary information was drawn from participant observation of cultivation operations, cannabis dealing, and the social lives of key respondents. Using this combination of qualitative data recording techniques profiles or 'case-studies' were drawn up for individual growers and dealers<sup>4</sup>. The original

---

<sup>4</sup> See next page.

South Yorkshire population was supplemented with growers and dealers from elsewhere in the UK. Detailed profiles/case-studies were drawn up for a total of 55 individuals with partial profiles developed for many more.

Further data was collected using online research methods. A number of cannabis-cultivation related websites and mailing lists were monitored. Online interviews were conducted with a further 12 respondents. The total number of participants contributing to web sites and other online communication forums monitored numbered in the thousands.

An important supplement to the information gained from those involved in cannabis cultivation was interview data obtained from a number of 'experts' – people with knowledge of cannabis cultivation who weren't themselves involved. This included three members of the Forensic Science Service, two members of the Independent Drug Monitoring Unit ([www.idmu.co.uk](http://www.idmu.co.uk)), four police officers with particular knowledge of cannabis cultivation and the staff and management of three shops that supply grow-lamps and other equipment for indoor cultivation. These shops and the police officers were from the South Yorkshire area of England – the area where most of the growers who participated in face-to-face interviews and participant observation were drawn from.

The data was supplemented with data taken from newspaper reports, parliamentary discussions and policy documents during the period of the PhD research. For the current essay news reports and other documentary sources were also consulted covering the period since completing the PhD research, particularly during the recent debates around re-upgrading cannabis to a class B drug. A fuller discussion of the methods employed in the PhD research is available in Potter (2007).

### **3 The increase in domestic marijuana production in the UK**

Domestic production seems to be on the increase in the UK. We have a number of indicators which suggest this, although official statistics on cannabis cultivation are somewhat unreliable. Cannabis cultivation only comes to light through police action and whilst there are police figures on seizures of cannabis plants it must be remembered that these are as much a reflection of policing procedures as of actual levels of cannabis growing. Table 1 shows the number of cannabis plants seized each year from 1994 to 2005.

---

<sup>4</sup> The level of detail of the final profiles varied depending on the opportunities available to interview and/or observe different individuals.

**Table 1. Total number of cannabis plants seized in England and Wales by year.**

Year	Total number of cannabis plants seized
1994	54,280
1995	91,650
1996	113,650
1997	77,570
1998	70,020
1999	53,060
2000	45,460
2001	67,700
2002	52,140
2003	80,500
2004	88,674
2005	208,357

Sources: 1994-2003 Mwenda et al. (2005:4);  
 2004 Mwenda and Kaiza, (2004:7);  
 2005 Reed (2007:8).  
 (No. of plants seized rounded off to nearest 10 for years 1994 to 2003.)

Although the pattern from 1994 to 2004 is difficult to describe with clarity, with peaks and troughs across the years, the general trend seems to be upwards and the 2005 value represents a dramatic increase from previous years. Unfortunately data since 2005 is not yet available so we cannot tell if this is a new trend, or a one-off.

It should be pointed out that the numbers of plants seized across this period – even in the peak years – is much smaller than equivalent figures for the Netherlands (Chapter 4 in this book), even more so if we consider relative population differences. Of course the Dutch figures, like the British ones, reflect as much on police activity as they do on actual levels of cannabis cultivation, but a comparison of seizure data does suggest that, regardless of trends, the situation in the UK relating to domestic production of cannabis has a long way to go before it matches the situation in the Netherlands. This may suggest that the concerns relating to domestic production in the UK may be somewhat overstated.

As well as consulting the official statistics I interviewed a variety of professionals with a working knowledge of the UK cannabis market – this included members of the police with knowledge of drug markets, members of the Forensic Science Service (FSS) who analysed drugs sent to them by the police, and members of the Independent Drug Monitoring Unit (IDMU) who provide

---

*The growth of cannabis cultivation: Explanations for import substitution in the UK*

---

an expert witness service in court cases. All these experts were very familiar with trends in cannabis cultivation, and all shared a general consensus that domestic cultivation was steadily increasing. One FSS scientist went further describing not just the expansion in cannabis cultivation, but the change in the approach that growers were employing:

*'In the [19]70s there were practically no cases [of cannabis growing in the UK]. In the [19]80s cultivation would be allotments, greenhouses and windowsills. Commercial growing kicked-in in the early [19]90s and grew steadily, with hydroponics and Dutch cannabis technology perhaps contributing to this.'* (FSS scientist with experience in cannabis cultivation cases).

