

A Sustainable Future for Cannabis Farmers

'Alternative Development' Opportunities
in the Legal Cannabis Market





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This report is dedicated to Rene Roemersma.

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Key Points & Recommendations

- From the early days of cannabis prohibition, traditional cannabis producing countries have stressed the importance of finding alternative income opportunities for poor rural communities dependent on cannabis cultivation.
- In contrast to projects for illicit coca and poppy cultivation, almost nowhere have small cannabis farmers been offered substantial development assistance for moving out of the illegal market; efforts in the past in Morocco and Lebanon did not have a lasting impact on cannabis cultivation.
- The impact of free trade policies and related price crashes of agricultural commodities like coffee, cocoa and banana, turned the illegal cannabis market into a survival economy for millions of people.
- ‘Alternative development’ in its original sense of shifting to other lucrative crops and income sources is no longer a viable policy perspective for cannabis, if it ever was.
- The recent wave of policy changes and fast-growing legal spaces in the medical cannabis market offer new opportunities for small farmers to transition out of illegality.
- Barriers to entry are not easy to overcome and few small farmers have been able thus far to conquer some space in the billion-dollar medicinal cannabis market.
- Several traditional producing countries have recently started to explore the option of ‘alternative development *with* cannabis’: Jamaica, St Vincent and the Grenadines, Colombia, Paraguay, Mexico, Ghana, South Africa, Lesotho, eSwatini, Morocco, Lebanon and Thailand.
- The medical market can be divided into four segments with very distinct characteristics and regulatory frameworks: (1) pharmaceutical preparations made from purified cannabinoids; (2) cannabis flower or whole-plant extracts as prescription medicines; (3) cannabis as part of traditional herbal medicines practices; and (4) low-THC / CBD products often sold as health products or dietary supplements.
- The multi-billion dollar global CBD market seems to offer particularly promising prospects for small farmers in traditional producing countries, even though they will have to compete with the highly industrialised and fast-growing hemp industry in Europe, North America and China.
- The INCB (International Narcotics Control Board) – and to a lesser extent the WHO Expert Committee on Drug Dependence – has demonstrated a strong bias in favour of strictly controlled preparations manufactured by the pharmaceutical industry from isolated cannabinoids, rather than herbal cannabis-based medicines and a more accessible model for patients and farmers.
- ‘For many millions of people, herbal medicines, traditional treatments, and traditional practitioners are the main source of health care, and sometimes the only source of care’,

according to the WHO; and that is also the case for medicinal uses of cannabis.

- The emerging legal markets are increasingly captured by big corporations, due to the dominance of a 'Western' pharmaceutical model for the medical market and an 'import-substitution' model for the non-medical market, both pushing out small farmers from traditional producing countries.
- Most companies producing medical cannabis prefer intensive indoor cultivation over collaborating with small farmers currently growing cannabis illicitly, often using strains and cultivation methods that require technical advice and training in order to meet GMP (Good Manufacturing Practise) or GACP (Good Manufacturing and Collection Practise) standards.
- Many plant-based medicines originate from outdoor cultivation by small farmers - including the licit opium poppy cultivation in India and Turkey for the production of opiate medicines - belying the narrative that basic quality standards could not be met by small farmers in the case of cannabis.
- Indoor cultivation also comes with a much higher carbon footprint, given the high energy use and greenhouse gas emissions that follow from continuous indoor lighting and advanced climate control systems, yet another reason to consider changing current cannabis market dynamics.
- Instead of putting all the eggs in the basket of an export-led growth model, countries should pursue a strategy in which as many markets as possible are targeted: foreign as well as domestic; industrial, medicinal and nutraceutical; and - where allowed - also social, religious, cultural and adult uses.
- Countries introducing legal regulation of the cannabis market should cautiously consider the terms under which foreign businesses can participate, at least until a local industry - including small growers - has been able to establish itself; this may require imposing certain restrictions on foreign ownership and investment.
- Legislators and regulatory authorities need to establish special preferential access schemes, such as subsidies, affirmative licensing laws, quotas requiring that a certain percentage of cannabis is sourced from small farmers, and perhaps benefits to companies choosing to comply with principles of social justice and sustainable development.
- Given the barriers to entering a competitive market for the mostly poorly organised and often criminalised traditional farmers, a cooperative form of production would be most beneficial and most empowering for cannabis growing communities.
- The development of a national or regional vision based on inclusive and consultative processes with cannabis farmers, health practitioners, patient groups, legal experts, scientists and other constituencies is critical to set the right framework in place.

- In a positive sign that countries are cautiously reclaiming their long history with cannabis, Morocco, South Africa, India, Nepal, Thailand, Jamaica, Colombia and Mexico in December 2020 all voted in favour of the WHO recommendation to remove cannabis from the strictest Schedule IV of the Single Convention; without their vote the recommendation would not have passed the CND (Commission on Narcotic Drugs) majority vote.
- The fact that even after the WHO review, cannabis still remains in Schedule I means that medical prescription is still obligatory which is an obstacle for traditional medicinal practices, and that cultural and religious uses are still not allowed under the treaty which represents a legal conflict with indigenous, cultural and religious rights.
- Any cannabis policy reform needs to be accompanied by the expungement of criminal records and other measures related to restorative justice for those disproportionately impacted by the War on Drugs, especially indigenous peoples and racial minorities.
- Connecting the dots between the cannabis regulation debate and the sustainable development agenda may still offer prospects for upholding the SDG (Sustainable Development Goals) promise to 'leave no-one behind'.
- Traditional growers need technical, financial and legal assistance to overcome the multiple barriers they face to get access to legally regulated markets; development agencies should actively and urgently provide such assistance before markets will be captured by big corporations.
- Benchmarking best practices and learning from experiences to lessen the barriers to entry for small farmers while raising them for large companies can help to steer cannabis markets in a more sustainable and equitable direction by attracting responsible investors and lining up suitable buyers and market outlets based on principles of community empowerment, the protection of natural heritage, and fair(er) trade.
- The legacies of colonialism and the particular burden that repressive responses to the illicit cannabis market have placed on countries in the 'Global South', need to be taken into account when considering a 'development *with* cannabis' model; it will require an updating of our notions of development and North-South cooperation, based on principles of social justice, fair trade and sustainability.
- Lessons from other markets indicate that private sector-driven development through 'inclusive business' models based on global value chains, or voluntary sustainability certification mechanisms, are unlikely to make the cannabis market more sustainable; in the end, legislative and regulatory rules are essential to enforce the basic parameters removing barriers to entry, providing preferential access and compensation, and imposing restrictions to free-market dynamics and corporate capture.



Cannabis grower, St. Vincent and the Grenadines, Sylvia Kay, november 2019



1. Cannabis Traditions & Subsistence

1.1 Brief history of traditional cannabis cultures

The human interaction with the many aspects of the cannabis plant evolved on the steppes of Central Asia from 12,000 BCE onwards, during the retreat of the last glacial age.^{1,2} Cannabis is among the oldest cultivated crops. Although there is disagreement on its taxonomic classifications, originally the two main species are *Cannabis sativa* (mainly non-psychoactive) and *Cannabis indica* (psychoactive).³ Since the 1970s, however, the distinction has become increasingly irrelevant because of extensive cross-breeding into new hybrid strains in the quest for ideal properties for recreational use. The fibre-type *Cannabis sativa* grew between about 35° and 60° latitude, north and south of the Equator. Until the 1840s, this was the sole type in Europe, also known as European hemp, and it was widely planted in European colonies, but low-latitude plantings failed for ecological reasons. *Cannabis indica*, also known as Indian hemp,⁴ grew mainly below 35° latitude. By 2000 BCE, its use for psychoactive properties arose in the border areas of what are now Afghanistan, Pakistan and Tajikistan and has since been produced in low latitudes worldwide.⁵

The cannabis plant might have been used principally for its fibres, but the seeds were also used for food, and due to the sticky nature of the psychoactive resin, humans probably soon discovered the intoxicating effect of the plant. From the steppes of Central Asia – possibly in the Pamir plain in present-day Tajikistan, bordering Afghanistan, Kyrgyzstan, and Uighur Xinjiang in Western China⁶ – the plant was soon incorporated in China. The Chinese used hemp widely for rope, clothing, sails, and bowstrings. Paintings of the plant were found on pottery dating to 6,200 BCE. Apart from its fibres, cannabis seeds are nutritious, and its psychoactive properties gradually became important for shamans and in religious practices, as well as for ordinary people to escape the monotony of

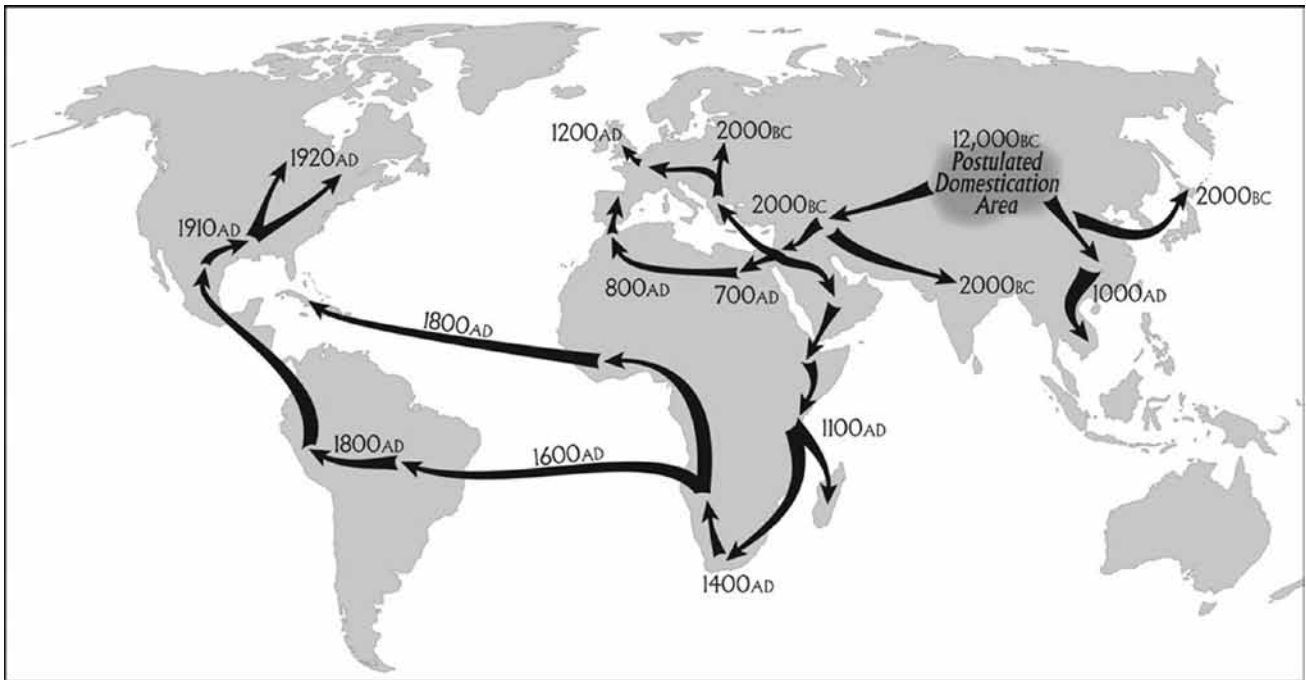


Figure 1. Historical dispersal of cannabis (Barney Warf, Geographical Review 2014)⁷

everyday life. The first documented evidence of medicinal cannabis in China dates back to 4,000 BCE.⁸

From the Central Asian steppes cannabis travelled across the world, as described by Barney Warf’s historical geography (see Figure 1). This journey can be roughly divided into two main phases: a *pre-modern phase* and a subsequent *colonial capitalist phase*.⁹ The pre-modern phase was slow, extending over a period of thousands of years, in which the plant migrated along ancient trade routes like the Silk Roads in addition to various conquests and invasions and also peaceful migrations. By the mediaeval period, cannabis was well established in the Muslim world, from Morocco to Egypt and the Eastern Mediterranean Levant, as well as on the east coast of Africa around 1000 ADE through Hindi, Farsi, or Arabic-speaking traders at trade hubs such as Zanzibar and the Island of Mozambique. From there it moved up the Zambezi river basin and down the Congo River to the west coast of southern Africa.

The plant had also reached Europe where hemp fibre was used to produce rope, canvas sailcloth and caulking (hemp soaked in tar to fill the seams between the planks of a wooden hull in order to make ships watertight). Such

technologies enabled European powers in the colonial capitalist phase to build their empires, leading to an encounter with the psychoactive and medicinal properties of the plant that were much better known in those (sub)tropical regions. The plant had reached the Indian subcontinent between 2000 and 1000 BCE, possibly the most significant development for its medicinal and recreational use due to a long and continuing tradition of psychoactive cannabis cultivation, often with medicinal and religious elements. By contrast, in China, with the ascendancy of Confucianism as the state ideology, the use of psychoactive cannabis gradually declined. *Ganja*, as cannabis was known in India, was also available in the form *bhanga* (an edible preparation used in food and drink, as a mild paste or tea mixed with milk), or *charas* (cannabis resin, known as *hashish*). Cannabis (mixed with other herbs) was also much used in Ayurvedic medicinal traditions.

Mindful of the substantial profits from the opium trade, from 1793 to the 1850s the British East India Company gained substantial revenues from taxing cannabis, granting licenses to retailers and wholesalers. To counter peasants’ attempts to avoid taxation, supervisors were employed and, as a result, the colonial taxation of cannabis



was increasingly associated with illegality. 'Once a product becomes the subject of a state levy, and once the traditional producers and suppliers of that article act to protect their profits by evading that levy, that product and those traders become suspicious to administrators seeking to maximize the state's revenues', according to the historian James Mills,¹⁰ who argues that these considerations of imperial control probably contributed to the association of cannabis with illegality and criminality.

After an exhaustive study in 1894–1895, the Indian Hemp Drugs Commission proposed to maintain the tax system. The Commission was convened less because of any major concerns in India itself, but rather because a question was raised in the British House of Commons by temperance crusaders. They were concerned about the effects of the production and consumption of hemp and claimed that the 'lunatic asylums of India are filled with ganja smokers'.^{11,12} The Commission looked into earlier proposals in India to prohibit cannabis in 1798, 1872 and 1892, and concluded that these had always been rejected on the grounds that the plant grew

wild almost everywhere and attempts to stop consumption in various forms could trigger social tensions and drive the local population into using more harmful intoxicants, such as alcohol.

The report concluded: 'In respect to the alleged mental effects of the drugs, the Commission have come to the conclusion that the moderate use of hemp drugs produces no injurious effects on the mind. [...] As a rule these drugs do not tend to crime and violence'. The report also noted 'that moderate use of these drugs is the rule, and that the excessive use is comparatively exceptional. The moderate use produces practically no ill effects'. Although that might have been the most sensible solution, ulterior motives such as tax revenue were influential. Two Indian members of the Commission dissented from the majority of mostly British administrators, claiming significant harm to health, although on the basis of unreliable and incomplete evidence about the correlation between mental illness and cannabis use.

In the nineteenth century, Indian contract labourers brought the culture of recreational use to labour-short islands in the Caribbean. Indentured Indian workers brought ganja with them to Barbados and Jamaica after the abolition of slavery in 1834, where it was tolerated provided that sugar production did not suffer. The crop subsequently spread to the islands' black residents. As late as 1907, company stores in Jamaica and Trinidad openly and legally sold cannabis.¹³ In 1913, however, ganja in Jamaica was declared illegal. Indian contract labourers also brought their cannabis culture to Natal (South Africa), which led to the first controls in sub-Saharan Africa (SSA) prohibiting the growing, possession and use of cannabis by Indian labourers.