Similarly the IDMU described how their expert-witness work involved more and more cases of domestic production, with most of these being indoor growing operations (grow-ops) utilising lights and other technology. The IDMU are often called in to assess whether a particular drug haul is likely to be for personal use or for supply: increasingly their cases are now dominated by assessing domestic cultivation set-ups.

On the other side of the law many cannabis users and dealers I spoke to also report a shift towards domestically-sourced marijuana. Even less-well-informed users could describe a change in terms of the decreasing availability of cannabis resin compared to an increase in herbal varieties of marijuana<sup>5</sup>. The more informed users and dealers knew that the tendency towards herbal cannabis in the market place reflected the fact that it was grown in the UK. Whilst some herbal cannabis is imported many dealers and users noted that imported herbal cannabis tends to be quite compressed as a result of smuggling whereas locally produced herbal cannabis would be a lot looser in consistency with individual buds and flowers intact (rather than crushed together with the leaf material). Other users and dealers simply asked their suppliers where their cannabis was coming from to be told with increasing frequency that it was locally produced. The trend was seen as relatively recent and fairly dramatic. As one cannabis dealer said: 'Well these days it's *all* grown in the area. You occasionally get the odd little bit [of imported cannabis] here and there' (Cannabis dealer).

The IDMU also conduct an annual survey of self-defined 'regular users' in which they ask questions not just about the frequency of their respondents' drug taking but also about where they get different drugs from. The IDMU,

---

<sup>5</sup> A trend that not all users welcomed – more than one interviewee commented that they would rather have cannabis resin, but that it was much harder to get these days.

*Garfield (Gary) Potter*

---

from this data, claim as much as 66% of the cannabis consumed in the UK is now produced within the country (personal communication, IDMU, also reported in the Sunday Herald Oct. 9<sup>th</sup> 2005). This is an increase on the 50% reported by the IDMU in 2002, 47% in 2001 and a mere 13% back in 1994 ([www.idmu.co.uk](http://www.idmu.co.uk)). This jump from 13% to 66% in just over ten years is phenomenal. Of course we cannot be 100% sure of the accuracy of figures supplied by the IDMU. They are a small-scale outfit investigating a notoriously hard-to-research area, but they have been studying the UK drugs market for over 20 years. They target self-defined 'regular users' and ask them detailed questions about their drug using habits including the source(s) of their cannabis. I have discussed their methodology in depth elsewhere (Potter, 2007) and have flagged up possible sources of inaccuracy, however their methodology is consistent and as such we can expect the broad trends they highlight to be somewhat indicative of reality.

Another indication of the apparent rapid expansion of domestic cultivation in the UK lies with the 'support' industries. Most cannabis grown in the UK with commercial or social/commercial intent (Hough et al., 2003) is grown indoors under artificial lights. Businesses manufacturing and supplying specialist lights for indoor horticulture have seen a large and steady increase in demand for their products since the early-mid 1990s. One manager of a grow-light manufacturing company explained that the industry had grown from 'three hydro[ponic] specialist shops to about 80 in the last 17 years in the UK' with his own business seeing 'steady growth of about 25-50% per annum'. This expansion may not be entirely due to the growth in cannabis cultivation – grow-lights have many legitimate uses – but the implication was certainly that a lot of this extra business was due to illegal marijuana production. As he said, '[the] industry ignores the fact that a lot of customers abuse equipment... Not so much ignore it as not entertain [this idea]'. As a member of staff at another grow-shop explained '[more and more] customers talk about growing tomatoes. They're not growing tomatoes. We know that, they know that, we know that they know that we know that. But you can tell by the questions they ask. Not many people grow their own tomatoes indoors!'

#### **4 Market changes relating to increased domestic production**

Hough et al. (2003) identified five types of cannabis grower in the UK: the 'sole-use grower' who grows for personal use only; the 'medical grower' who grows for his own or somebody else's medical benefit<sup>6</sup>; the 'social grower'

---

<sup>6</sup> Medical benefits from taking cannabis are claimed for a vast number of conditions of which MS is merely the best known example.



who grows to supply themselves and their friends with good quality cannabis; the 'social/commercial' grower who supplies friends and acquaintances for some financial return, and; the 'commercial grower' who grows for money and sells to anyone.