The colonial capitalist encounter also led to the further dispersal of cannabis in the Americas. The Spanish introduced cannabis into Colombia in the seventeenth century for the ships' rigging. Portuguese sailors and enslaved Africans in the sixteenth century introduced cannabis into what is now Brazil,

where it was known as *fumo de Angola* (Angolan smoke) or *diamba*, *liamba*, *riamba* and *maconha*, all derived from Ambundo, Kimbundu and other languages in present-day Angola and Congo.¹⁴ Central African names for cannabis were also used in Colombia, Jamaica, and Panama and the Spanish term *marihuana* apparently derives from the Kimbundu plural *marimba*.¹⁵ In Brazil it was used by enslaved sugarcane workers and allowed to be grown amid the sugarcane fields in the northeast, from where it spread to fishing villages and long-shore workers.¹⁶

In Angola, the Portuguese colonial rulers introduced one of the first prohibitions of cannabis; its use by the enslaved was ‘considered a crime’, the explorer David Livingstone observed in 1857, noting that ‘this pernicious weed is extensively used in all the tribes of the interior’ (which would roughly cover today’s Zambia).¹⁷ Another explorer noted in 1875 that although the Portuguese prohibited enslaved Africans from using it, *diamba* was sold widely at the market in Luanda (Angola) and was grown round village huts nearly everywhere in the country.^{18,19} The

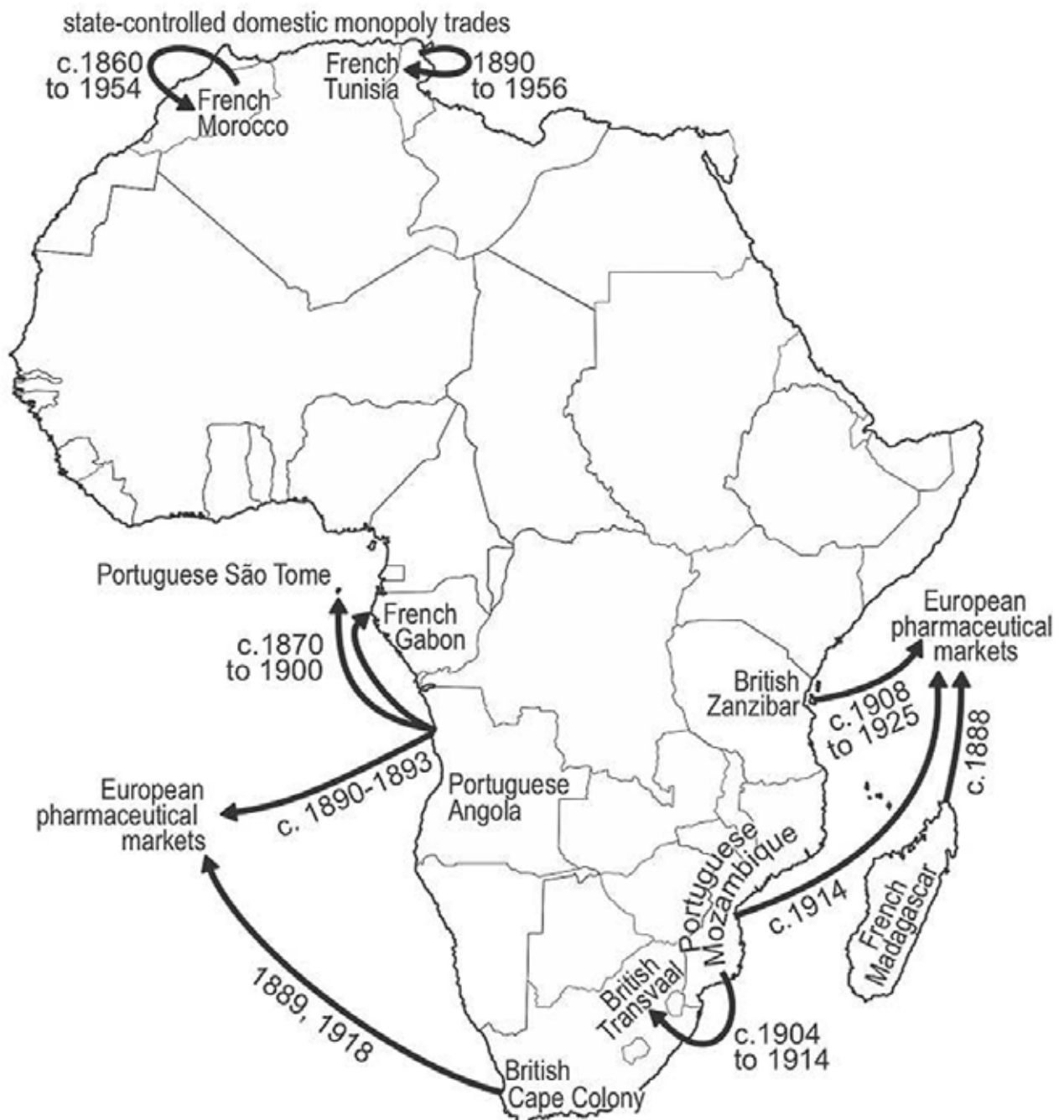


Figure 2. Taxed, legal cannabis trades under colonial governments (Chris Duvall, 2019)²⁰

lives of some peoples in the Congo centred on cannabis, which was cultivated, smoked regularly in a *riamba* (a huge calabash more than a metre in diameter) and venerated.²¹

In the Americas, cannabis was first prohibited in Brazil when the Rio de Janeiro municipal council issued a directive in 1830 that forbade the sale or use of *pito de pango* (cannabis, commonly smoked in a kind of water pipe) as well as its presence in any public premises. Anyone who sold *pango* was liable to a fine of 20 milreis (about US\$40 at the 1830 exchange rate), and any enslaved or other person who used *pango* could be sentenced to up to three days in prison. Other municipal councils followed suit: Caxias in 1846, São Luís in 1866, Santos in 1870, and Campinas in 1876. An 1886 directive in São Luís, capital of the northern state of Maranhão, prohibited the sale, public exhibition and smoking of cannabis. Slaves violating the law could be jailed for four days.²²



Cannabis sativa, Prof. Dr. Otto Wilhelm Thomé, Flora von Deutschland, Österreich und der Schweiz, 1885.

With the final stage of the colonisation of the African continent from the 1870s to the 1890s, the European colonial powers pushed for revenue from their territories, by taxing pre-existing markets, similar to the case in India. Most of these markets were short-lived, except for the more lucrative monopolies in Morocco and Tunisia, which persisted into the 1950s. In Morocco, local administrations collected taxes on the sale of tobacco and *kif*, which were transferred to the sultan and the *Makhzen*, which held the monopoly.²³ At the end of the nineteenth century, 90% of the French demand for pharmaceutical cannabis products – not prohibited at the time – was met by imports from Morocco.²⁴

French colonial policy was similarly motivated by extracting revenue. In 1899, based on its *Régie Indochinoise de l'Opium*, a monopoly controlling the import and marketing of opium in its Asian colonies, France created the *Régie des Tabacs et du Kif*, a multinational company formed with French capital, based in Tangiers. At the 1906 Algeciras conference, France obtained the monopoly of the *Régie*.²⁵ French colonial policy allowed the cultivation of cannabis for Morocco's domestic market because it was profitable, developing it for the recreational use of *kif* by local populations. As in Indochina, the monopoly charged extortionate prices, and the revenues from the sale of *kif* and tobacco generated the highest revenue of France's colonial budgets after import duties.²⁶

Short-lived monopolies also developed in Portuguese Angola and Mozambique, French Madagascar, British Cape Colony and Transvaal (South Africa) and British Zanzibar. From these colonies, European businesses tried to export cannabis for their own domestic pharmaceutical markets, but did not build on local capacity. Other export crops, however, including mild intoxicants such as tobacco, coffee, and tea, were more profitable, while the Europeans regarded cannabis as harming 'native health' and diminishing the availability and quality of labour.^{27,28} This stigmatisation of cannabis pushed it underground and most African colonial

governments banned it even before it was listed in the 1925 Opium Convention, which set in motion ever stricter legal prohibition. In French Congo, for instance, cannabis moved from open to hidden cultivation between 1880 and 1925. In South Africa, cannabis growing was increasingly concealed after 1850 and nearly invisible by 1900.²⁹

1.2 Impact of cannabis prohibition

Between 1840 and 1900, European and US medical journals published more than 100 articles on the therapeutic use of cannabis, recommending it as an appetite stimulant, muscle relaxant, analgesic, hypnotic and anticonvulsant.³⁰ In 1890, one of the physicians at Queen Victoria's court, wrote in *The Lancet* that 'Indian hemp, when pure and administered carefully, is one of the most valuable medicines we possess'.³¹ Its use in Western medicine started to decline in the early twentieth century, and for the US 'the final blow was struck by the Marihuana Tax Act of 1937. Designed to prevent nonmedical use, this law made cannabis so difficult to obtain for medical purposes that it was removed from the pharmacopeia'.³² The 1961 Single Convention basically did the same for the rest of the world.

Negotiating the draft of the Single Convention, the US was adamant that Asian therapeutic traditions should be dismissed as 'quasi-medical uses'. This provoked a fierce rebuke from the newly independent Government of India, which 'emphasized that Indigenous systems of medicine such as the Ayurvedic and Unani systems which had been in existence in India on an organized basis for hundreds of years, and on which large sections of the population continue to depend for medical treatment, were just as much entitled to be called medical, and not quasi-medical, as the allopathic and homeopathic systems were. They did not become quasi-medical merely because they were not Western systems'.³³

In the midst of post-war reconstruction and independence movements, negotiations started in the 1950s to strengthen the

international regime by creating a new 'Single Convention' under the auspices of the United Nations, replacing the earlier treaties. The British, Dutch and French colonial powers, which had previously resisted the imposition of stricter prohibition, had lost control of their profitable legal monopolies over opium, coca and cannabis production in their former colonies such as Burma, India, Indonesia and Morocco. The newly independent states were less successful than their former colonial rulers in resisting US pressure to establish a global drug-prohibition regime; the balance of power had shifted. After difficult negotiations, the Single Convention obliged countries to extend national control to the cultivation of opium poppy, coca and cannabis, to impose criminal sanctions on illicit cultivation, and to ban all traditional uses.³⁴

All traditional uses of cannabis and coca had to be abolished within 25 years, the 'quasi-medical' uses of opium within 15 years. Controversially, cannabis ('the flowering or fruiting tops of the cannabis plant') and cannabis resin were listed under its Schedules I and IV, the latter reserved for substances with 'particularly dangerous properties' and little or no recognised therapeutic value. This stringent classification was made without a proper assessment by the World Health Organization (WHO), the UN specialised agency mandated by the Convention to recommend on the scheduling of substances.³⁵ According to Adolphe Lande, who played a key role in the design of the UN drug-control treaty system and who wrote the commentaries to both the 1961 and 1971 conventions, cannabis 'is defined as one of the 'narcotic' agricultural products whose control undoubtedly represents the weakest point of the international regime'.³⁶

As Neil Boister wrote in his handbook, *Penal aspects of the UN drug conventions*, the 1961 Single Convention 'embodies the general strategy of the developed drug consumer states to curtail and eventually eliminate the cultivation of drug producing plants, objectives that could only be achieved at some cost to the developing countries where these plants were grown'.³⁷ In the case of

opium, legal regimes for medical and non-medical uses persisted until the mid-1970s before being completely abolished in countries such as Burma, Iran and Pakistan, or brought under a strictly state-controlled regime for medicinal purposes only. In India and Turkey, the transformation was done in such a way that many small farmers were allowed to continue cultivating with a state license. In the case of coca, the significant international demand for medical cocaine that had existed until the early twentieth century had all but disappeared, but a legal framework was established in Bolivia and Peru to sustain the supply of coca leaf for the traditional domestic market and for export as a flavouring agent in the production of Coca Cola. Abolishing the widespread traditional cultural and ceremonial uses in the Andean region proved impossible, a reality that Bolivia, Colombia and Peru have tried to justify under the 1961 and/or 1988 Convention by means of reservations.

In the case of cannabis, however, given the particularly strict classification and prohibition under the Single Convention, no new legal regime was established. What was

left of the already dwindling global medical market collapsed, and under significant pressure traditional practices either disappeared or survived underground in places where law enforcement was more tolerant of local cultures. The surviving pockets of illicit cultivation in traditional cannabis-producing countries became major sources of production and export for the global illicit cannabis market when consumption started to explode in Europe and North America at the end of the 1960s.

1.3 The extent of the current cannabis subsistence economy

It is impossible to estimate how many small-scale farmers still depend on illicit cannabis cultivation. Rough calculations of global cannabis cultivation made by the United Nations Office on Drugs and Crime (UNODC) have produced vastly different ranges. An initial attempt in 1999, estimated that the 'total global areas where cannabis plant is cultivated and/or grows wild may range from 670,000 ha to 1,800,000 ha'.³⁸ In 2004, the

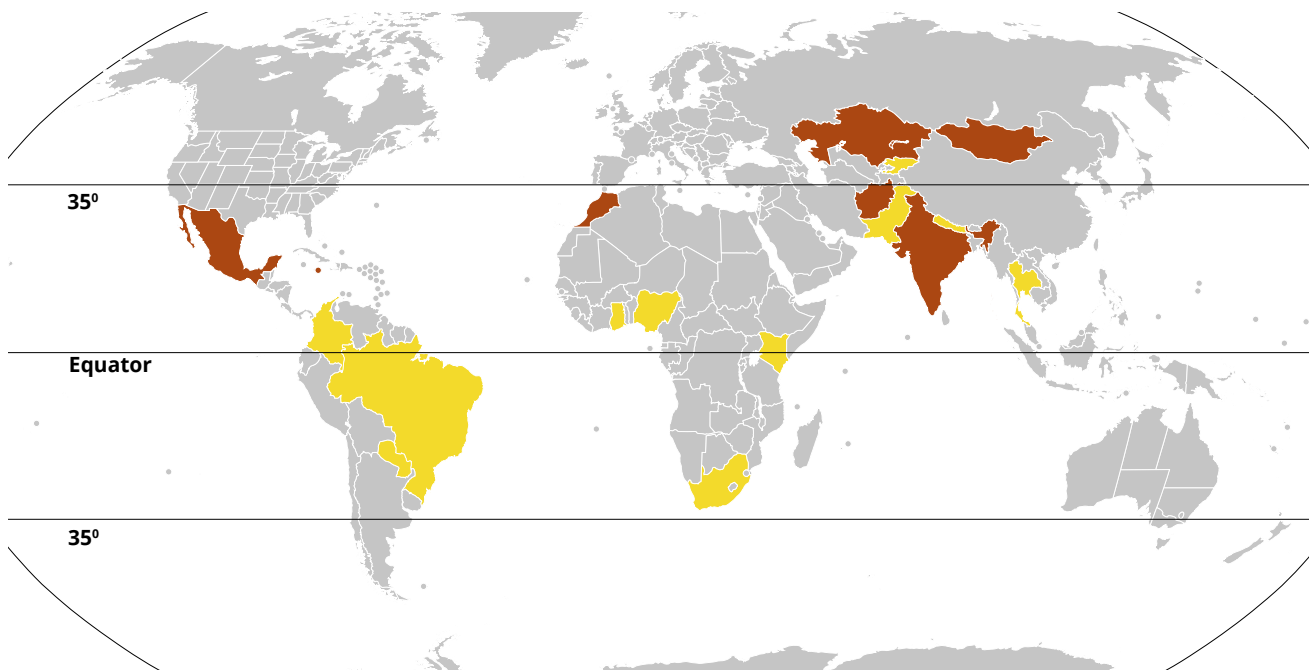


Figure 3 Map: Major traditional producer countries.³⁹

■ < 10,000 hectares ■ > 10,000 hectares

Notes: Significant producer countries with less than 10,000 ha: Brazil, Colombia, Ghana, Kenya, Kyrgyzstan, Lebanon, Lesotho, Nepal, Nigeria, Pakistan, Paraguay, St. Vincent and the Grenadines, South Africa, eSwatini (Swaziland), Thailand.

Producer countries with more than 10,000 ha: Afghanistan, India, Jamaica, Kazakhstan, Mongolia, Morocco, and Mexico.

General Assembly requested UNODC to prepare a global market survey of cannabis,⁴⁰ leading to a special issue of the *Bulletin on Narcotics* and a summary in the 2006 World Drug Report. The preliminary analysis ‘suggests that the bulk of global cannabis production occurs in an area of about 231,000 hectares, of which more than half are in Morocco’,⁴¹ no doubt influenced by the fact that Morocco was the only country where UNODC had done a crop survey. The publication spells out the many methodological difficulties in producing reliable estimates, including the lack of basic data. The Annual Reports Questionnaire (ARQ), for example, asks Member States to estimate the number of hectares (ha) under cannabis cultivation, but ‘most respondents do not fill out this section’. ‘In fairness’, according to UNODC, ‘most States would have little knowledge of how to make such an estimate. Given that most consumption is domestic and many societies do not regard cannabis as particularly problematic, most would have little incentive to invest much time in making such a calculation.’⁴² A few years later, the 2009 *World Drug Report* mentioned a range of 200,000–641,800 ha, based on global production estimates of cannabis herb in the range of 13,300–66,100 tonnes and of cannabis resin from 2,200–9,900 tonnes.⁴³ Since then, UNODC has avoided global production estimates and merely points out the high levels of uncertainty as cannabis can be grown – indoors or outdoors – in almost every country in the world, and provides only selected examples of cultivation estimates and data on eradication and seizures to illustrate the magnitude of the market.

Since 2000, UNODC has published annual crop-monitoring surveys for opium poppy and coca.⁴⁴ Cannabis crop surveys, however, were undertaken only in the period 2003–2005 for Morocco, and 2009–2012 for Afghanistan. In 2003, the Moroccan survey estimated that 134,000 ha of cannabis were cultivated in the northern Rif region by some 96,600 households, with the following year showing a 10% decline to 120,500 ha.⁴⁵ In 2005, cultivation had declined further to 72,500

ha, involving about 90,000 households.⁴⁶ Other observers have estimated the number of Moroccan households depending on kif and hashish production at around 140,000, representing more than a million people.⁴⁷ For Afghanistan, UNODC’s latest cannabis survey estimated a range of 8,000–17,000 ha involving some 65,000 households.⁴⁸

Other significant traditional supply sources for international markets, apart from Morocco and Afghanistan, include Albania, Cambodia, Colombia, Jamaica, Kazakhstan, Lebanon, Mexico, Nepal, Nigeria, Pakistan, Paraguay, South Africa, St Vincent and the Grenadines, and Thailand, but there are hardly any reliable data about the extent of cultivation or volumes of export. Kazakhstan, one of the alleged birthplaces of cannabis more than 10,000 years ago – where there is still a vibrant local cannabis culture, including the use of fibre in textiles and traditional medicinal and social uses – is a rarely reported example. In 2014, government authorities estimated the amount of wild and cultivated cannabis in the Chui valley, the country’s main production area, at 140,000 ha.⁴⁹ Up to two-thirds of the valley’s inhabitants may be involved in the cannabis trade for local uses and export to the rest of Central Asia and Russia.

The number of farming households in Afghanistan and Morocco, combined with the unknowns of other major producing countries in Africa, Latin America and the Caribbean, and Asia, and the many day labourers required for cultivation and harvesting, make clear that illicit cannabis cultivation provides an essential subsistence economy for many millions of small farmers and rural workers around the world. The expansion of domestic production in North American and European markets (including indoor cultivation and home growing for personal use) has replaced a significant part of the imports from the traditional producing countries. Despite this decline in the reliance on imported cannabis, there are still important development considerations to address in policies on cannabis.



2. Cannabis and Alternative Development

2.1 From Technical Assistance to Alternative Development

In the early 1990s, the United Nations Drugs Control Programme (UNDCP) concluded that cannabis cultivation was not appropriate for alternative development projects. *'Its elimination is largely a matter of law enforcement'*, a UNDCP technical information paper said,¹ *'and does not justify, aside from exceptional cases, assistance in the form of investments in crop substitution or rural development'*. The prospect of effective measures against cannabis cultivation had always been limited, according to the paper, *'because of the dispersed nature of the cultivation, which occurs in a wild state in many countries. Furthermore, the perception by public opinion and by governments of the threat posed by cannabis has been relatively weak'*.

Nevertheless, in the early stage of negotiations leading to the 1961 Single Convention, offering economically viable alternatives and technical assistance in the form of crop substitution was seen as the logical step to limit drug production at the source, which was considered to be the most effective way to control drug-bearing crops.² Cannabis was certainly seen as a possible candidate. The issue of crop substitution gained prominence in the agenda of the Commission on Narcotic Drugs (CND), the annual UN gathering of national and international drug-control officials, when Iran decided to restrict poppy cultivation to certain provinces following the adoption of the 1953 Opium Protocol.³ From 1956 onwards, the issue of 'technical assistance in the field of narcotics control' – or since 1962, 'technical co-operation in narcotics control' – would be a regular item on the CND agenda.

At the time, the CND did not have its own specialised UN agency, and depended on existing ones, such as the World Health Organization (WHO) and the Food and

Agriculture Organization (FAO) to implement programmes. At the higher level, technical assistance was managed by the Extended Programme of Technical Assistance (EPTA) for economic development of underdeveloped countries, established in 1949, to comply with Article 55 of the 1945 UN Charter to work for *'higher standards of living, full employment and conditions of economic and social progress and development'*.⁴ In 1958 the UN Special Fund (SF) was established in order to enlarge the scope of its programme of technical assistance.⁵ In 1966, EPTA and the SF were merged to form the United Nations Development Programme (UNDP), but were maintained as two separate funds by UNDP until 1970.

At the 1956 session of the CND, Iran proposed a resolution on 'technical assistance' that recognised that the effort required *'increased technical assistance in enabling its cultivators to introduce other agricultural crops to replace opium poppy plantation'*, which could not be accomplished *'without international co-operation'*. The Iranian resolution was adopted, as was another resolution, sponsored by Canada and the US, to limit assistance in the field of narcotics control to *'advisory services of experts, fellowships, seminars, and laboratory services in connexion with the determination of the origin of narcotics found in the illicit traffic'*.⁶

Although at that time the issue of opium was deemed more urgent, cannabis soon followed when in 1957 Morocco, which had gained independence from French and Spanish rule the year before (though Spain retains control over the enclaves Ceuta and Melilla, and the status of the Western Sahara remains unresolved), also took up the issue of technical assistance regarding cannabis cultivation. The country had adhered to the existing drug-control regime and cannabis prohibition was extended from the former French (since 1954) to include the former Spanish zone where most of the once licit cultivation took place. The Moroccan government drew the attention of the CND to the importance of *'finding alternate crops for cannabis'*, for which it required *'technical assistance in the form of agronomists*

specializing in crop substitution'.⁷ The problem, according to the Moroccan representative, *'was that thousands of people had for years been living on the cultivation of kif, and it was their main source of livelihood'*.⁸

At the 1959 CND session, there was special reference to the problem of the prohibition of cannabis in areas of North Africa and the Indian sub-continent, in which it still is, or until recently was, allowed. Those countries, it was noted, generally have *'not sufficient resources of their own to cope fully with the difficulties which arise from their policy of prohibition and would consequently need considerable outside aid'*. Although at the same session considerable scepticism was voiced about the appropriateness of technical assistance, once again the magical formula was applied: *'Technical assistance was in particular needed for the introduction of substitute crops and for the solution of the medical aspects of the problem of cannabis "addiction"'*.⁹

The observer for Morocco informed the Commission that cultivation of cannabis, or *kif*, had already been reduced by almost half and the Ministry of Agriculture was experimenting with substitute crops.¹⁰ The year before, Morocco had announced preparatory steps to request technical assistance. The Ministry of Agriculture had embarked on a thorough survey of cannabis cultivation in the rather inaccessible northern part of Morocco, the Rif, with the intention that when the survey had been completed, assistance of FAO experts would be requested to convert the land under cannabis cultivation to other crops.¹¹

The Moroccan government decided to move ahead; growers were compensated (US\$ 0.40 per pound)¹² for the cannabis they surrendered, and in 1960 nearly 50 tons were purchased and destroyed under this programme.¹³ Employment had to be found for approximately 15,000 growers. In Ketama, the Ministry of Agriculture distributed seeds and fertilisers to assist farmers to switch from *kif* cultivation to other crops. One of the

schemes was to convert cannabis fields to tobacco cultivation,¹⁴ which made sense as the monopoly that used to buy the licit cannabis in the recent past, the *Régie des kifs et tabac*, also had the monopoly on tobacco trading in the country.

The FAO undertook a survey of the Rif region ‘to facilitate the replacement of the former “kif” (cannabis) cultivation in the region as part of the general re-development of agriculture and of re-afforestation’.¹⁵ In 1961, the UN and the FAO initiated a rural development programme, *Développement Economique et Rural du Rif Occidental* (DERRO), which, although not specifically aimed at cannabis cultivation, which the FAO was reluctant to do directly, was intended to develop the area and counter deforestation, erosion and migration.¹⁶ In 1962, a significant increase in the quantities of cannabis seized in Morocco was reported, almost double the 1961 figure. In addition, some 400,000 cannabis plants had been destroyed. Apart from the quantities involved, the situation had undergone no particular change. Clandestine cultivation in the north still continued despite repressive government measures.¹⁷

Financial assistance for crop substitution for drug-bearing crops was not really forthcoming, however, even for opium, considered to be more urgent. In Iran, an increased influx of illicit opium from Afghanistan and Turkey, and a drain on Iran’s gold reserves, ‘were creating a critical situation; and unless more positive assistance could be provided by the United Nations, the Iranian Government might be obliged to revert to opium cultivation and to re-establish an opium monopoly’,¹⁸ which effectively happened in 1969.¹⁹ The issue in Morocco gradually faded from the debate at the CND and attention shifted to Lebanon, another major producer of cannabis and main supplier of the substantial market in Egypt. Lebanon was using ‘preventive and punitive measures to remedy the situation, and in particular it was endeavouring to promote new crops.’²⁰ In 1963, growers in the cannabis-producing regions had been authorised to plant tobacco, which was bought

by the government. Furthermore, ‘prospecting was in progress to discover land suitable for cultivating sunflower and industrial cannabis’.²¹

The sunflower project (the ‘Green Plan’) to replace cannabis cultivation in the Baalbek/Hermel district, initially had some impact. The provision of seeds, fertilisers and the purchase of the sunflower crop at encouraging prices led to a considerable drop in cannabis production. But a few years later, the government was unable to provide the inputs, and the highly bureaucratic administrative procedures delayed payment for the harvest. Consequently, farmers went back to cultivating cannabis.²² At the CND in 1973, the representative of Lebanon, reviewing the measures taken since 1966 to eliminate the production of cannabis resin in the country, ‘said that although those measures had been strenuously pursued and had entailed heavy expenditure, they had proved inadequate’.²³

It was increasingly clear that the UN’s efforts in the crop-substitution field were, at best, modest. What was said in a report for the 1967 CND, prepared by the Secretariat and based on information gathered by a member of the Division of Narcotic Drugs on the role of crop substitution in the Lebanese sunflower operation in cannabis-growing areas might equally be said of its role in general, that its assistance is ‘by expert advice, by liaison or co-ordination, but most important, by creating the international atmosphere in which other forms of assistance might begin to flow’.²⁴ While the sunflower project was supported by US development aid, the outbreak of the civil war in Lebanon (1975–1990) sealed its fate. Cannabis cultivation increased substantially while opium was also introduced.

In the following years, both Lebanon and Morocco, among the most important producers of hashish for export over the previous 50 years, were involved in crop-substitution projects. None of these projects had a substantial and lasting impact on cannabis cultivation.²⁵ The subsidy paid to cannabis farmers in Lebanon to make cannabis less profitable than sunflower



Cannabis cultivation, Donar Azila, Pien Metaal, 2009

initially worked, but also resulted in a rise in the price for illicit hashish, *‘there was a risk – if the Lebanese government were to keep on increasing the sunflower subsidies – of entering into a “race with the traffickers”’. This would involve Lebanon in staggering costs, even if there was the remotest chance of its winning the race’*.²⁶

Since 2003, Morocco has received at least €28 million from the European Union (EU) to eradicate the cultivation of cannabis. In addition, the US donated \$43 million between 2005 and 2012 to help farmers find new crops to replace cannabis.²⁷ According to Khalid Benomar, former head of strategy and planning of the Agency for the Promotion and Development of the North (APDN), *‘Everything the Agency did in terms of reconversion [crop substitution] was doomed to fail, because there was not a favourable development environment, especially the inadequacy of basic infrastructure’*.²⁸ The APDN promoted cooperatives to develop new income-generating activities, along with complementary activities such as beekeeping, sheep or goat breeding, or arboriculture. *‘There have been successful experiences, but we have seen many constraints, including resistance from the people who boycotted training and collaboration’*, Benomar explains. Successful

crops such as olives need at least 10 years to become profitable, while the cannabis cycle is at most five months. The sheep and goat breeding projects were unsuccessful.

2.2 Cannabis and Alternative Development: the shared responsibility

The Permanent Central Narcotics Board (predecessor of the INCB) had pointed out in 1968, that *‘the only means of ultimately eliminating illicit traffic in opium, coca leaves and cannabis would be to launch a campaign of socio-economic reform on a world-wide scale in the areas concerned, and to replace the opium, coca leaves and cannabis by other crops. Such an undertaking would require extensive international cooperation and enormous financial and administrative resources, and might at first appear impracticable’*.²⁹ In the case of cannabis, however, the challenges were both financial and political.

‘Ironically enough’, according to the Board’s President, Sir Harry Greenfield, *‘at a time when countries such as India, with centuries of experience of cannabis, are progressively*

eliminating consumption, libertarians in industrially advanced countries are arguing that it is no worse than alcohol, that its consumption is not dangerous, or that it is, at any rate, not sufficiently dangerous to justify prohibition'.³⁰ That year—shortly after the ‘Summer of Love’—an ECOSOC resolution indeed noted ‘that considerable publicity has been given to unauthoritative statements minimizing the harmful effects of cannabis and advocating that its use be permitted for non-medical purposes’ and recommended that governments should ‘effectively deal with publicity which advocates legalization or tolerance of the non-medical use of cannabis as a harmless drug’.³¹

‘Cannabis’, Greenfield correctly predicted, ‘is a subject of neverending debate: it has been so for several years now, and it seems likely to continue so for a number of years more’.³² Indeed, the debate went on, and 30 years later the issue returned in full force after the 1998 UNGASS had set the 10-year target of ‘eliminating or reducing significantly the illicit cultivation of

the coca bush, the cannabis plant and the opium poppy’ by 2008, and – in order to accomplish that ambitious goal – had adopted the *Action Plan on International Cooperation on the Eradication of Illicit Drug Crops and on Alternative Development*. The 1998 Political Declaration furthermore enshrined the principles of a *balanced approach* [between supply and demand reduction] and *shared responsibility* [between importing and producing countries]: ‘The universal recognition that both consumer and drug producing countries share the same amount of responsibility has since then been confirmed by countless resolutions, action plans and policy framework documents’.³³

In the case of cannabis, however, those principles were never seriously applied. In a special report section on the ‘Control of Cannabis’, the INCB repeated in 2001 Greenfield’s earlier irony: ‘It is disturbing that, while many developing countries have been devoting resources to the eradication of cannabis and to fighting illicit trafficking in the drug, certain developed countries have, at the same time, decided to tolerate the cultivation of, trade in and abuse of cannabis’.³⁴ The Board indicted European leniency in particular as having relinquished responsibility for cannabis consumption in the face of concerted efforts to eliminate the cultivation of cannabis by the traditional producing countries. This INCB-inspired discourse on ‘the diligent producer versus the ‘lenient’ consumer state dichotomy’ led to a number of resolutions, mostly sponsored by African and Arab CND member states.³⁵

The first of these appeared on the CND agenda in 2002 entitled ‘Control of cannabis in Africa’, requesting the UN International Drug Control Programme (UNDCP, a predecessor of today’s UNODC) ‘to consider developing and implementing appropriate alternative development programmes, subject to availability of voluntary resources, and, where possible, to integrate them into programmes already being implemented in African countries by other United Nations entities’.³⁶ Subsequently, in 2004, the General Assembly adopted a resolution on ‘Control of cultivation of and trafficking in cannabis’ which expressed concern that ‘cultivation of and trafficking in



Cannabis crops in Mpondoland, South Africa, Pien Metaal, may 2018

*cannabis are on the increase in Africa partly as a result of extreme poverty and the absence of any viable alternative crop and partly because of the profitability of such activity and the high demand for cannabis in other regions of the world’ and that ‘increased cultivation of cannabis in Africa is extremely dangerous for the ecosystem because it leads to extensive use of fertilizers, overexploitation of the soil and destruction of forests to make room for new cannabis fields, thus accelerating soil erosion’.*³⁷

The General Assembly resolution called upon all States ‘to ensure strict compliance with all the provisions’ of the UN drug control conventions and urged them, ‘in accordance with the principle of shared responsibility and as a sign of their commitment to the fight against illicit drugs, to extend cooperation to affected States, particularly in Africa, in the area of alternative development, including funding for research into crops offering viable alternatives to cannabis, environmental protection and technical assistance’; and encouraged those countries ‘with experience and expertise in the eradication of illicit drug crops and alternative development programmes to share their experience and expertise with affected States, particularly in Africa’.³⁸

The resolution also welcomed the first survey of cannabis cultivation conducted by Morocco in cooperation with UNODC in 2003, and requested the agency ‘to begin a global survey of cannabis’. The first Moroccan crop survey revealed the full extent of cannabis cultivation in the country, estimated to have reached 134,000 ha from which over 3,000 tonnes of hashish could be produced, mostly destined for the European market. One of the main reasons, according to UNODC Executive Director Antonio María Costa in his preface to the report, was ‘the spectacular expansion of drug use in general, and cannabis use in particular, in European countries from the 1970s onwards’.³⁹ Though the bulk of the profits from the estimated €10 billion industry remained in the hands of trafficking networks operating in Europe, according to Costa, some 800,000 people, or two-thirds of the rural population of the Rif region, depended on cannabis for half of their income: ‘The international

*community – multilateral organizations, countries of production, trafficking, and consumption together – must assume this shared responsibility and commit to addressing the problem with a determination and spirit of cooperation commensurate with those of the Moroccan government’.*⁴⁰

A year later, the second survey showed declining prices and a 10% reduction in the area under cannabis production, prompting Costa to express optimism in his foreword. Farm-gate income from cannabis, estimated at US\$325 million in 2004, represented only 0.7% of Moroccan national income. ‘This problem can, therefore, be addressed’, according to Costa, while stressing that the ‘commitment of the international community, in terms of technical and financial means, will be essential to maintain the downward trend in production’.⁴¹ The decline ‘opens up promising prospects for the implementation of sustainable development programmes. This opportunity must be seized in a spirit of multilateral cooperation’. The 2004 survey included a section on the socio-economic and cultural factors influencing the decisions of cannabis farmers, ‘the missing piece of the puzzle for the implementation of adequate action programmes in the search for alternative income’, according to Driss Benhima, Director of the APDN.⁴² The results of the sociological study demonstrated ‘the particular importance of upgrading collective social organisation, particularly in the central Rif area’, without which ‘the success and sustainability of alternative development programmes cannot be guaranteed’. The other determining factor would be international development cooperation, according to Benhima, announcing a round table jointly organised with UNODC to bring together potential donors and mobilise the necessary funding.