Weisheit, specifically studying *commercial* cannabis growers in America some years earlier, classified three types of (commercial) growers: 'Hustlers', motivated by the challenge, the money and other benefits (such as status) related to success; 'Communal growers' for whom cannabis use and culture is part of their lifestyle and for whom financial return is a welcome side-line rather than a key motivating factor, and; 'Pragmatists' who have a dire financial need and find commercial cannabis cultivation a viable solution (Weisheit, 1992).

My own study of cannabis cultivation in the UK built on both these models (Potter, 2007). Growers could be differentiated by what motivates them. Most are motivated predominantly by non-financial drivers<sup>7</sup> – they may be growing as a political statement, to supply medical users, to avoid the 'real' dealers<sup>8</sup> (Parker, 2000) and real criminals of the black-market, or to ensure the quality, purity or availability of the cannabis they end up using. These people invariably also take a certain pleasure and pride both in the act of growing and in the production of a good-quality end product (defined as 'intangible rewards' by Weisheit (1991)). This group would equate, to a degree, with Hough et al. 'sole-use' and 'social' growers, but none of Weisheit's growers (who were, specifically, *commercial* growers).

For a second group of growers money plays a significant role in conjunction with non-financial motivations. Growers realise they can sell excess crops and make some money, but the original motivating forces relate more to the reasons just cited. Many of these people would still grow cannabis if they weren't making money, albeit on a smaller scale. This group echoes Hough et al. 'social/commercial' growers (and probably some of their 'commercial' growers as well) and Weisheit's 'communal growers'.

The final groups are motivated almost exclusively by financial incentives – they got into cannabis growing to make money. Non-financial motivations

---

<sup>7</sup> Some of these growers cite the motivation of 'thrift' (as previously identified by Warner, R. (1986) *Invisible Hand: The Marijuana Business*. New York: Beech Tree Books, p. 200) – that is the saving of money that would otherwise have been spent on cannabis.

<sup>8</sup> Howard Parker (2000) describes how young people buying dance drugs differentiate between 'real' dealers and those people (usually described as friends) who they actually get their drugs from. Cannabis users and growers often similarly differentiate. 'Real' dealers are the real criminals in their estimations. Avoiding having to come into contact with these people is a commonly cited reason for getting into cannabis cultivation.

*Garfield (Gary) Potter*

---

may still have an influence – many growers still take pride in producing a good crop – but without the profits these people would not grow cannabis. These people are most similar to the ‘commercial growers’ of Hough et al. and ‘Hustlers’ of Weisheit’s typology.

The different groups have different effects on the wider cannabis market. Medical growers have their own market (although there may be overlap with the non-medical market). Personal use growers and social suppliers are largely separate from the established black-market. Their biggest effect is probably to remove custom from the wider market. Social/commercial growers tend to supply ‘friends and acquaintances’. Different growers supply their own small markets although these markets will overlap with each other (and the wider market) because many social/commercial growers are sociable in their hobby and know other, similar growers. Large-scale commercial growers feed large sections of the wider market in the same way that large-scale importers do traditionally. The overall effect is a degree of fragmentation in the market. Large sections of the market no longer rely on supplies from a few ‘Mister Big’ type drug smugglers<sup>9</sup>.

The drift to domestic cultivation has had other effects on the market. Most commercial – and many non-commercial – cannabis growers grow indoors. By controlling climatic conditions and accessing seeds or cuttings from premium varieties of cannabis the market has seen stronger variants take an increasing share of the market. These stronger ‘Skunk’<sup>10</sup> varieties are more widely available and the prices have declined on the back of this: availability and ‘quality’ and strength have increased whilst price has declined. This chapter is not the place to debate the increased strength of cannabis and any possible link to mental health, but premium strength varieties are taking larger market-share and that means the average strength of cannabis on the market is increasing although the strongest varieties available are no stronger than the strongest varieties available in previous decades.

## 5 Increased cultivation as a response to downgrading

There seems to have been a definite increase in domestic cannabis production, but the expansion fits a fairly fixed pattern extending back to well before the downgrading of cannabis. The experts I spoke to – whether from the Police, the FSS, the IDMU, from those that supply cannabis growing equipment, or

---

<sup>9</sup> And as such may be harder to disrupt through targeted policing.

<sup>10</sup> ‘Skunk’ is, strictly speaking, a specific strain of cannabis. However the term is now generally used (by the media, at least) to refer to all premium-strength cannabis varieties.

from the growers and dealers themselves – all spoke of a trend that could be traced back to the early or mid 1990s rather than a sudden or specific trend triggered by the downgrading of cannabis in 2004.