That same year, in 2004, a European resolution called ‘to enhance the dialogue and cooperation between the Union and cannabis producing regions, in order to strengthen the Union’s efforts to support alternative development and to facilitate the cooperation on combating the trafficking of cannabis from those regions into the Union’.⁴³ And in its report for 2005, the INCB

devoted a thematic chapter to ‘Alternative development and legitimate livelihoods’ calling attention to the reality that the ‘vast majority of illicit crop growers, particularly the large number of cannabis plant growers in developing countries, have unfortunately never received direct alternative development assistance’ and that ‘[r]egrettably, there are virtually no alternative development projects or programmes in Africa, despite the large amount of cannabis produced in that region’.⁴⁴

In response, another resolution was adopted by the CND and ECOSOC in 2006, on ‘Using alternative development programmes to reduce the cultivation of cannabis plants’. ‘Desiring that the successful application of alternative development programmes in efforts to sustain the reduction of coca bush and opium poppy cultivation be replicated, as appropriate and possible, in efforts to reduce the cultivation of cannabis plants’, the resolution urged Member States, ‘in accordance with the principle of shared responsibility [...] to extend cooperation to affected States, especially in Africa, in the area of alternative development, including research into crops offering viable alternatives to cannabis, and technical assistance’.⁴⁵ The resolution mandated UNODC, ‘when requested by States reporting the large-scale cultivation of cannabis plants, to conduct a study with development partners [...] on the feasibility of implementing alternative development programmes in those countries’.⁴⁶

UNODC had already implemented a global market survey of cannabis, pursuant to the 2004 General Assembly resolution, the results of which were published in a special double issue of the *Bulletin on Narcotics* in 2006, characterising the political context as follows:

International law treats cannabis as it does other illicit drugs; but in practice, several States have reduced the priority afforded to enforcement of laws on cannabis relative to other drug issues. Signatories to a range of international drug control treaties have agreed that cannabis should be deemed an illicit drug. Despite these agreements, many States have, in various ways, relaxed their controls over cannabis. Even where these changes do

*not amount to a breach of the treaties, there appears to be a divergence in spirit between international agreements and individual State action. This discontinuity has not been addressed at an international level and thus international efforts to address cannabis have also fallen by the wayside.*⁴⁷

The ambivalence also translates into obstacles for data gathering: ‘UNODC annual reports questionnaire asks Member States to estimate the number of hectares under cannabis cultivation in their respective countries, but most respondents do not fill out this section. In fairness, most States would have little knowledge of how to make such an estimate. Given that most consumption is domestic and many societies do not regard cannabis as particularly problematic, most would have little incentive to invest much time in making such a calculation’.⁴⁸

In 2008, reporting to the CND on the implementation of the resolution on AD and cannabis, ‘Morocco indicated that it needed assistance from the international community and requested the European Union, where demand for cannabis continued to increase, to provide such assistance. Furthermore, Morocco indicated that the absence of a common policy on cannabis in the European Union, exacerbated by ambiguous drug laws in some States, undermined the efforts of Morocco in that regard.’⁴⁹ Again in 2008, the target year set by the 1998 UNGASS, the INCB concluded: ‘Developing countries that struggle to eliminate illicit cannabis cultivation are discouraged by the tolerant policies of their wealthier neighbouring countries and, perhaps as a consequence, receive little alternative development assistance’.⁵⁰ An evaluation of the policy coherence of the EU’s development and poverty-reduction programmes in Northern Africa confirmed the ambivalent attitude:

‘There is an incoherence between the de facto demand on the European drugs market for Moroccan cannabis (which is partly tolerated) and the EU’s efforts to eradicate this crop in the northern provinces and to replace it with other crops, which economic actors judge bound to fail as long as demand persists – and as long as other crops cannot be exported –

and as long as profits remain high: 'The only way to eradicate cannabis, is to convince the Europeans to smoke carrots'. The official ban has in fact encouraged criminalisation of the growing and trade of cannabis and the creation of mafias in northern Morocco. In pre-colonial times, cannabis was a legal and even taxed commodity in northern Morocco. Legalising cannabis would circumvent mafias and increase farmers 'profits'.⁵¹

2.3 Cannabis and Alternative Development: the Practice

The request to UNODC made in the 2006 ECOSOC resolution to undertake a more thorough global cannabis cultivation survey was 'subject to the availability of extrabudgetary resources', and in 2007 the office budgeted the three-year effort to cost US\$ 9.1 million: 'So far, UNODC has not received any expression of interest from Member States to contribute to this activity', stressing that, 'prior to formulating or designing alternative development interventions in any geographical area, a thorough analysis of the situation and a technical assessment of the extent of the cannabis plant cultivation are required'.⁵² In other words, AD interventions for cannabis would make sense only after a thorough study, for which no donor was willing to pay. In this way UNODC effectively – and deliberately – put an end to the illusion that international funding would ever be available to implement AD projects aimed at illicit cannabis cultivation.

For opium poppy and coca, there have been significant AD investments especially in Afghanistan, Thailand and the Andean region, but very few AD projects aiming to reduce cannabis cultivation. According to the INCB, 'only two donor-supported alternative development projects have been implemented in areas affected by cannabis plant cultivation – one in the Rif valley in Morocco and the other in the Bekaa valley in Lebanon (where opium poppy was also being cultivated). Thus, there is limited experience with donor-supported alternative development programmes in cannabis plant cultivation areas'.⁵³

Some governments did mention to INCB or UNODC in the mid-2000s that they had undertaken or at least explored their own AD efforts without external funding. Ghana, for example, conducted a small project in support of alternative livelihoods for cannabis growers;⁵⁴ Jamaica had explored the possibility of hemp cultivation as part of its AD programme; and the Philippines had done a rapid assessment of cannabis cultivation sites to identify areas for AD pilot projects and had studied the possibility of using *yakon* (a root vegetable) and *jathropha* (the seeds of which can be used for making biodiesel) as substitute crops.⁵⁵

The lack of current development projects that aim to reduce illicit cannabis cultivation clearly demonstrates the loss of confidence and political interest among the donors and UN agencies. Today, most UN reports and resolutions on AD avoid the cannabis issue altogether. UNODC's 2019 'Global Overview of Alternative Development', for example, makes no mention of cannabis.⁵⁶ This creates difficulties for the global discourse on drug control and AD, because the aims, targets and treaty provisions are the same with regard to reducing illicit cultivation of opium poppy, coca and cannabis. The basic premise of AD is that reduction of illicit cultivation is sustainable only if alternative livelihoods are created through rural development. Rather than meaningless political declarations and CND resolutions, it is time to openly acknowledge that 'eliminating or significantly reducing' the cannabis market is no longer considered to be a feasible target, and that the focus needs to shift to other, more realistic, policy options.



3. Asia

3.1 The Doi Tung Alternative Development model in Thailand and Aceh, Indonesia

The Doi Tung Development Project in Northern Thailand, led by the Mae Fah Luang Foundation (MFLF) has been praised and studied by scholars, advocates, and policy-makers from around the globe. Over the past 30 years, the Doi Tung project has helped rural communities in Northern Thailand – particularly in the Golden Triangle – to reduce economic dependency on illegal opium poppy cultivation through a wide array of development programmes. The Doi Tung model relies on four key principles: ‘proper sequencing of viable livelihood alternatives and eradication; integrated and holistic alternative livelihoods rather than a limited crop substitution approach; long-term solutions for development instead of “quick-fix”’; and integration of stakeholders and involvement of local communities’.¹

The Doi Tung project area covers around 15,000 ha in Chiang Rai province, benefiting approximately 11,000 people living in 29 villages. The project counted from the start on strong support from the royal family, which was instrumental for its reputation and to secure long-term funding. The first five years (1988–1993) focused on immediate health issues and the provision of other basic life necessities. In the second phase (1994–2002) income generation became the main focus, introducing the concept in rural development of moving up the value chain. ‘This involves moving beyond the cultivation of agricultural commodities, by actively planning and implementing how one can move into the processing steps that add value locally to the base product.’² The final 15-year phase intends to make the project sustainable by strengthening the local business units and product brand. ‘It is during this final phase that capacity building, empowerment, and education take place, so that the people are equipped to take

over the project in 2017, when the project phases out. Our ultimate goal is to leave the administration and management of the development of the area and the businesses in the hands of a new generation of local leaders.’³

Importantly, the Thai authorities also ‘distinguished between commercial cultivation and conceded to a level of households’ production commensurate with the level of local consumption. Recognising that even if opium was to be abandoned as a source of income there would be medical, social and cultural reasons for household cultivation to continue on a small scale’.⁴ Illicit poppy cultivation in northern Thailand gradually declined as more alternative and sustainable livelihoods were introduced to local populations with no coercion or moral judgement. As much of the opium was also consumed locally, the reduction was also facilitated by a process of cultural assimilation of the ethnic minority and the gradual abandonment of traditional opium uses. The part of the Thai opium cultivation that had been destined for the international heroin

market was, however, subsequently replaced by increased production in other parts of the Golden Triangle, most notably across the border in Myanmar.⁵

In Thailand, the successful AD model was applied only to opium poppy and not to the also vibrant cannabis cultivation and culture in other parts of the country. In 2006, however, the Indonesian government requested the MFLF to use its model to develop an AD pilot project for reducing the widespread illicit cannabis cultivation in Aceh. This request was part of its broader approach to address the issue of cannabis production in Aceh, institutionalised in the 2006–2020 strategy of the National Narcotics Board (Badan Narkotika Nasional or BNN). Illicit cannabis cultivation in Indonesia is most commonly found in the northern part of Sumatra, especially in Aceh province, where cannabis has long been used for culinary and therapeutic purposes. Cannabis, placed under Indonesia’s strictest category of drugs, is also the country’s most widely used illicit substance.⁶



Ganja farm, Aceh Besar, Indonesia, M. Anshar

For decades, cannabis cultivation in Aceh was associated with the armed conflict between the state and the separatist group Free Aceh Movement (Gerakan Aceh Merdeka or GAM), which emerged in the late 1970s in pursuit of an independent Aceh. Cannabis, along with other illegally obtained yet lucrative resources such as timber, reportedly served as an important source of income for the separatist group, although state institutions – such as the police and the military – were allegedly also involved in these activities.⁷ In this context, cannabis was grown by small-scale farmers in high-altitude and mountainous regions of Aceh, with each plantation typically not exceeding an area of 1 ha.⁸ In 2004, or one year before the official end of the 30-year conflict, some sources believed that an estimated 30% of cannabis in Southeast Asia came from Aceh.⁹ In December 2004, Aceh was among the regions heavily hit by the Indian Ocean earthquake and tsunami. The severe aftermath of the tsunami magnified the

precarity and insecurity of local populations whose livelihood options had been severely affected by the longstanding conflict, hence the significance of cannabis cultivation – albeit illicit – as a means of survival.

Relevant national and local government institutions, but also community and religious leaders, were involved in the design and implementation of the MFLF's AD pilot project. This effectively started in 2007, and focused on two main areas in Aceh Besar district, covering Lamteuba and Maheng villages. These villages had notoriously been an insurgent stronghold and also associated with high levels of illicit cannabis cultivation. Through its initial survey conducted in 2006, the MFLF and its local partners identified a number of pressing issues in the area, notably with regard to health, food security, and livelihoods. Two health programmes – malaria eradication and a prosthesis programme – were implemented in Lamteuba, both tackling some of the most urgent health concerns and also building rapport and mutual trust with local people, who were recruited as volunteers on the programme. This process also facilitated closer engagement between the Acehnese and various Indonesian government officials – a dynamic which had to be revitalised gradually following the 30-year conflict.

Later on, projects to promote livelihoods were launched in Maheng and Lamteuba, concretely aiming to increase local income from US\$ 1 to US\$ 2 a day per person. A variety of agricultural projects and assistance were developed, alongside the introduction of new and higher-value crops, educational sessions to breed fish and ducks (to produce salted eggs), goat-breeding projects, and assistance in processing technology such as using a rice mill. In addition, local people were offered support in forming cooperatives to enable them to be more self-sufficient in the long run.

The AD programme did not specifically address, let alone problematise, the issue of cannabis cultivation. In the spirit of



Cannabis harvest in North East India, Ernestien Jensema, october 2014

inclusiveness, as well as produce benefits for all regardless of their background, local people were never asked about their (current or previous) involvement in illegal activities. There were no criteria for participation, with the exception of certain sub-projects requiring participants' prior commitment and continuous engagement. For example, there was an application process for a training session on goat raising, and those accepted were invited to prepare land plots and assume various responsibilities throughout the training period. The system was based on the principle of two-way interaction and cooperation deemed as necessary in development programmes.

True to the basic Doi Tung principles, there was no forced eradication of cannabis in Maheng and Lamteuba during the AD pilot project, which ended in 2011. Nevertheless, a number of BNN reports show that some of its largest and militarised eradication operations, known as the Nila Rencong Operations, were carried out in many parts of Aceh (including in Lamteuba) between April and September 2006, just before the formal start of the project. A total of 250 ha of cannabis fields were forcibly eradicated at the time.¹⁰

In the end, the pilot project's primary quantitative goals to improve health, food security, and income were met: average per capita income rose from US\$0.75 to over US\$2.60 a day. The population of Maheng moved from the primary stage of basic sickness prevention and survival in the beginning of the pilot project, to the secondary phase of community sufficiency – with some residents beginning to look into forming small enterprises and cooperatives to sell value-added goods produced in the village. The local economy was boosted by greater spending. For instance, sales at local grocery stores and cafés increased by approximately 80%. Residents who were not originally farmers also had other means of earning a living, for instance as intermediaries selling agricultural produce to nearby markets or as labourers in post-tsunami infrastructure-building projects.

By the end of the pilot project, reports showed that households in Maheng and Lamteuba were no longer involved in cannabis cultivation, which can be attributed to the creation of viable livelihood alternatives, although it is not clear whether it had a broader impact in the province. MFLF's successful participatory malaria-management programme in Lamteuba was integrated into similar health projects throughout Aceh province. Eventually, the model became an important component of Indonesia's national health plan and strategy. Nonetheless, other elements of the AD pilot project – namely its well-coordinated and participatory livelihood diversification efforts, and the principle that such efforts should precede eradication measures – were not replicated in other cannabis-growing areas in Indonesia, nor was it sustained in Aceh following MFLF's departure.

Today's AD programmes in Indonesia, including Aceh, remain officially guided by the same BNN-administered 2006–2020 strategy which had prompted the MFLF's involvement in the first place. As expressed by BNN representatives at the 63rd Session of the Commission on Narcotic Drugs in March 2020, current AD programmes are still largely inspired by the Doi Tung model. These include training programmes in agriculture, manufacturing food and herbal products, and handicrafts. Some of the programmes are run in partnership with the private sector in order to facilitate the marketing and sales of goods the communities produce, but cannabis eradication remains one of BNN's key priorities. More importantly, unlike the MFLF-assisted AD pilot project in Maheng and Lamteuba (which treated the drugs issue separately from development), the BNN's AD programmes are mainly part of a strategy of drug control rather than development.

In late 2019, the BNN still administered AD programmes on a small scale in Aceh – in Aceh Besar, Bireun, and Gayo Lues – where cannabis-substitution projects involving maize and cattle were implemented across an area of 100 ha.¹¹ According to the BNN, in 2019

a total of 12.1 ha of cannabis fields containing 484,000 cannabis plants (or around 103 tonnes) were eradicated in the Aceh province.¹²

While eradication is the main policy regarding illicit cannabis cultivation, cannabis farmers – who are most affected by policies aimed at stemming supply – are seldom heard in public and policymaking spheres. Only in recent years – as cannabis policy reform gained visible public support – did farmers’ experiences begin to appear in news outlets. Some former cannabis farmers said that many had resorted to cannabis cultivation because of the lack of access to jobs. These former farmers, who shared their testimonies anonymously, felt that they had earned more through illegal cannabis cultivation than other livelihoods but had also repeatedly lost their harvests (and thus income) either due to fraud (by investors and/or investment partners)¹³ or eradication led by the Indonesian military.¹⁴ According to one of these former farmers, cannabis cultivation has now moved into more remote mountainous areas, but ‘we simply do not know who plants it, even though we live nearby.’¹⁵

3.2 Thailand’s medical cannabis framework

Thailand is world famous for its special *cannabis sativa* landrace from Northeast Thailand with unique properties, a variety often referred to and sold as ‘Thai sticks’ because of the centuries-old tradition of drying and tying the buds onto long sticks. As in other Asian countries, traditional cultural and medicinal uses have existed for centuries and have never completely disappeared, despite the formal prohibition. Varying forms of *de facto* tolerance have kept them alive, albeit to hugely different degrees between countries and between sub-national states or provinces. In 2019, Thailand became the first country in Asia to regulate cannabis for medicinal purposes, joining over 30 other countries which have implemented various types of regulation for medicinal cannabis in the Americas, Europe, and Africa. Signs of

change, or at least growing public support to reform cannabis policy, can also be found in other Asian countries, including in India, Indonesia, Malaysia, Nepal, South Korea, and even the Philippines¹⁶ – as an increasing number of governments, entrepreneurs and civil society organisations (CSOs) are attracted by the socioeconomic potential of stimulating a legally regulated cannabis industry catering to domestic and international demand.

Given the achievements and valuable lessons inspired by the Doi Tung project in Thailand, might legal medicinal cannabis be incorporated into existing and/or emerging (alternative) development projects in Asia? Could the legal medical cannabis market serve as a source of sustainable livelihoods for farmers and rural workers currently operating in the illicit market?

Thailand has been one of the few countries – if not the only one – whose framework of legal medicinal cannabis is officially tied with its traditional medicine and healing systems. The regulatory system for medical cannabis in Thailand is considered fairly restrictive and is predominantly controlled by government institutions. Only government-sanctioned institutions can apply for cultivation, manufacturing, and trading licenses for medicinal cannabis – though these could also include practitioners of Thai folk and traditional medicine, hospitals, and agricultural groups categorised as ‘community or social enterprise’.¹⁷ Regardless, it is clear that the current model does not include small cannabis farmers currently operating in the illicit market, nor is it linked with the existing AD policy framework as developed around the Doi Tung project. There have also been concerns about the possible corporate capture of Thailand’s medical cannabis sector, particularly in relation to patents.¹⁸

In late 2019, Thailand’s Public Health Minister, Anutin Charnvirakul, initiated a draft regulation which would allow the registration of individual farmers to legally grow limited amounts of cannabis and to sell their produce to hospitals and clinics.¹⁹

Around the same time, a draft law to allow small-scale personal cultivation (up to six plants) was introduced by the Bhumjaithai Party, part of Thailand's ruling coalition.²⁰ A new narcotics bill is being reviewed by the Council of State. If subsequently approved, the bill 'would allow anyone to plant cannabis at home, both for medical purposes or as a cash crop', including by patients and investors.²¹

3.3 Overview of other recent developments in Asia

On 1 February 2020, the first medical cannabis clinic in India opened its doors in Bengaluru. Vedi Wellness Centre offers Ayurveda-inspired and medicinal products made of cannabis, including whole cannabis extracts prescribed to treat conditions like pain and inflammation. These medicines are manufactured by a private company called HempCann Solutions, using hemp and/or the leaves and seeds of cannabis plants – which are not exempt from India's drug laws. The company has reportedly sold more than 30,000 units of cannabis-based medicines to over 5,000 patients across India.²² Other products made of hemp and/or the leaves of seeds of cannabis plants, especially topical and other health products, have also gained visibility in India. This emerging sector has been dominated by private investors and companies.²³

The fight to reform cannabis policy continues in India, and signs of progress include the Delhi High Court's issuance of plea challenging the criminalisation of cannabis in the country.²⁴ Several states in India, including Uttarakhand and Madhya Pradesh, have also taken legal steps to regulate cannabis cultivation for medical and industrial purposes, yet the (future) role of small producers to transition out of illegality remains to be seen.

In neighbouring Nepal, a group of legislators are pushing for the legalisation of medical cannabis markets. One of the proposed bills would enable cannabis growers to apply for licenses to grow cannabis for the commercial

market, and allow households to cultivate small amounts of cannabis.²⁵

In February 2020, Indonesia's Ministry of Agriculture issued a ministerial decree concerning various agricultural commodities. Cannabis sativa was added into the list of medicinal plants as agricultural commodities. Despite its political significance, the ministerial decree was made widely accessible only via an Instagram post published months later. This went viral within hours, and the following day, the Minister of Agriculture said that he would revoke the inclusion of cannabis as a medicinal plant and revise the decree accordingly, given his commitment to 'eradicate drug abuse'.²⁶

The Ministry's initial decision to include cannabis in the decree might have coincided with the growing (visibility of) support for and interest in cannabis policy reform in Indonesia, especially with regard to the substance's medicinal potential.²⁷ Policy-makers and public figures have spoken about the socioeconomic potential of stimulating a legal cannabis industry – from national legislators promoting legal cannabis exports²⁸ to local authorities and prominent historians speaking favourably about a possible cannabis cultivation pilot project in Aceh.²⁹

In Malaysia, several government officials have sought ways to stimulate its hemp and CBD industry. Similar to Indonesia, medicinal cannabis has been central to discussions on cannabis policy reform in Malaysia. Regardless, there has been no concrete draft bill or regulatory initiatives officially tabled at the government level in Indonesia or Malaysia.

Visit to a Jamaican cannabis field during an exchange visit of farmers from Colombia, Morocco, Jamaica and Saint Vincent, Martin Jelsma, August 2018



4. Latin America & the Caribbean

4.1 The Caribbean: small farmers in Jamaica and St Vincent and the Grenadines

The Caribbean has a long history of cultivation, trade and use of cannabis – known locally as ‘ganja’ – which is widely used recreationally, as a folk medicine, and as a sacrament by the Rastafarian community.

Despite being one of the earliest countries to prohibit cannabis back in the early 1900s, **Jamaica** was the first country in the region to move openly towards creating a licit medical cannabis market, reforming its legislation and practice from 2015 onwards. This is the result of changing social attitudes, the assertion of cultural minority rights (notably by the Rastafarian community), and political sensitivity in response to growing pressure and social agitation by the cannabis reform movement.¹ St. Vincent and the Grenadines followed suit, approving legislation in 2018 focused on including traditional cannabis growers into a medicinal cannabis market. This is a significant step as these two countries produce most of the cannabis illegally traded in the Caribbean. The CARICOM Regional Commission on Marijuana contributed to the push for a regional approach to a regulated market for cannabis. It presented a report in 2018,² making a regional analysis of the consequences of cannabis prohibition, and recommending reforms with future social and economic benefits. Other countries in the region have taken cautious steps in the same direction, but none has opted for full legalisation.

As the first country in the region to adapt its cannabis legislation, Jamaica’s much-debated legal reform was intended mainly to redress the injustices that surrounded cannabis as a criminal offence and to gradually stop treating its cultivation and use for both cultural and medical uses as such. The amendments to the Dangerous Drug Act (DDA) implied that ‘new provisions will be in place regarding the possession and smoking of ganja, use of ganja

by persons of the Rastafarian faith, and use of ganja for medical, therapeutic and scientific purposes'.³

Approved by parliament in February 2015, politicians and other stakeholders were eager to perceive the reforms as an economic opportunity, while the amended law was not actually intended to lay a solid basis for the development of a medicinal cannabis industry. After so many years of stalled

reforms, everyone involved rushed to demand a 'piece of the cannabis pie', while there is still a need for many regulations to build the basic infrastructure for the medical cannabis industry. Since then, the Jamaican government has moved ahead with the establishment of a medical cannabis framework based on a 'closed loop' licensing system (licensees trade with licensees) as well as a modest Alternative Development project to support small and traditional ganja growers (see Box).

BOX: Jamaica's Alternative Development Project

The Jamaican government created a Cannabis Licencing Authority (CLA), which in 2016 introduced a tiered licensing system for medicinal ganja, meant to protect the small farmers who previously had risked significant criminal charges. Since then it has issued 67 ganja licences to local companies and individuals, including 28 for cultivation, 23 for retail, 11 for processing, 4 for research and development (R&D) and 1 for transport.⁴ Unfortunately, few if any have been extended to the traditional farmers, which can be explained by several reasons: the costs involved in the licensing procedure; the lack of land titles required for a license; and that the revised legislation made no specific mention on the issue of cannabis cultivation, even omitting the act of cultivation in expunging criminal records, a fundamental element of the reform. It is still impossible for a farmer previously convicted for illicit cultivation to obtain a license.

In response to concerns that the new legal framework leaves out small and traditional ganja growers, the CLA developed an Alternative Development Project (ADP) aimed to assist their transition to the legal market. As the former AD director explains: *'At the time we were attempting to put in an alternative development project that was geared towards the traditional ganja growers and transitioning them from that illicit market space into the legal market space. So our AD or alternative development project was more based on community development and development of the traditional farmers and getting them into an alternate market and not necessarily an alternate crop. So we took the old concept of alternative development that initially started out as crop substitution and instead we had them cultivating the same crop that they would cultivate under the illicit framework but instead of selling it within the illicit market and the illicit framework, they would now become suppliers to the legal regimes, the medicinal regime'*.⁵

The initiative was addressed by the MP Andrew Holness, announcing on 6 January 2019 that in March that year the government would 'unveil a development programme for farmers in the ganja sector [...] to ensure the small farmers in the sector are protected as the global marijuana industry expands. [...] because it is a real fear that as that industry emerges, becomes more corporatized, that the original ganja man, the original farmer, could very well be left out of the gains and the benefits'.⁶ The CLA 'Alternative Development Project' is being developed in collaboration with the Westmoreland Hemp & Ganja Farmers Association and the St Elizabeth Maroon community and is 'geared

towards transitioning current illicit ganja farmers into the legal regulated industry'.⁷ This goal was emphasised in April 2019 by J.C. Hutchinson, minister without portfolio at the Ministry of Industry, Commerce, Agriculture and Fisheries. Referring to the introduction of the pilot project, he stressed that *'cannabis is one of the crops which the government is making sure that the small farmers are involved in growing legally'*.⁸

Despite these promises, the AD pilot project has been launched in only one of the two communities two years after it was first announced, and has encountered a number of difficulties. Many of these relate to long-standing structural problems faced by small farmers including landlessness and lack of capital and access to credit. Others relate to the high compliance costs associated with the legal framework and efforts to prevent diversion (including the installation of high-perimeter fencing, security cameras, and the hiring of private security companies). A lack of training in the growing techniques required to meet the standards associated with the medical cannabis industry has also been a hindrance. While the authorities are aware of these issues and have made some efforts to alleviate problems, these have had little impact to date. As some authors argue, *'The AD programme has stalled and needs to be better funded and supported if obstacles faced by poor farmers are to be overcome'*.⁹

Given its slow start, a 'special transitional permit' has been proposed *'to provide the traditional small-scale farmers with an additional avenue to enter the licit market, as well an opportunity to transition from being the holder of a special permit to holding a license'*.¹⁰ According to the Caribbean Fair Trade Cannabis Working Group, *'the proposed new permit would be valid for two years and that the process would cut fees for those farmers and allow for variations to strict infrastructure and security requirements'*.¹¹

Analysts have described the inconsistencies in the Jamaican model and the lack of coordination among the relevant ministries, departments and agencies.¹² There remain problems in the government's AD project with turnaround times and objectives related to long-standing tensions between drug-control and development priorities.¹³ There has also been little support from the medical profession and health authorities for the medical use of cannabis. Widely considered a folk medicine, the authorities have been hesitant to embark on R&D, and develop a local medical cannabis sector, even though highly relevant research is conducted on glaucoma at the University of the West Indies (UWI). From the economic perspective, most if not all of the newly developed produce goes abroad, and the sale of medical cannabis to tourists has become mainstream. Domestic consumption could be stimulated through the

system of retail herb houses (and potentially outside of this) if it were permitted for a nutraceutical industry to be developed based on traditional medicines.¹⁴ This would, however, probably require a new examination of the country's Food and Drug Act.

The government of **St Vincent and the Grenadines (SVG)** closely watched the Jamaican approach in order to learn from experiences there, and since 2018 has developed legislation and regulation to create a medical cannabis industry intended to encompass traditional farmers, drafting and approving an amnesty law for cannabis producers and creating a medicinal cannabis agency (MCA), as prescribed by the international drug treaties. The MCA *'is committed to developing a viable and sustainable medicinal cannabis industry, focused on the production of quality cannabis*

for export where no traditional cultivator is left behind'.¹⁵ It provides training for traditional farmers and includes them in decision-making and policy development. The six liaison officers, all growers themselves, act as a bridge between growers from different regions and the government, to discuss relevant concerns with the MCA. Technical support is provided to help the growers to form cooperatives, and even some land titles have been assigned to former illicit growers. Farmers are also exempt in the first two years after obtaining the license from the high-cost security and fencing requirements.

The role of small and traditional cultivators is hotly debated in the transition to a licit cannabis market. According to one of them, *'the voice of the small cultivator is critical if these processes are to go forward. If we look at the medical cannabis industry, we see principally three main stakeholders: there's the investor; there's the state or the government; and there's the small, traditional cultivators, one cannot go without the other. The government has to regulate it, the small cultivators [don't] have the money so we depend on the investors to bring the finance. Because we have to remember it is an export-oriented industry and it's in that area that we make our money principally. But without that traditional knowledge*

that the small growers have, it wouldn't work. We're not saying "no" to the scientific knowledge because the investors... you know the international community, there's certain standards, there's requirements, certain compliances. So, you bring the scientific knowledge and let us merge it with the traditional knowledge because one complements the other. And I believe that St. Vincent, guided by the climatic conditions here, guided by our soil, our sunlight, our volcano (you know, because as a result we have excellent soil), we have the potential for producing one of the best cannabis in the world'.¹⁶

The Ministry of Agriculture is responsible for implementing and organising the new sector, claiming to treat cannabis as just another agricultural crop, but setting different parameters on security and processing controls. Growers have formed cooperatives, strengthening their capacities to negotiate and develop the business skills needed to operate in the new industry. Almost all the investment capital comes from foreign companies, and several have gained a license to produce cannabis for export, mainly to Canada and the UK. Unlike Jamaica, SVG is not a major consumption market. This means that while supplying the local market is an important element of the new regulation, to



Cannabis cultivation by rastafari man, st. Vincent and the Grenadines, Sylvia Kay, november 2019

make it work economically for the majority of traditional farmers the model hinges on export with much of its success depending on access to international market opportunities. As the Chief Licensing Officer of the MCA explains:

*‘Cause that’s one thing that we don’t want to encourage persons to plant and they don’t have nowhere to send the product because the majority of Vincentians don’t smoke cannabis and with a population of about 110,000 persons, even if 10,000 persons were smoking every day, you know, like five times a day, it would be hard for all of the product that’s actually grown here because illegally – the product that’s grown illegally – about 90% is exported anyway’.*¹⁷

To secure market outlets and attract responsible investors, the MCA carries out due diligence in the form of comprehensive background checks, subjecting investors to a set of evaluation criteria, and conducting on-site inspections, including regular scheduled visits as well as unannounced spot checks on the advice of the Chief Licensing Officer. The government is attuned to some of the development opportunities that may be harnessed through the licit medicinal cannabis market, and has initiated a number of projects under an alternative livelihoods programme. It is enshrined in law, for example, that foreign companies must include in their business plan a diversification project alongside their cannabis operation. These diversification projects are listed under the guidance of the Ministry of Agriculture and have included projects related to, inter alia, research into the medicinal properties and extraction techniques of plants such as turmeric, soursop, and moringa. In addition to this, foreign companies are required within the first of year of licensing to pay a 250,000 XCD food-security fee, which is channelled into alternative livelihood projects. This complements other revenues that the authorities collect from license fees that the Ministry of Finance can allocate to meet other needs such as education, treatment programmes for substance abuse, or further support to traditional cultivators.

4.2 Towards a regional Caribbean cannabis policy

The CARICOM Conference of Heads of Government agreed at its 25th Inter-Sessional Meeting in 2014 to establish a Commission to ‘interrogate the issue of possible reform to the legal regimes regulating cannabis/marijuana in CARICOM countries’ on the basis that this is ‘an issue of deep social significance to Caribbean people’.¹⁸ The resulting report ‘Waiting to Exhale – Safeguarding our future through responsible socio-legal policy on marijuana’, published in 2018, responded to this mandate, aiming to bring a level of serious discussion of and purpose to the cannabis question. Based on survey data, independent documentary research, national consultations with the general public, and focus group discussions (FGDs) with users, cultivators, youth, and health practitioners across 14 countries, it brings a multi-disciplinary perspective to the issue of cannabis law reform, drawing from the fields of public health, human rights, social work, law enforcement, academia, pastoral care and community organising. The report makes the case for ‘moving away from the narrow constraints of medical marijuana, to embrace notions of social justice, human rights, economics, regional hegemony and their right to health’.¹⁹

This does not necessarily mean that all Caribbean countries will or should adopt harmonised policies, but the report makes a strong case that all of them should engage in a process of reforming legislation on cannabis, noting that the status quo cannot be justified from the perspectives of human rights and social justice in view of the ongoing impact of current policies on marginalised and vulnerable populations. As the Chair of the Commission comments, ‘We felt that decriminalization was the bottom line that should be the minimum standard. And of course as we were completing our exercise, the whole medical cannabis industry kind of began to blow up. We did say very clearly in the report that we did not want it to be only law reform for medicinal purposes’.²⁰

Since its publication, in addition to Jamaica and SVG, many other Caribbean countries have embarked on reforms, albeit cautiously. Steps to decriminalise possession for personal use were already, or have since been legalised, in Antigua and Barbuda, the Bahamas, Barbados, Belize, Bermuda, Dominica, St Lucia, St Kitts and Nevis, Trinidad and Tobago, and the Virgin Islands, while several countries are considering doing so, including the Cayman Islands and Grenada. A number of countries recognise the right of the Rastafarian community to ceremonial use and all refer to the potential economic benefits of ‘the industry’.

Some Caribbean countries would like to see the development of a regional medical cannabis market, being specific to the possibilities and needs of the Caribbean population.²¹ For now, most of the investments in the nascent Caribbean industry have come from foreign companies (Canada, UK, US) keen to export to their own domestic markets and supply the emerging global markets. Alerted to this, and wanting to ensure that any gains would serve the needs of local economic development, while taking to heart the recommendations of the CARICOM commission, a group of local farmers, activists and academics have called on governments to take the position of traditional cannabis farmers into account in designing and expanding the industry.²² As one long standing cannabis activist and organiser proclaims: *‘we must forge a tight, a close alliance and take a coordinated approach so that our traditional growers in our respective territories can benefit and that our region as a whole can benefit by preventing on the one hand, a new kind of colonialism and on the other hand, by allowing us to take real control of our destiny, economically and otherwise’*.²³

4.3 Medicinal cannabis and the Colombian peace process

The cannabis industry has found fertile ground for its regulation in Latin America. Cannabis is, as elsewhere, the preferred

controlled substance. Currently, seven Latin American countries have regulated medicinal cannabis, varying from highly sophisticated pharmaceutical models of cultivation, production and distribution, to focusing on controlling access to imports of medicines or medicinal preparations.²⁴ Low production costs, climate conditions, cannabis plant varieties, and domestic and external market possibilities have attracted local and multinational investors, which have welcomed the legislative changes in traditional producer countries.²⁵

After Uruguay regulated the production, sale and consumption of medicinal and recreational cannabis in 2013, several Latin American countries have decided to some degree to join an emerging market, portraying it as an alternative to the longstanding prohibitionist model. Repressive drug policies have been a political priority in Latin America, causing collateral damage in communities that depend on these crops to sustain a livelihood, caught in the crossfire of a war between public forces and trafficking organisations.²⁶ In Colombia and Mexico, countries in which illicit drug production and trade have permeated almost all spheres of society and weakened their institutions, medicinal cannabis has been promoted as a form of alternative development. To date, however, the legal adjustments have failed to address the underlying problems, and the communities most affected by punitive policies have been omitted from the regulatory models.