Having said that, the trend identified in table 1 does seem to point to a link between downgrading and an increase in domestic cultivation, and this needs some attention. Regardless of the spike in 1996 the figures for 2005 represent a sudden and dramatic increase in the number of plants seized. However this is not necessarily a reflection on a sudden increase in the number of plants being grown in the UK. The Home Office publication 'Seizures of Drugs in England and Wales, 2005' points out that as well as the change from Class B to Class C there was a change in the way that police dealt with cannabis that was introduced in April 2004:

*'With effect from 1 April 2004 the Home Office issued guidance to all police forces in relation to the recording of formal warnings for cannabis possession which was in line with Association of Chief Police Officers (ACPO) guidance. This gave an additional disposal option of a formal warning for cannabis possession. Whereas a simple caution involves processing an individual at a police station, a formal warning (now 'street warnings') could be completed on the street. The number of simple cautions decreased from 37,738 in 2004/05 to 27,570 in 2005/06 (a 27 per cent decrease), whilst the number of formal warnings increased from 39,256 in 2004/05 to 63,331 in 2005/06, a 61 per cent increase (data on a calendar year basis is unavailable). The widespread and growing use of this new disposal is thought to have been a likely contributory factor in the increase in the number of police seizures for cannabis in 2005.' (Reed, 2007)*

Whilst we may not think this has much to do with seizures of cannabis plants (as opposed to cannabis resin or herbal cannabis) it is quite possible that a number of small-scale grow-ops which would previously have involved in cautions are now being sucked into the system through the 'formal warning' disposal (in a classic case of net-widening). The same document points out that 82% of cannabis plant seizures in 2005 were seizures of less than 50 plants, which could easily include a number of small-scale seizures that would have previously slipped through the net of official statistics by being dealt with informally<sup>11</sup>.

---

<sup>11</sup> The majority of people who grow cannabis – the 'sole-use grower' and the 'social grower' in Hough et al. typology (2003: 8) will only grow a plant or two. Many of these non-commercial growers will not use high-tech equipment or go for particularly high yields. It seems likely that the police may have looked to deal with this type of grower informally, and may now utilise the 'warning' disposal.

Garfield (Gary) Potter

---

Police officers I spoke to, particularly those working in metropolitan areas, consistently pointed out a number of relevant points. Firstly they were aware (as mentioned previously) that cannabis cultivation was on the increase in their areas – and had been increasing steadily since the early 1990s. Secondly they pointed out that they rarely actively sought out cannabis cultivators preferring, instead, to concentrate on those involved in dealing other (‘harder’) drugs<sup>12</sup>. Pursuit of grow-ops would usually only occur if they were connected to other forms of drug dealing or crime, or if the police came across them by accident<sup>13</sup> or on information provided by a member of the public. As one officer said of the latter type of instance ‘we have to be seen to respond’ to public complaints or tip-offs. The gist from this and other officers was that the policing of cannabis grow-ops was largely *reactive* and rarely *proactive*. Since the downgrading of cannabis a number of police forces have, at various times, conducted specific operations targeting cannabis cultivation in their areas<sup>14</sup>.

Some of these have undoubtedly come as a response to public and media concerns about the general increase in domestic cultivation. The eye of public opinion was focussed on cannabis around the time of downgrading and it seems that this has encouraged some police forces to instigate crack-downs on domestic cultivation, partly in response to accusations of being soft on cannabis. Of course once a police operation against a specific type of crime is launched the statistics get skewed as the police uncover more instances of this type of crime than they would during ‘normal’ policing. Whilst changes in the way cannabis offences are dealt with may not explain the full extent of the surge in cannabis plants seized in 2005 it may well explain a large chunk of the smaller-scale growing operations. Targeted policing may explain a large chunk of larger-scale growing operations. The combination of the two may well explain the overall spike. Unfortunately without more detailed data from 2005 and without more recent data to compare with we cannot come to a more definite explanation. However 2006 saw the nation-wide ‘operation Keymer’ targeting cannabis cultivation and involving 20 English police forces. I would expect the 2006 figures to show a high level of plants seized, but this may again be a reflection on police priorities rather than actual levels of cultivation.

---

<sup>12</sup> Particularly heroin and cocaine, but also ecstasy.

<sup>13</sup> Many of the cannabis growers I spoke to who had come to the attention of the police reported being caught by ‘accident’ or ‘bad-luck’. Many of the grow-ops reported in the press are also detected through passive rather than active policing, except those occasions when the police are actively cracking down on cannabis growing, such as during ‘operation Keymer’ in 2006.