Colombia is one such example. In 2016, the government approved Law 1787, which together with Decree 613, established a regulatory framework for cannabis for medicinal and scientific purposes, providing four types of licenses: seed propagation, cultivation (psychoactive and non-psychoactive cannabis) and manufacture of derivatives. The plan was underpinned by addressing the needs of rural communities, patients and small enterprises, within the framework of the national peace process. By introducing the category of small and medium growers, the law included

producers and vendors with a cultivation area of less than 0.5 ha, to give small producers certain advantages. It also allowed specific security control mechanisms, relevant for indigenous communities that operate with legal autonomy, and gave priority to small and medium growers in allocating quotas for the production of cannabis, requiring manufacturing licensees to purchase at least 10% of the raw material from them.²⁷

This promising business generated a ‘green fever’. By April 2020, the Ministry of Justice had issued 656 licences (seed propagation and cultivation), while the Health Ministry approved 465 manufacturing licenses. Most of these licenses were granted to local entrepreneurs or multinationals, and soon Canadian and US companies took over and bought out local initiatives. As much as 70% of investment in medicinal cannabis is foreign, and 71% of licenses are allocated in urban or intermediate regions, while 21% are in rural areas and the remaining 8% in remote rural areas.²⁸ Most of the large companies and multinationals have their own crops, extraction plants and derivatives manufacturing, and simply hire local farmers to work for them, as opposed to obtaining the agreed 10% of the cannabis production from small farmers.²⁹

Before the law was approved, two licenses were granted to Canadian multinationals

through Decree 2467, issued by the national government in 2015, an early warning of what was to come. The words of Senator Benedetti, ‘Once more we are going to be prisoners of the gringos’³⁰, clearly refer to a risk that the regulation would favour foreign companies to the detriment of local producers.

Although Decree 613 included preferential mechanisms for small and medium-sized growers, this was counteracted by the fact that Colombia adopted a pharmaceutical regulatory model, requiring large capital investments and the obligation to comply with certain standards for manufacturing and production, leaving small growers out of competition, a former official explained.³¹ In similar terms, the legislation states that illicit crops cannot be used in transitioning to plantations for medicinal purposes, thus requiring peasants to destroy their crops as a condition to apply for a license. This clear obstacle to make the transition from illegality undermines the viability of medicinal cannabis as an alternative development option.

In the same year as Law 1787 was approved, the national government signed a peace agreement with the FARC guerrillas to end over 50 years of armed conflict. One of the points of the Final Agreement to End the Armed Conflict and Build a Stable and Lasting Peace focused precisely on a ‘solution to the illicit drugs problem’, introducing a ‘voluntary substitution’ scheme under a new National Comprehensive Crop Substitution Programme (PNIS). While a definition of small and medium peasant farmers in Decree 613 sought to link medicinal cannabis to the PNIS, the programme focused more on reducing coca crops, the main income source for the drugs trade since the 1970s. Furthermore, unlike coca or opium poppy, with existing – albeit often inaccurate – estimates of crops and families that depend on them, there is no such data on cannabis crops.³²

A recent report questions the scope of medicinal cannabis as a stabilisation or substitution mechanism for municipalities in Colombia. For this, the report evaluated

Greenhouse in Toribio, Colombia, Martin Jelsma, 2018



the Development Programmes with a Territorial Approach (PDET), an instrument created with the Peace Agreement and whose purpose is ‘the structural transformation of the countryside and the rural environment, and an equitable relationship between the countryside and the city’.³³ The report concludes, that as of August 2019 only four PDET municipalities had medicinal cannabis plantations, and emphasises that the medicinal cannabis industry is not located in municipalities with strong presence of illicit crops, such as Cauca: ‘[...] the space for small producers is limited and also its potential for productive and territorial transformation in PDET municipalities, or as a tool for replacing crops’.³⁴

Lastly, one of the government’s commitments in the peace agreement was to create differentiated criminal pursuit of small-scale farmers of crops for illicit use. The idea was to characterise small coca, cannabis and poppy growers and offer them an alternative criminal mechanism, encouraging them to join the crop-substitution process. However, this initiative was defeated in congress by strong political opposition, especially by the attorney general at the time, Néstor Humberto Martínez, and remains pending.³⁵

Colombia’s experience has served as an example for other countries in the process of regulating cannabis. Mexico is an important case as a large cannabis producer where regulation addresses both medicinal cannabis and recreational use.

4.4 Mexico

The Mexican government was obliged to legislate on the issue of cannabis, after the Supreme Court of Justice decreed on five separate occasions that prohibiting the recreational use of cannabis should be considered unconstitutional.³⁶ After many debates and delays, in March 2020 the Senate Justice, Health and Legislative Studies commissions approved the decree to create

a Law for Cannabis Regulation, which was slightly modified and approved by the Senate in December 2020, and by parliament on 10 March by a two thirds majority. The new legislation is now awaiting the Senate’s approval, due before the end of April, and be signed into law by the President.

This law regulates all cannabis use: its – commercial – use for recreational, industrial, medicinal, palliative, pharmaceutical, and research purposes. It includes the creation of the Mexican Cannabis Institute, a national agency that coordinates government institutions involved in public cannabis policies, as prescribed by the international treaties. Similar to Colombia, it creates a licensing system for the cannabis industry, covering cultivation, transformation, commercialisation, export or import, and research.³⁷ The new law permits the cultivation of up to six plants per household, and possession for personal use increased from 5 grams to 28 grams.

In the legislative process, different sectors of civil society, patients, doctors, specialists and activists formulated various recommendations, although these were drowned out by the enthusiasm of parliamentarians and the business sector that approved of this reform.³⁸ Much like in Colombia, critics of this regulatory framework argue that it benefits only foreign industry and big companies. ‘The decree [...] lacks a vision of social justice, public health and human rights. This ruling overregulates, accentuates criminalization and creates entry barriers that only large pharmaceutical companies and foreign industries could overcome’, according to one statement.³⁹

Some senators also opposed the measures; Patricia Mercado argued that the ruling does not serve the poorest, who have most suffered from the prohibitionist policy.⁴⁰ Senator Claudia Ruíz Massieu, from the Institutional Revolutionary Party (PRI), also said: ‘We do not see a balanced approach between the perspective of health, security, human rights and prevention’.⁴¹

While the government of Andrés Manuel López Obrador (known as AMLO) presented cannabis regulation as a way to remove organised crime from the marijuana business, critics say this regulation excludes smaller operators in the production chain by imposing high standards and conditions, making it impossible for small and medium actors to enter the market. The decree, for example, calls for testing and traceability tests, and imposes expensive packaging requirements, making it extremely difficult for farming communities to get involved. It also overregulates some processes, such as requiring a license and verification process to cultivate cannabis for personal use, and criminalises minor infringements such as exceeding the allowed amounts for personal consumption.⁴²

In a webinar organised by various NGOs, Alejandro Madrazo, director of the Centre for Economic Research and Teaching (CIDE), said that far from representing an alternative development option for peasant farmers, the decree implies very high investment costs for cultivation of cannabis which reduces them to the status of being employed by a transnational company: ‘The proposal is designed for the emerging international markets, at the cost of the security and rights of Mexican society’.⁴³

In both the Colombian and Mexican cases, the regulatory model responds more to the demands of the export market, which benefits mainly the corporate sector, than to the domestic needs in terms of public health and supporting vulnerable populations. The former Colombian health minister, Alejandro Gaviria, is emphatic that ‘medical cannabis is not the solution to the challenges of neither the country’s legality nor alternative development’.⁴⁴

4.5 Paraguay: just paying lip service?

Paraguay, referred to as the cannabis bread basket of the Southern Cone,⁴⁵ enacted legislation in 2019 allowing for the

development of a cannabis industry with low THC content. Decree 2725/2019 was approved by the government in October 2019, but failed to discuss its proposals with the cannabis-producing communities it claims to benefit.

Cannabis producers from San Pedro, one of the main producing regions, are said to have been happily surprised to learn the decree will benefit 25,000 small-scale community producers, allowing each family to grow 2 ha of cannabis for industrial hemp, aiming at reaching 50,000 ha in 2020. The Ministry of Agriculture went as far as to project cost effectiveness of US\$ 1,500 per hectare, and two harvests per year. After so many years of being ignored, the communities are eager to become associated with such a plan.

On 15 November 2017, the parliament approved legislation that created a national medical and scientific research programme on the medicinal use of cannabis and its derivatives. Its regulation allows for the production of cannabis for medicinal purposes, under a system of licenses and requirements that imply restrictions on the participation of small farmers. Possessing a pharmaceutical laboratory is just one of these unrealistic obligations.

The Paraguayan government has for some years been involved in policy debates on AD, particularly in cooperation with the EU-sponsored programme COPOLAD, hosting workshops in 2017 on AD and value chains. At one workshop, the Executive Secretary of the Paraguayan anti-drug unit SENAD, Hugo Vera, said: ‘As [the person] responsible for the national policy against drugs, I have first-hand experience of my compatriots’ situation, because this is one of the human sides of SENAD, a body not only in charge of the suppression of drug trafficking but also to develop alternative policies to those who, under dire circumstances, have to move to illicit crops’.⁴⁶

TNI consulted the community of San Pedro to ask whether they were aware of these two recent pieces of legislation and whether they had been approached by any government

agency to discuss their role in these initiatives. They reacted as follows:

‘The farmers, who should be a main part of the process, have not participated in decision-making, at least with one of the authorities, the Ministry of Agriculture, to analyse working methods, production planning, financial policy, use of innovative technology, creation of an experimental field by zone, seed programme, provision of tools and machinery, installation of small laboratories, transformation of raw hemp material or to consolidate the organisation of small-scale agricultural producers in cooperatives. These issues must be clarified and systematised in a development plan that integrates the government institutions involved as well as the peasant organisations, to have a horizon towards which to fight, guide and defend legally. Moreover, this could dignify Paraguayan farmers’ labour, mainly sugarcane and marijuana growers. We know perfectly well what immense productive and industrial value hemp and cannabis represent, which historically has been the best economic option from their perspective. Therefore, we must write clear rules and turn the discourse of the government –that legalisation is intended to improve the living conditions of the cannabis farmer in Paraguay– into practice. Previously, the government used the same discourse and promises when it was announced that we would convert into producers of tomatoes, sesame and cassava, as an alternative to discourage the planting of marijuana. This programme turned out to be a fiasco; producers were paid very low prices for their crops and some of the produce was lost due to the lack of markets. This situation tends to happen often in the agricultural production chain, in which the interests of large supermarkets or corporations are imposed, ignoring the immense possibilities for small producers to benefit if it were opened to all, especially the most vulnerable. Regarding medical cannabis, the law should be aimed at the patients, who are the main reason to create this new business, instead of benefiting the laboratories. If we have the right to produce cannabis, we must also have the right to produce the oil to cure diseases. We should not take advantage of the cannabis business only as a raw material, but we demand to be included ourselves as producers who could benefit from the imminent industrialisation,



Caucannabis, M. Jelsma

favouring our own market, controlling and improving the production quality, from the farm to the market, and thus avoiding the importation of cannabis products whose origin, value and quality remain unknown.¹⁴⁷

In February 2020, the Paraguayan government granted 12 licenses for the production of medicinal cannabis to companies that are already (Good Manufacturing Practice) GMP-certified pharmaceutical producers. This contradicts the declaration made by the current president of SENAD, Arnaldo Giuzzio, who tweeted that this represents ‘the insertion of this new item as it is a potential Alternative Development tool for peasant families conditioned by illegal activity’.⁴⁸

Farming communities in Paraguay that survive by growing cannabis for the illicit market seem to have been left out of the emerging medicinal and industrial markets. While the government discourse uses politically correct language, very little of it has materialised in practice.

5. Africa & Middle East

5.1 A development opportunity for the Moroccan Rif

After the initial attempts at crop substitution in Morocco in the late 1950s and early 1960s (see chapter II), attempts to tackle the issue through development programmes withered away. At the time of independence, the herbal kif market was largely domestic and regional (mainly Algeria). King Mohammed V had decided to condone cannabis cultivation around five *douars* (villages) in the Amazigh tribal areas of Ketama, Beni Seddat and Beni Khaled after quelling the 1958 insurrection in the Rif that was motivated by, among other grievances, the ban on cannabis cultivation.¹ Since the mid-1960s, observers already noted that the Moroccan government attempted to practise a policy of containment, not permitting new areas of cannabis cultivation but allowing those already in production to be maintained.²

Starting in the mid-1960s, Moroccan cannabis becomes an export product with the emergence of the counterculture in Europe and North America, which resulted in profound changes in the country's cannabis industry. Most importantly, it shifted to hashish production for the illicit European market. Hashish is less bulky than herbal cannabis, can be stored longer and is easier to transport.³ In the 1980s, cultivation increased rapidly in response to growing European demand and a declining supply from other traditional producer countries like Afghanistan and Lebanon because of armed conflicts.⁴ Before this, cannabis cultivation in the Rif probably covered less than 10,000 ha.⁵ In 1988, this had risen to an estimated 25,000 ha; by 1994, it was 55,000–60,000 ha, and in 1995 it reached 74,000 ha.⁶

For the farmers in the Rif, cannabis represented an opportunity to move rapidly from a subsistence household-based economy to a cash economy: still precarious, but substantial.⁷ Production probably peaked

Workshop cannabis farmer, OrangeHill, Westmoreland Jamaica, Vicki Hanson, August 2018



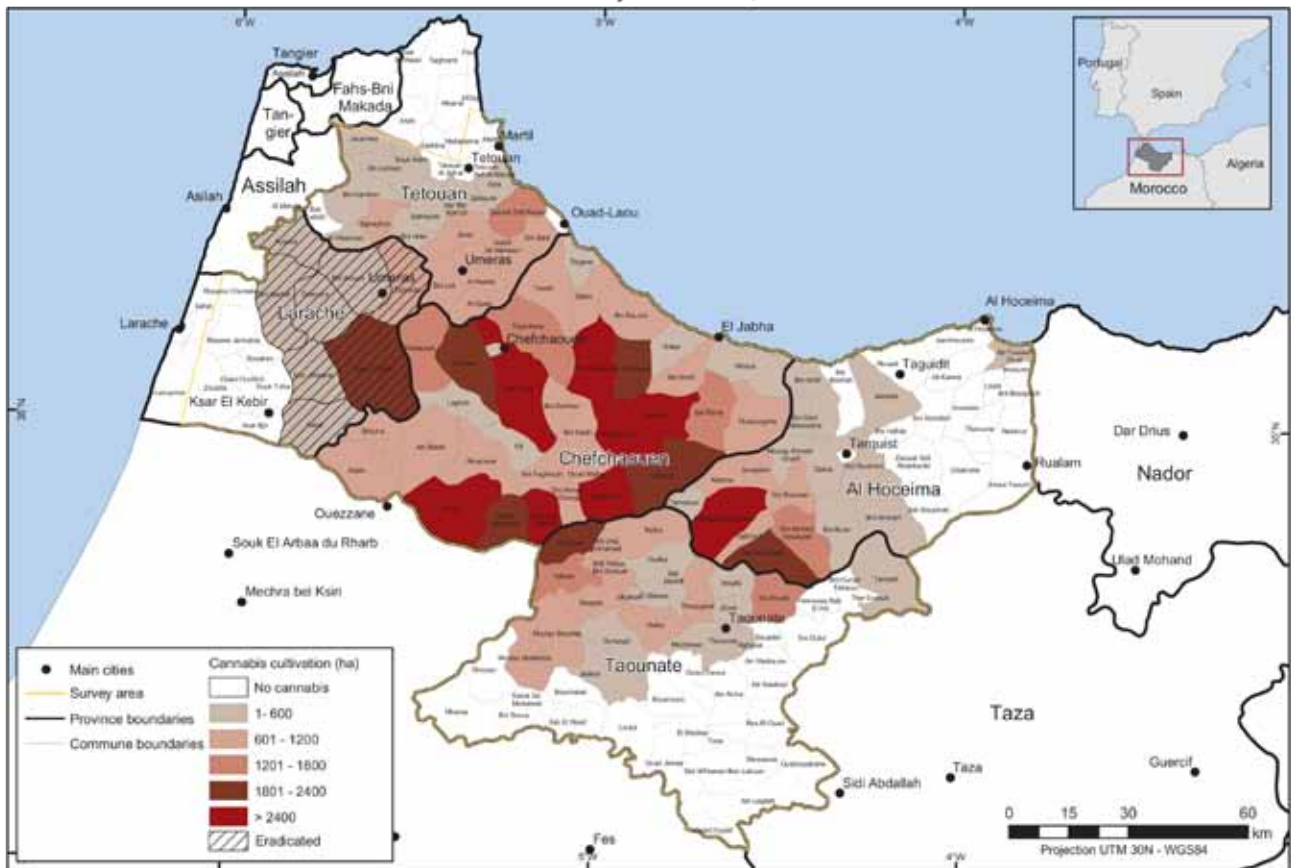
around 2003 when a crop-monitoring survey conducted by UNODC and the Moroccan government revealed that 134,000 ha were under cultivation, producing 3,080 tonnes of hashish, at a value of US\$214 million, equivalent to 0.57% of Morocco's gross domestic product (GDP).⁸ The country was considered to be the world's largest hashish producer.