<sup>14</sup> Various newspaper sources.

## 6 Explanations for the 'Green Avalanche' in the Netherlands

Although the change in policy in the UK in 2004 was followed with a spike in the number of cannabis plants seized in 2005 this in itself is not sufficient evidence as to the argument that liberalising the law was a major cause in the expansion of domestic production. The indicators we have looked at – official and IDMU cultivation stats and expert opinions from knowledgeable observers – suggest a trend towards cannabis cultivation that stretches back to before the change in the law. A similar trend towards domestic cannabis cultivation has also been noted in many other countries (see, for example, the chapters 4 and 5 in this book, for discussions on the situation in the Netherlands and Belgium respectively) and these do not all correspond to changes in national laws either. The legal situation undoubtedly has some influence (countries with very strict penalties for cannabis production or dealing have not reported dramatic increases in production), but does not seem to be the major driving force. So the question remains as to why there has been an increase in domestic production of cannabis in the UK and other non-traditional producer nations?

The drug trade is just that – a trade – and as such the question of why domestic production has expanded in the UK and elsewhere is arguably best looked at firstly in economic terms. This was the approach taken by Jansen (2002) when considering the situation in the Netherlands which can be seen as being similar to the situation in the UK, only at a more advanced stage. Domestic cultivation has been a feature of the Dutch cannabis scene for many years now and has undoubtedly influenced the situation elsewhere. Whereas we are talking now of a 66% self-sufficiency in the UK cannabis market, in the Netherlands Jansen put this figure at 75% six years ago. Three quarters of all cannabis consumed in the Netherlands originated in that country in 2002, and in both socio-political and technological areas the Netherlands can also be seen to have been ahead of the UK in generating conditions favourable to domestic production (Janssen, 2002).

The first point Jansen makes about 'Eurocannabis' – his term for cannabis produced in Europe 'mainly, but not exclusively ... indoors, under artificial light' – is that it represents a case of what economists call 'import substitution'. That is to say that domestic production is seen, in market terms, as an economically viable – perhaps even desirable – alternative to relying on an import-led market. Jansen claims that 'Economic theory provides an explanation for both the import substitution tendencies and the resulting global shift of cannabis production towards the Western world.'

Cannabis is of course illegal in the Netherlands as in the UK – yet the illegal status has not been successful in stopping the demand for cannabis. 'As

*Garfield (Gary) Potter*

---

worded in an old economic law: “Where a demand emerges, the supply will follow”. If demand in the Netherlands encourages production there then presumably demand in the UK – greater due both to a larger population and higher prevalence rates for cannabis use (EMCDDA, 2007) – should encourage production here<sup>15</sup>.

The illegal nature of the market does not prevent demand; it merely raises the price of the commodity. Thus attempts at cannabis control lead to the condition where domestic production, under artificial light, becomes economically viable. These conditions exist in the UK (and elsewhere) as in the Netherlands and hence we see the emergence of domestic cultivation in many Western countries (Clarke, 1998; UNODC, 2008)<sup>16</sup>.

However the phenomenon is undoubtedly most pronounced in the Netherlands. Jansen points out that in the 1980s the breeding of new cannabis strains to suit different climatic conditions (including different artificial climates) was legal for the Dutch – as was the experimentation with new production techniques. The Netherlands were already a leading nation in plant-science techniques and indoor cultivation methods<sup>17</sup> – largely due to being a densely populated nation with limited agricultural space. With this technological background, and a liberal attitude to cannabis, the Netherlands can be seen to have two advantages over other nations in developing cannabis import-substitution. In the UK we may not have had these advantages, but once the technologies and techniques were developed in the Netherlands there was nothing to stop them disseminating to Britain. Evidence from both active growers and cannabis growing information sources shows a heavy link between the British and Dutch cannabis cultivation scenes – many of my respondents had Dutch contacts, had visited the Netherlands, or had access to literature originating in the Netherlands<sup>18</sup>. There are also cases of Dutch nationals coming to the UK and getting involved with cannabis cultivation

---

<sup>15</sup> It is worth noting that the demand for cannabis in the UK, at least as measured by prevalence rates, has been in steady decline since a peak in 2002/03. Whereas in that year 10.9% of the populations had used cannabis in the last year by 2006/07 this had fallen to 8.2% (Murphy, R. and Roe, S. (2007), *Drug Misuse Declared: Findings from the 2006/07 British Crime Survey*. London: Home Office). One of the arguments for re-upgrading cannabis has often been an increase in use. In fact usage rates have decreased since downgrading. To be more precise usage rates seem to have decreased since just before downgrading.

<sup>16</sup> Note that both Clarke and Jansen were writing about expanding domestic cultivation in a variety of western nations before the UK downgraded cannabis. The UNODC reported marijuana cultivation in 172 of the 198 countries for which they had data.

<sup>17</sup> Whose application to cannabis growing can be traced back to the 1970s in America where harsher anti-cannabis laws inspired cultivators to concentrate their efforts behind the privacy of closed doors. Bergman, 2002; cited in Jansen, 2002, section 2.

<sup>18</sup> Many of the cannabis related web-sites and distribution lists I monitored were actually hosted by Dutch-based Internet Service Providers.

---

*The growth of cannabis cultivation: Explanations for import substitution in the UK*

---

and/or Dutch-style cannabis cafés (coffee shops), even if these enterprises tend to be short lived.

Jansen goes on to cite the role of both coffee-shops (establishments that retail cannabis in the Netherlands which if not strictly legal then at least are officially tolerated) and 'grow shops' (establishments that sell the equipment necessary for indoor cultivation of cannabis – these are completely legal) in helping to launch the 'Green Avalanche' that saw domestically produced cannabis come to monopolise the Dutch market. Coffee-shops provided domestic growers with practically-legal retail outlets to supply. Jansen notes that rather than being dominated by 'organised crime' groups domestic production and supply of the coffee shops is dominated by smaller scale individual and independent growing operations often each producing less than 10 kilograms of cannabis per annum. Grow shops provide these same people with all the equipment needed to set-up and run growing operations. The UK has, in recent years, seen a similar boom in one industry and the tentative emergence of the other. Grow shops in particular have taken off, particularly across the 1990s, as we have seen.

Recent years have also seen the first 'coffee-shops' opened in the UK<sup>19</sup>. These outlets have, to date, been doomed to failure operating as they do in open challenge to the law and local police. But where they have opened – often for only a very short time period (but with some lasting months or even years<sup>20</sup>) – they have operated on similar lines to Dutch coffee-shops offering a range of cannabis including both imported and locally-produced varieties to. However the cannabis cafés so far opened in the UK do not provide an outlet for growers to sell their product on anything like the same scale as occurs in the Netherlands. Whilst the increased availability of specialist growing equipment – either through grow-shops or mail-order – has undoubtedly played an important part in the expansion of domestic cannabis cultivation in the UK as in the Netherlands<sup>21</sup> cannabis cafés and their role as outlets for domestic cultivators do not seem to be that important. The emergence of cannabis cafés in the UK on a similar scale to those found in the Netherlands may well

---

<sup>19</sup> Cafés, bars and other retail outlets doubling as cannabis retail outlets have existed secretly in the UK for a long time but these new coffee-shops were the first to openly advertise themselves as cannabis outlets.

<sup>20</sup> Two well-documented examples are 'The Dutch Experience' in Stockport and a series of cafes operating out of Worthing and Lancing on the south coast of England (various news reports and personal communications).

<sup>21</sup> Although of course this is probably a reciprocal relationship – the expansion in the market for indoor growing equipment is presumably as much a result of the demand for this equipment by cannabis growers as it is a cause of increased cannabis growing. It is the fact that this equipment has become readily available, in part at least due to a lack of legal restrictions on such equipment, that is important in both countries.

*Garfield (Gary) Potter*

---

contribute to even higher levels of domestic cultivation but the level of domestic production in the UK remains high without these outlets. It seems likely that some kind of convenient retail outlet encourages domestic production. I would suggest that this is met in the UK simply through small-scale localised distribution (dealing) networks, often centred on groups of small-scale social/commercial cannabis growers. With demand for cannabis so high in the UK – higher than in the Netherlands – few growers would encounter much difficulty in finding customers to buy their product, especially as many growers are likely to be cannabis connoisseurs heavily into cannabis culture (Potter, 2007; Weisheit, 1991 and 1992) and as such well connected to other cannabis users. The final factor suggested by Jansen in encouraging the development of the domestic cannabis market is favourable social and legal/political conditions. Dutch society at large and Dutch legal and political conditions are more tolerant of cannabis use and production than probably any other developed nation.