At the time, cannabis was 12–46 times more profitable than cereal crops, 4–17 times more than wine grapes, 4–14 times more than olive trees, and 2–8 times more than the most lucrative alternative, figs;⁹ alternatives that, if not already cultivated, need considerable time to bear fruit. The 2003 UNODC study calculated that cannabis-cultivated land yielded 7–8 times more income than rain fed land producing barley, and 12–16 times more when irrigated.¹⁰ Cannabis income accounted for 62% of the total income from farming in the provinces of Chefchaouen and Al Hoceima, where cannabis cultivation is well established

– including the traditional cannabis-cultivating heartland – and where some villages are even characterised by cannabis monoculture.¹¹

The results of the third Moroccan cultivation survey in 2005 showed a significant decline, from the 134,000 ha reported two years before, down to 72,500 ha with an estimated production of just over 1,000 tonnes. The drop in production was attributed in the survey report to a drought and to forced eradication campaigns by the Moroccan authorities. Discrepancies between the figures, however, led to tensions between the Moroccan government and UNODC. The authorities claimed to have eradicated 12,000 ha – out of a total 15,160 eradicated ha – in Larache province, one of the newer cultivation areas far beyond the traditional areas in the Rif and where the crop survey had detected less than 4,000 ha prior to eradication. The UNODC office in Morocco closed in 2006, the 2005 survey was still published in January

Morocco - Northern Provinces: Cannabis Cultivation by Commune, 2005



Source: Government of Morocco/UNODC Cannabis Survey 2005
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Figure 1: Cannabis cultivation in the Northern Provinces of Morocco.¹²

2007 but without a preface by the Moroccan government or UNODC, and there have not been any further joint surveys.¹³

Since then, owing to surplus production as well as international pressure, several years of repression ensued, with arrests of market operators and crop eradication – using slash-and-burn campaigns and herbicide spraying¹⁴– cannabis-producing areas have declined around a stable amount of 47,500 ha since 2011,¹⁵ although that government figure remains controversial since it does not state how the data are collected. There is currently no reliable information on the exact areas under cultivation, the scale of cannabis cultivation, or the amounts of hashish produced.^{16,17} The reason that the authorities were able to reduce cannabis cultivation in Taounate and Larache was that those regions had only recently started to produce cannabis on lands that had previously been under commercial agriculture. In Larache, for instance, on average only 15% of total household income depended on cannabis, and in Taounate 33%, according to the 2003 UNODC study.¹⁸ Neither region had a history

of household cannabis cultivation as existed in the High Rif, but had been commercially exploited lands relying on agricultural labourers.¹⁹

The reduction in the area under cannabis cultivation has had only a limited effect on overall production of hashish. This is due both to the introduction of new agricultural methods, and a shift by Moroccan growers towards new, hybrid cannabis varieties that are more potent and have a significantly higher yield than the original landraces previously used.²⁰ With two or even three crops a year, growers are able to produce about 35,000 tonnes of cannabis annually, which, after processing, accounts for 713–714 tonnes of cannabis resin (hashish).²¹ This rapid increase in illicit cannabis cultivation in the Rif has taken a heavy toll on the region’s already threatened forests and fragile ecosystem.²² The switch from the mostly rainfed original local *beldia* landraces to systematically irrigated new hybrid varieties, imported from industrialised countries, jeopardises the region’s scarce water resources, as well as further damaging the

People of the Basotho nation smoking dagga, present-day Lesotho, Southern Africa, H.V. Meyerowitz, 1936



quality of the soil, aggravated by the extensive use of non-organic fertilisers.²³

The Rif is an environmentally fragile region and one of the poorest and most densely populated in Morocco. Deforestation, the fragile water and soil conditions as well as demographic pressure – due to the relative ‘prosperity in poverty’ generated by the cannabis economy – were already mentioned in FAO reports in the 1960s and subsequent studies, and the ecologically destructive and increasingly intensive industrialised production methods have only worsened the situation.^{24,25,26} The Rifan economy has become addicted to cannabis cultivation and local people are inadvertently destroying their land in the process, a study concluded.²⁷ Obviously, not all social and environmental problems are attributable to cannabis, but the current unregulated and unsustainable cultivation methods contribute significantly to a situation that was already precarious.

While the government has been largely successful in containing traditional cultivation areas,²⁸ in the last 50 years the remaining cannabis growers have shown remarkable resilience to government attempts to eradicate or reduce cultivation and to adapt to changes in the international market.²⁹ According to figures cited by the interior ministry, based on the data from the UNODC studies in the mid-2000s, an estimated 90,000 households, or 760,000 Moroccans, depend on cannabis production, which is currently concentrated in the northern Rif regions of Al-Hoceima, Chefchaouen and Ouazzane.³⁰ Other observers estimate that 140,000 households are involved in cannabis cultivation, meaning that more than a million people depend on the illicit economy.³¹

Prosecution for cannabis-related offences in Morocco doubled from around 25,000 in the first half of the 2000s to more than 50,000 in 2013.³² The resulting insecurity is a source of corruption and repression, and growers are at the mercy of local village authorities and law enforcement officials.³³ Amnesty for cannabis growers was an important issue during

recent election campaigns. Hamid Chabat, the secretary-general of the Istiqlal Party, said that nearly 80,000 cannabis growers were released on bail and risk returning to prison at any time if they are involved in the cultivation of cannabis, while the ‘corrupt and money launderers enjoy amnesty’. He added that most of these small growers being prosecuted lack identity documents and cannot exercise their voting rights.³⁴

The country’s revenues from the cultivation and trafficking of hashish are very significant, outstripping earnings from tourism, so it is difficult for substitution crops to become established, according to representatives of the mini-Dublin group of the Council of the European Union in 2016.³⁵ There was consensus on the need to provide more assistance to Morocco in this field, but the few AD projects undertaken in the Rif have failed to reduce or even contain cannabis cultivation in the region and some reportedly even had counterproductive consequences:

One such project, for example (PMH Nord project led by AFD between 1997 and 2002, at a cost of 4 million Euros), aimed at reducing cannabis cultivation in an area by extending an irrigation perimeter and by modernizing irrigation techniques. Although such a phenomenon had already happened with opium poppy cultivation in southern Afghanistan and in other countries, the project eventually led to an increase of cannabis cultivation after the farmers chose to irrigate cannabis fields rather than alternative crops. Coupled with a misunderstanding or ignorance of what is basically a new cannabis economy, a limited knowledge of the past failures and limitations of alternative development programmes is of course a real concern for the region.³⁶

While Moroccan hashish is mainly destined for the European market, there are major inconsistencies in the EU development strategy towards Morocco, or rather conflicting goals. Controlling migration from Morocco is high on the EU agenda and increasingly so given the current anti-migrant

sentiment in many EU member states, but eradication of the cannabis economy will almost certainly increase migration.³⁷ The EU strategy is to link development to migration policies, and economic development is aimed at generating employment in order to ‘fix populations in the main migrant sending regions’.³⁸ These policies are inconsistent and the priority is given to the interests of EU member states; licit agricultural development has been severely impeded by EU protectionism, in particular by its Mediterranean member states regarding the export of citrus fruits, olives and wine.

‘The only way to eradicate cannabis is to convince the Europeans to smoke carrots’, an evaluation of the EU’s development and poverty-reduction programmes concluded.³⁹ ‘The official ban has in fact encouraged the criminalisation of the growing and trade of cannabis and the creation of mafias in northern Morocco’, the report says. ‘Legalising cannabis would circumvent mafias and increase farmer’s profits’, but the issue of a legal recreational cannabis market, and even more so the export of Moroccan cannabis to European markets, is a no-go area among EU member states and European Commission officials, given the widely diverging domestic policies in the EU, from zero-tolerance in Sweden and France to attempts to legally regulate the cannabis market, as announced in Luxembourg and experimented with in the Netherlands. That said, Luxembourg and the Netherlands exclude imported cannabis, which has to be supplied domestically. There is no expectation of a swift resolution of the issue, and EU and domestic policymakers will probably avoid even discussing it.

Cannabis for medicinal and industrial use, however, might have a better chance of being legalised, although there is currently no such industry except for some limited production for domestic cosmetic products.⁴⁰ Since 2008, the possible legalisation of cannabis for pharmaceutical and industrial use has been debated in Morocco, initially led by Chakib El Khayari, former president of the *Association Rif des droits humains* (ARDH) and spokesperson

of the *Collectif marocain pour l’usage médical et industriel du kif* (CMUMIK).⁴¹ Both the *Parti authenticité et modernité* (Modernity and Authenticity Party – PAM) and Rifian deputies of the *Istiqlal* party support the legalisation and regulation of cannabis for pharmaceutical, medicinal and industrial purposes. In 2013 proposals advocated by El Khayari were incorporated in legislation proposed by both parties.⁴² The PAM called for the establishment of a ‘national agency for the culture of cannabis’ in charge of selling cannabis crops to industrial and pharmaceutical companies. However, the question of legalising cannabis has since been the subject of rivalries between the PAM, with strong roots in the Bab Berred region, and the *Istiqlal* Party, in the Ketama region, as well as between various other regions of the country.⁴³ Many promises are made to tackle the problem during election campaigns, quickly forgotten when the campaigns are over.⁴⁴

The growers, however, are convinced that the proposed legislation will be inadequate since it makes no reference to hashish for the recreational market, their main source of income. Currently, the situation is characterised by tension and distrust between the different stakeholders, while the growers remain vulnerable and too disorganised to be properly represented in the political decision-making process. Moreover, among the cannabis-growing communities there is a tension between those in the traditional heartland in the Rif (Ketama-Bab Berred-Chefchaouen in the High and Middle Rif) and more recent growing areas in Taounate (the Lower Rif to the south) and the most recent area around Larache. Growers from the traditional region, such as those represented by Abellatif Adebibe, president of the *Association Amazighe de Sanhaja du Rif*, claim their perceived historical right to cannabis cultivation, while dismissing the claims of other regions.

Nevertheless, in 2017, the *Conseil Economique, Social et Environnemental* (Economic, Social and Environmental Council – CESE),

an independent Moroccan consultative institution created in 2011 by Royal Decree to conduct studies and make proposals to the Moroccan government and the two chambers of parliament, recommended in a report on rural development in the mountainous areas ‘resolving the cannabis issue’, while recognising that the plant was one among the untapped ‘riches’ of the Rif and indicating that its potential ‘[has] not been sufficiently developed through the implementation of appropriate strategies to generate wealth for local populations’.⁴⁵ The report did not elaborate on how to do this, however.

A consensus seems to be gradually emerging. A few years later, another commission tasked with finding a new national development model, the *Commission spéciale sur le modèle de développement* (CSMD), also addressed the cannabis issue in its broad mandate. In February 2020, members of the commission travelled to the Rif to hear the views of the cannabis-growing communities. Community representatives told the commission in no uncertain terms that ‘either the new model clearly proposes the legalisation of cannabis cultivation in the northern region of Morocco, or it prohibits it once and for all, on condition that an alternative be set up which would serve as a secure and sustainable

source of income for the inhabitants of the region and which would enable them to emerge permanently from a perpetual state of precariousness’.⁴⁶ In a subsequent hearing in July, experts in the field recognised that the repressive approach to cannabis growers is not working, and the meeting focused on how to better exploit the plant’s therapeutic and recreational virtues. ‘Faced with this problem, everything has been tried and nothing has worked. You can’t go against the tide. Now we have to make a choice’, one participant commented.⁴⁷ By the end of January 2020 the CSMD presented its conclusions to the King, and although they have still not been made public, it is assumed their findings reflected what was to follow.

The first sign that Morocco was preparing a policy change on cannabis was the vote cast at the UN Commission on Narcotic Drugs Reconvened in December 2020, in favour of a WHO rescheduling proposal, recognising some of its medicinal potential.⁴⁸ Soon afterwards, towards the end of February 2021, a proposed law on cannabis production for medicinal, therapeutic and industrial purposes was presented to the government council, which approved the bill on 11 March. Although it has not yet been officially translated from Arabic, some of its content is known.⁴⁹ Most



Youth with local mayor in Azilla, High Rif, Morocco, Pien Metaal



importantly, Bill 13-21 will not allow any activity related to recreational cannabis, but seems to take into consideration the situation of the traditional cannabis growers in the Rif, limiting the authorised areas of cannabis cultivation to six zones across the kingdom. The exact authorisation of those areas will be determined later by a decree, and are expected to include the traditional cultivation areas tolerated in northern Morocco,⁵⁰ under the supervision of an exclusive National Agency. That National Agency will have broad administrative, implementing, and inspecting powers through a licensing system obliging farmers to form cooperatives and to enter into agreements to sell their crops to Agency-approved private processing and export companies under Moroccan law. Cooperatives of growers are obliged to plant exclusively Agency-approved cannabis strains. A prison sentence ranging from three months to two years, and fines from 5,000 to 100,000 dirhams (USD 555–11,111) will be applied to anyone planting without a permit, for illicit use, or not respecting permitted quantities.

According to an expert observer, there is a need to be realistic about the impact of the bill: ‘in the first instance, the authorities will

not be able to authorise more than 10% of the current areas. Their production will be more than enough to satisfy the market share to which the Kingdom could aspire initially’. The expert estimates that 5,000–8,000 ha could now be legally cultivated, of the estimated 73,000 ha currently illicitly cultivated for recreational use. Morocco could produce some 10,000 quintals (1,000 tonnes) of cannabis for medicinal and therapeutic use. ‘This is all that the market capacity currently allows, knowing that 95% of the world demand comes from North America, a market that has been locked up until now’, according to this source.⁵¹

The legalisation of medical and/or recreational cannabis in Morocco will certainly not be an economic panacea, as Pierre-Arnaud Chouvy, a long-term observer of the country’s cannabis industry, remarks.⁵² A legal cannabis market will not necessarily increase the scarce natural, material and economic resources of the Rif and its population, but it will have the undeniable advantage of ending the illegality, and alleviating the marginalisation of cannabis growers. With legalisation and the expungement of criminal records for non-violent cannabis-related crimes, there will be less corruption. Importantly, it could substantially increase the opportunities to preserve the region’s fragile ecosystem with better management of the forests, soil and water, provided the right complementary policies are included in the legal regulation of cannabis. Ultimately, the legalisation of cannabis would contribute to integrating the Rif with the rest of Morocco and promote its economic, social and political stability, as well as in Morocco as a whole, and even in the EU.

5.2 Lebanon – Cannabis and development in the Bekaa valley

Confronted with skyrocketing unemployment and slow growth since 2011, when civil war broke out in neighbouring Syria, Lebanon contracted the consulting firm McKinsey & Co. on how to revive the country’s economy. With public debt at more than 150% of GDP at the end of 2017, Lebanon’s debt-to-GDP ratio is

the third largest in the world.⁵³ The Syrian war also contributed to yet another cyclical boom in the illicit cultivation of cannabis. Growers claim the trade increased by 50% since 2012, as the authorities turned their attention to border security.⁵⁴ Today they bring in an estimated US\$175 million–US\$200 million a year, exporting to the Gulf, Europe, Africa and North America. According to UNODC, Lebanon is the world’s third largest exporter of cannabis resin (hashish).⁵⁵

One of McKinsey’s recommendations was to legalise cannabis cultivation for export-oriented medicinal purposes in an effort to boost Lebanon’s troubled economy.⁵⁶ The plan aims for the near-elimination of illegal cannabis cultivation by 2035, with the majority of growers being licensed and overseen by the government.⁵⁷ The proposal gained weight when Raed Khoury, the caretaker Minister of economics, endorsed the plan. ‘The quality [of cannabis] we have is one of the best in the world’, Khoury said, adding that the industry could be worth US\$1 billion. On 21 April 2020, the Lebanese parliament passed Law 178/20 regulating the cultivation of the plant for medicinal and industrial purposes. While the law regulates the cultivation and manufacture of cannabis for these uses, Lebanon’s Narcotics Law 673/98 remains intact, prohibiting domestic cannabis use, even for medicinal purposes. The future cannabis products are regulated only for export.⁵⁸

According to many analysts, the plan is flawed, in particular regarding the development perspective for the current traditional growers in the Bekaa, despite the stated objective of the law to achieve ‘sustainable development in the areas negatively affected by the illicit cultivation of the cannabis plant’.⁵⁹ One problem is that the law only allows cannabis containing a percentage of THC that has yet to be specified. In the draft bill, the maximum THC content allowed was 1%, while the illicit Lebanese cannabis contains up to 18–20% THC.⁶⁰ In the existing law, the THC content has to be specified by a decree. Another problem is that the bill

excludes anyone with a criminal record from obtaining a cannabis license, which would effectively rule out most of the current traditional growers.⁶¹

Rather than benefiting from the law, the farmers whose livelihood relies on the plant would be cut out. Under the Narcotics Law 673/98, there are about 42,000 outstanding arrest warrants – mainly for offences linked to the drug trade – and many pending trials against farmers and residents of the Baalbek–Hermel region.⁶² The government promised to pass an amnesty law but political infighting prevented this. The proposed amnesty aimed to facilitate the release of incarcerated people from overcrowded prisons, but few cannabis farmers can expect a clean record through this measure.⁶³ According to the Lebanese NGO Legal Agenda there are about 5,000 arrest warrants a year issued against cannabis growers.

Cannabis farmers were not consulted or even informed about the law and what it exactly would entail. The law is detached from the everyday reality in Lebanon, and there is considerable confusion about its specifics even among the legislators.⁶⁴ According to Kanj Hamade, an Assistant Professor of Agricultural Economics and Rural Development at the Lebanese University, Law 178/20 is more appropriately characterised as a *crop-substitution* rather than a *legalisation* initiative.⁶⁵ In his view, the conditions for cannabis cultivation set out in the law are similar to the unsustainable crop-substitution programmes of the 1960s and 1990s.