In the UK this element has been perhaps less obvious although recent developments culminating in the downgrading of cannabis to a class C drug do reflect a general social shift towards a greater acceptance and tolerance of cannabis use and, by association, cannabis production. (Having said that the backlash against the downgrading is well documented in the media – this acceptance and tolerance definitely does not permeate to all sections of society. Not that it does in the Netherlands either!) This is further evidenced by studies such as that carried out by Nina Stratford at the National Centre for Social Research. In a report published in 2003 she and her team found that in the two decades from 1983 public support for the legalisation (that is to say greater liberalisation than the recent downgrading) of cannabis had risen from 12% to 41% – with 86% now supporting cannabis use for medical purposes (on prescription from a doctor). This finding reflects a more general liberalisation of British attitudes to cannabis (and, to a lesser extent, other ‘soft’ drugs) (Economic and Social Research Council press release 15<sup>th</sup> July 2003). It is obvious that against such a background of increasingly liberal social and legal attitudes conditions for potential cannabis growers become somewhat easier – but it is important to note that the way cannabis is looked upon and, crucially, policed is more significant than the actual wording of the law. Police officers themselves often say that cannabis is not a priority, and is usually policed reactively rather than proactively, and many growers feared bad-luck more than police activity in terms of risks of getting caught. A tolerant population is less likely to report a cannabis grower if it stumbles upon his grow-op.



## 7 Explanations for import substitution in the UK

The trends observed and inferred in the UK are not as dramatic as those seen in the Netherlands in the period of the 1990s and early 2000s (see Table 1) – as such it may be premature to talk about a ‘Green Avalanche’ in the UK. It is worth pointing out that much of the cannabis grown in the Netherlands is grown for export or for consumption by foreigners (drug tourists) in Dutch coffee shops (see, for example, Decorte, this volume). However there seems to be a definite shift towards import substitution in the British market, and this needs explaining. Most of the conditions Jansen believes helped encourage the ‘Green Avalanche’ in the Netherlands can be seen to apply to a greater or lesser extent in the UK. Increasingly liberal attitudes in both the social and legal arenas; high levels of demand for cannabis; increased access to increasingly sophisticated growing equipment and specialist strains of cannabis, and; possibly, the beginnings of the coffee-shop style grower-friendly distribution system alongside an established social-supply tradition of small-scale local distribution networks have made domestic production a viable rival to an import-led market where prices are kept artificially high by the legal situation (and where there is a relatively high level of risk for the cannabis smuggler). This combination of factors has provided the conditions in which the high-levels of domestic production we now see have flourished. I would add to this list an element that Jansen overlooked – possibly because it wasn’t relevant in the Netherlands at the time. Many of my growers – particularly those who participated in on-line growing forums – learnt many techniques and tips through the internet. Others learnt from magazines or books. Clearly the wide availability of information on how to grow cannabis can only aid those who want to grow, and can only help to encourage a greater prevalence of growing in a society. This relates, conceptually, to the idea of a general level of tolerance to cannabis in the cultural and political discourse of a society. The dissemination of knowledge and the availability of specialist equipment, advanced horticultural techniques and the availability of tried-and-tested premium strains of cannabis has undoubtedly helped fuel all growing – commercial or non-commercial. There are economic benefits behind import substitution. Traffickers may reason that domestic production is safer than importation, and the costs involved (and hence profit margins) may be lessened not least because there are fewer links in the chain from domestic production to end-user than for overseas production to end-user via some sort of smuggling network. This helps explain the expansion in cannabis cultivation. However for the non-commercial or social/commercial grower economic explanations don’t make sense on their own. For these people, rather, ideological explanations need also to be considered. Import substitution at this level reflects a broader trend in consumer concerns. The wish to avoid the black-market reflects both the ‘fair trade’ movement and a more general

*Garfield (Gary) Potter*

---

drift towards 'ethical consumerism'. The wish to ensure a better quality and purity of cannabis has echoes in the trend for organic farming. Many of those involved in social and social/commercial cultivation are interested in green politics more generally. This trend, along with the availability of equipment and knowledge, may be more explanatory than the recent change in the law.

## 8 Conclusions

Although it is impossible to be sure – cannabis cultivation is a secretive occupation – it does seem that domestic cannabis cultivation is on the increase in the UK. The available official data in this area is weak, but we can infer an upward trend from the views of experts and those working in 'support industries'. However it seems that the trend towards domestic cultivation, or 'import substitution', stretches back to before the recent changes in law and policy that saw cannabis downgraded to a Class C drug. Rather than blame a liberalisation in policy we need to consider alternative explanations. Jansen's modelling of the situation in the Netherlands provides us with a model for analysing the situation in the UK.

Although a certain level of tolerance in society at large may be necessary for large-scale import-substitution in the cannabis market the specific issue of the downgrading of cannabis probably had a negligible role. Sentences available to the commercial trafficker (grower or importer) were not lessened with the change in the law, and most large scale cannabis growers would know the risks. Smaller scale cannabis cultivators (non-commercial or social/commercial) may have been attracted by apparent liberalisation, but small scale cannabis cultivation was, seemingly, taking off before the down-grading. Most small scale cultivators don't expect to get caught, and they don't expect to get a custodial sentence if they do get caught (personal communications with respondents). I would argue that these are not the types of growers that the law is (or should be) most concerned with anyway. Even if they are, those involved in trafficking are still subject to the same maximum sentences as they were before downgrading, and those not involved in trafficking are unlikely to get a custodial sentence for a first offence anyway.

The main driver behind import substitution in the UK is not the legal situation. The wider cultural situation – with cannabis being widely used and widely referenced in popular culture – must be important, but the real driver has been the arrival of technologies and techniques for cannabis growing established elsewhere<sup>22</sup>. What's more, the trend towards domestic cultivation was well

---

<sup>22</sup> It has been pointed out to the author that cannabis growers migrating from the United States to The Netherlands in the early 1990s may have been a key driver behind the green avalanche arriving in the Netherlands (personal communication).

established before cannabis was downgraded and the actual impact of downgrading does not seem to have had a noticeable effect. Re-upgrading cannabis is unlikely to impact significantly on domestic production. What might have an effect would be a crack-down not on cannabis per se, but a crack-down on the markets that supply the equipment used to grow cannabis – but that raises many questions as this equipment has many legal uses and, gun control aside, it is rare to try to control a crime by putting restrictions on the equipment used in that crime when the equipment has other, legitimate uses.

## References

- ACMD (2002). The classification of cannabis under the Misuse of Drugs Act 1971. London: Home Office.
- ACMD (2005). Further consideration of the classification of cannabis under the Misuse of Drugs Act 1971. London: Home Office.
- ACMD (2008). Cannabis: Classification and Public Health. London: Home Office.
- Clarke, R.C. (1998). Hashish! Los Angeles: Red Eye Press.
- EMCDDA (2007). Annual Report 2007: The State of the Drugs Problem in Europe. Lisbon: EMCDDA.
- Hough, M., Warburton, H., Few, B., May, T., Man, L-H., Witton, J. and Turnbull, P.J. (2003). A growing market: The domestic cultivation of cannabis. York: Joseph Rowntree Foundation.
- Jansen, A.C.M. (2002). 'The economics of cannabis-cultivation in Europe' Paper presented at the 2<sup>nd</sup> European Conference on Drug Trafficking and Law Enforcement. Paris, 26<sup>th</sup> & 27<sup>th</sup> September, 2002. Available at <http://www.cedro-uva.org/lib/jansen.economics.html> (accessed 12<sup>th</sup> May 2008).
- Murphy, R. and Roe, S. (2007). Drug Misused Declared: Findings from the 2006/07 British Crime Survey. London: Home Office.
- Mwenda, L., Ahmad, M. and Kumari, K. (2005). Seizures of Drugs in England and Wales, 2003. London: Home Office.
- Mwenda, L. and Kaiza, P. (2004). Seizures of Drugs: England and Wales 2004. London: Home Office.
- Parker, H. (2000). 'How Young Britains Obtain Their Drugs: Drugs Transactions at the Point of Consumption' in Natarajan, M. and Hough, M. (Eds.) *Illegal Drug Markets: From Research to Prevention*. Policy Crime Prevention Studies Volume 11, 59-81. Monsey, New York: Criminal Justice Press.
- Police Foundation, The (2000). *Drugs and the Law: Report into the Independent Inquiry into the Misuse of Drugs Act 1971 (The Runciman Report)*. London: The Police Foundation.
- Potter, G. (2007). *Weed, Need and Greed: Domestic Marijuana Production and the UK Cannabis Market*. PhD thesis, University of Sheffield.
- Reed, E. (2007). *Seizures of Drugs in England and Wales, 2005* London: Home Office.
- UNODC (2008). *Annual Report 2008*.
- Warner, R. (1986). *Invisible hand: The marijuana business*. New York: Beech Tree Books.
- Weisheit, R. (1991). 'The intangible rewards from crime: The case of domestic marijuana cultivation' *Crime and Delinquency* 37 (4): 506-527.
- Weisheit, R. (1992). *Domestic Marijuana: A neglected industry*. New York: Greenwood Press.