In an earlier analysis of the McKinsey plan, Hamade had already argued that ‘the establishment of a state monopoly for cannabis production, similar in its mechanism to the tobacco monopoly, is likely to have a high negative impact on rural areas. The state and – more importantly – the traders that will benefit from cannabis trade concessions are likely to control and receive most of the wealth generated by the production, while farmers will be left with little’.⁶⁶ The legalisation of a different variety of cannabis,

with imported seeds from abroad as Law 178/20 seems to imply, would undermine the local knowledge and (agri)cultural heritage and lead to the exclusion of the traditional cannabis growers.

Just allowing a different strain of cannabis would make it unattractive for current growers to switch to the future licit medical cannabis market. Due to the devaluation of the Lebanese lira, importing seeds in hard currency would be even less feasible without proper support. The same is true for the costs involved with acquiring certificates of Good Agricultural and Collection Practices (GACP) and Good Storage Practices (GSP) for cannabis plants, required by the new law. Consequently, the proposed set-up under Law 178/20 is likely to ensure the survival of the illicit market as traditional growers have no incentive to enter the future licit market.

The real added value of Lebanese cannabis is in the current local strain used for recreational purposes, according to Hamade. The reputation of the Lebanese hashish on the current international markets is due to this strain, so legalising a different type of strain precludes benefiting from the potential of the available genetic resource. In his opinion, a better economic plan would have been to legalise the trade of the plants that are currently grown and for which the country is known, and develop a strategy around the industry, which could include tourism and rural development.⁶⁷ The 'legalisation' process and the law itself were not shaped as part of an urgently needed sustainable rural development strategy, or a national drug policy strategy, but as a means for the debt-ridden government to collect revenue and to consolidate current (local) power structures in the country.

Moreover, some observers fear the plan's popularity among the elites could be based on the potential for a few to make a lot of money, rather than to achieve social and economic progress.⁶⁸ The decrees implementing Law 178/20, could be used as a tool to reinforce the system of allocations and clientelism by

designating the geographic areas where the cannabis is allowed to grow. Since the law does not determine clear criteria, the decision by decrees increases the risk of political allocations, meaning the permitted areas would be decided depending on the residents' religious and political affiliation rather than the historical growing areas and/or land-use conditions.⁶⁹

The commission tasked with regulating the market and granting licenses to companies that the government intends to establish will be self-financed from the licensing fees, which opens the door to corruption and financial gain rather than social-economic criteria and benefits for traditional growers. According to some observers, Lebanon's elites are looking to exploit a cannabis cultivation industry based on export, eliminating existing small-scale traditional growers from the process, leaving those communities behind and blatantly ignored.⁷⁰

5.3 Sub-Saharan Africa – overview of policy changes

In sub-Saharan Africa (SSA), Ghana and Malawi legalised cannabis for medicinal and industrial purposes in March 2020, joining Lesotho, South Africa, Zimbabwe and Zambia. Rwanda followed in October 2020, announcing talks with four European and North American companies about growing and processing cannabis for export to meet rising pharmaceutical demand; all cannabis produced would be strictly for export and the domestic ban would remain despite the new policy allowing its production.⁷¹ With the exception of South Africa, the legalisation of cannabis in SSA countries is limited to medicinal and industrial use solely for export purposes, and with the intent to sell the licenses to mainly European and North American companies. The licensing processes are often rather opaque and formal regulations lacking or published after the fact, for instance in the Democratic Republic of the Congo (DRC) and Uganda, where foreign companies managed to acquire licenses.⁷²



Local farmers unleafing the cannabis harvest, Mpondoland, Pien Metaal, may 2018

In such processes, post-colonial elites are ‘dispossessing the citizens of these countries of access to the increasingly legal, global cannabis economy. Cannabis policy reforms in the Global North have allowed legal wealth generation by private companies and publicly traded corporations. These businesses have paid African governments for policies that allow them to cultivate cannabis for export, through the payment of licensing fees that are too expensive for most citizens of the countries to pay’.⁷³ In a way, they are reproducing colonial policies. Cannabis was initially legal under colonial governments from the 1870s to the 1880s, trying to turn existing indigenous cannabis economies into revenue-generating businesses, first by taxing pre-existing domestic markets and subsequently by attempts to export cannabis to their own pharmaceutical markets, without building on indigenous capacity.⁷⁴

South Africa authorised marijuana for medicinal use in 2017, and is currently the only African country that was forced to permit the recreational use of cannabis, or dagga, by a ruling of the Constitutional Court. In

September 2018 the Court decriminalised the use, possession and cultivation of cannabis by an adult for their personal consumption in private.⁷⁵ The Court left it to parliament within 24 months to address the constitutional shortcomings in the Drugs Act and Medicines Act. However, the draft Cannabis for Private Purposes Bill, tabled in September 2020, does not take account of the existence of a subsistence economy for more than 200 years, with many small-scale farmers relying on cannabis for their livelihood. Much of this production is in the Mpondoland region of the Eastern Cape, the cannabis belt of South Africa, and one of South Africa’s least developed regions where public services are scant and cannabis is grown, mainly by women, as the only cash crop.

Despite recent developments towards liberalisation of cannabis in South Africa, there is little hope among farmers – to the extent that they are even aware of these changes – that the policy will benefit them. Instead, they see the playing field tilted towards big companies and foreign investors with the capital and political connections

to apply for medical licenses. As one farmer states: ‘Our people feel betrayed, because all of the licenses are being issued to companies from elsewhere, while we who have been growing this plant here for generations, who have the skills, who have the knowledge, who have the land, are still being criminalised’.⁷⁶

Moreover, traditional leaders from the amaMpondo nation and cannabis farmers in the Eastern Cape are dissatisfied with the draft Cannabis for Private Purposes Bill, which proposes, among other things, that a household will be allowed to have only up to eight plants for private use. The Bill also caps private, personal possession of cannabis at 600g a person, or 1.2kg of dried cannabis per household. Trading in the plant carries a potential 15-year jail sentence.^{77,78} These conditions work against the traditional growers that have supplied the illicit market for decades. ‘It was better when the ganja was illegal, now we are told the ganja is legal but it is not’, a grower said. ‘There is no way that I can plant four plants or twelve plants. There is no family that can survive by four to twelve plants’.⁷⁹ Traditional growers call for a comprehensive consultation process that should be extended to the indigenous cannabis farmers in remote rural areas.

Meanwhile, urban entrepreneurs in South Africa have the chance to set up ‘grower clubs’ that provide a service to grow, dry and deliver cannabis for urban consumers who lack the space and/or knowledge to do so,⁸⁰ not unlike the cannabis social clubs that have developed in Spain since the late 1990s.⁸¹ In this ‘grow club model’ the cannabis plant is owned by club members, who buy their own seeds, while the cultivation and processing is outsourced to the ‘club’, at a fixed price and provides ‘the opportunity to participate meaningfully in the cannabis value chain’.⁸² However, in early 2021 a prominent ‘grower club’, The Haze Club (THC), was raided by the South African Police Service (SAPS), and the managers were arrested and charged with possession of a trafficable amount of cannabis. Officers confiscated 344 plants; all of the members’ plants and cannabis were destroyed. The

owners announced they would seek a high court ruling on the legality of grow clubs.⁸³

In theory, if allowed, the model could be open to rural growers, but it is hard to imagine how a decades-old model of traditional family-based growing communities can adapt to and overcome the multiple obstacles, such as the logistics to deliver the cannabis from remote rural areas, and the cultural, socio-economic and legal aspects of a very different production model based in a dynamic urban setting. In practice, this potential urban cannabis-production model is more likely to replace ‘old-fashioned’ rural cultivation and distribution, unless a mutually beneficial agreement is reached in which ‘craft’ cannabis from traditional areas is included, and adequately protected and remunerated.

Further to the north, in eSwatini (formerly known in English as Swaziland), a major supplier for the South African illicit recreational cannabis market for decades, developments have been no better for traditional growers. Moreover, it shows that transnational companies in their relentless quest to obtain licenses abroad to boost their value on the stock exchange and with investors, with no regard for local circumstances, seriously disrupt the peace in poor African nations. In 2019, the US companies Profile Solutions Inc. and Stem Holdings reported they had ‘received preliminary approval to become the only licensed growing farm and processing plant for medical cannabis and industrial hemp in The Kingdom of eSwatini for a minimum of 10 years’. The latter would be ‘the exclusive exporter within eSwatini for hemp and medical cannabis worldwide’.⁸⁴ Apparently, King Mswati entered into the deal with Stem Holdings and only afterwards was legislation introduced.⁸⁵ At the time, ministries declared that they had not awarded any license.⁸⁶

Parliament refused to approve the new Opium and Habit-Forming Drugs (Amendment) Bill that would have allowed the Stem Holdings deal in June 2020 due to a lack of consultation with important ‘stakeholders’, including the

existing illicit growers and traditional leaders who govern on communal land, which is about 54% of the country.^{87,88} In contrast, ten local and international companies, including some from Israel and the US, had been allowed to present their projects before the select committee tasked with considering the amendment of the law.⁸⁹ The withdrawal of the bill threatened the existence of the now controversial Stem Holdings project, and local newspapers allege that the police came down on dagga farmers, manipulating provisions of the recently adopted Prevention of Organized Crime Act (POCA).⁹⁰

In July 2020, after a series of POCA-enabled raids by law enforcement, the parliament moved to suspend it and determined that a new bill should be prepared to amend sections of POCA to address a number of concerns, such as the confiscation of property based on suspicions (without knowing the individual's exact source of income) and selective application of the law, which seems to target alleged cannabis growers and dealers without proper investigation and without affording suspects the right to a fair hearing.⁹¹ The MP Bacede Mabuza, held responsible for parliamentary actions against both laws, was arrested. According to the eSwatini human rights lawyer Sibusiso Nhlabatsi the POCA has been used to excessively target cannabis farmers and traders.⁹² It is apparent, Nhlabatsi says, that the incidence of raids on cannabis farmers' properties increased immediately after the Opium and Habit-Forming Drugs (Amendment) Bill was rejected in Parliament. 'Ever since the bill failed, it appears there is an overt campaign to say, "You can't be dealing in dagga anymore"', says Nhlabatsi. 'It is like they are trying to protect someone who has an interest in the business of dagga'. Cannabis growers allegedly threatened to burn down forests and sugarcane fields as revenge for the burning of dagga fields and seizing of their properties by the state.⁹³

'The cannabis that has become legal in Africa is not the cannabis that has benefitted African farmers', writes Chris S. Duvall, who has extensively studied cannabis and



Local farmers cleaning cannabis, Mpondoland, South Africa, Pien Metaal, may 2018

development in Africa.⁹⁴ 'Reported licensing fees have been tiny relative to the value of the Global Northern cannabis industry, yet far exceed what most citizens of the relevant countries could pay for the opportunity to grow cannabis legally', he notes. The neo-colonial character of the current cannabis reforms excludes policy reforms to allow casual growing, possession, or use for citizens, except, reluctantly, in South Africa. 'At present, cannabis liberalization has demonstrably benefitted few Africans, but has bolstered the prospects of many Global Northern companies and shareholders active in the stock exchanges in Toronto, Tel Aviv, and Frankfurt', according to Duvall. 'Foreign capital is being used to exploit the continent's resources – land, water, labour, and cannabis – rather than to offer meaningful opportunities for Africans to accumulate wealth.'

6. Alternative Development *with Cannabis*

6.1 Medicinal cannabis revival

As earlier chapters have made clear, after a century of repression initially promoted by colonial regimes but perpetuated by the UN drug-control treaty regime, the market for medicinal cannabis has recently experienced a revival and spectacular growth. According to the INCB, *'particularly since 2015, an increasing number of countries have started to use cannabis and cannabis extracts for medical purposes as well as for scientific research and have also authorized the cultivation of cannabis'*.¹ In 2000, total licit production of cannabis as reported to the INCB was 1.4 tonnes, by 2015 it stood at 100 tonnes, increasing exponentially to 289.5 tonnes in 2018. For 2019, the latest year for which figures are available, licit production of 468.3 tonnes was reported. These figures do not include the largest US market, since medicinal cannabis is still not permitted at the federal level and state-level licit production is not reported to the INCB – despite treaty requirements to provide statistics for the entire territory of a signatory party.

In Israel, the state of California, Canada and the Netherlands, cannabis for medicinal use has been permitted since 1992, 1996, 1999 and 2001 respectively, but in the past decade there has been a wave of legislative reforms around the world. In the US, 36 States and four 'territories' (District of Columbia, Guam, Puerto Rico and US Virgin Islands) have passed laws permitting medicinal use of cannabis or CBD.² A world overview reveals the true magnitude of the policy trend: in Europe (Austria, Belgium, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Lithuania, Luxembourg, Malta, North Macedonia, Norway, Poland, Portugal, Slovenia, Spain, Switzerland, United Kingdom); Oceania (Australia and New Zealand); Latin America (Argentina, Chile, Colombia, Mexico, Paraguay, Peru, Uruguay); the Caribbean (Antigua and Barbuda, Aruba,

Cannabis field, High Rif, Morocco, Abdellatif Adebibe, august 2020



Barbados, Belize, Bermuda, Jamaica, Puerto Rico, St Vincent and the Grenadines, Trinidad and Tobago, the Virgin Islands); Africa (eSwatini, Ghana, Lesotho, Malawi, Rwanda, South Africa, Zambia, Zimbabwe, and Morocco and Uganda on the brink); and Asia (India, Sri Lanka, the Philippines and Thailand). All these jurisdictions have passed legislation in recent years permitting some form of medicinal cannabis, albeit most with quite restrictive access. There is a wide variety in terms of what type of cannabis-based products are permitted; whether domestic production is regulated or the regime only allows imports; whether production is only meant for local consumption or also for export; or whether self-cultivation for medicinal use is permitted or access is only granted through pharmacies. In almost all of these countries there are many shortcomings in the regulatory frameworks, severely limiting patients' access as well as creating barriers to entry for small producers especially from the traditional cannabis-producing countries.

This chapter explores the threats and opportunities for pushing the emerging legal market into a more inclusive direction, introducing social justice, fair trade and sustainable development principles to facilitate access for small, traditional cannabis growers. In order to explore the feasibility and potential of medicinal cannabis as a legal value chain for Alternative Development, first the very distinct characteristics of the various products and associated regulatory frameworks need to be clarified. Roughly, the emerging market can be divided into:

(1) *Pharmaceutical preparations made from purified cannabinoids, either plant-extracted or synthetically produced, such as Sativex® (a 1:1 mixture of purified dronabinol/ Δ^9 -THC and cannabidiol/CBD, also referred to as 'nabiximols'), Marinol® and Syndros® (purified pharmaceutical-grade dronabinol/ Δ^9 -THC), and Epidiolex® (purified pharmaceutical-grade cannabidiol/CBD).* These are highly standardised and expensive controlled medications, brand-named, patented and produced by pharmaceutical

companies. Their effectiveness has been proven in controlled clinical trials following the principles of certification and quality guarantee applicable in Western medicines. In practice, however, they are available only on prescription to certain patients with very specific medical conditions and mainly in Europe and North America, after receiving approval from the Food and Drug Administration (FDA) in the US or the European Medicines Agency (EMA) for the EU, or national regulatory authorities in individual European countries or elsewhere. This represents an important segment of the global medicinal cannabis market with regard to advances in research, acceptance of cannabis-related substances within 'Western' medicinal culture and practice for specified medical conditions. Without doubt, this is the most favoured segment of the market for UN and national drug-control agencies whose primary concern is to separate medicinal cannabis from the illicit market. While important, in global terms it represents a relatively small market, largely dominated by principles of 'Western' medicinal practices and commercial interests of the main pharmaceutical industries that offer few prospects in terms of a more inclusive global medical cannabis market either for small producers or for the majority of people worldwide who could greatly benefit from better access to medicinal cannabis and more affordable prices.

(2) *Cannabis flower or whole-plant extracts as prescription medicines, either directly or as the basis for 'magistral formulas'; while common practice in North America, only few other countries have formally sanctioned herbal cannabis as a medicine, and mostly via exceptional schemes, magistral formulas prepared by pharmacists or after court rulings allowing cultivation for personal medicinal use (e.g. Germany, Mexico, South Africa). The WHO critical review on cannabis and cannabis resin refers to various medical cannabis programmes where natural cannabis products have been fully authorised, stating that by November 2017, 'medical cannabis can be used legally in Australia, Canada, Chile, Colombia, Germany, Israel, Jamaica, The Netherlands, Peru,*

and in 29 US states'.³ International trade has been severely restricted by often incompatible quality standards, and few importing countries. 'Primarily led by established medical markets in Israel and Germany', Canadian exports, however, tripled in 2020 when 'a grand total of 13,849 kilograms of dried flower and 10,494 litres of cannabis oil was exported'.⁴ Also Bedrocan, the state-licensed company in the Netherlands, tripled its exports of dried flower since 2018, mainly to Germany. With international trade starting to open up, there are clearly opportunities for traditional producers because 'with cost per gram being the highest driver of sales, experts say Canada will likely lose out in the medium-to-long term to competitors in countries like Colombia and Uruguay where the climate is ideal for growing and labour costs are much lower'. With the proper Good Agricultural and Collection Practices (GACP) in place to meet the high standards of the destination markets, it may also offer opportunities for small farmers and cooperatives in Africa or the Caribbean.

(3) *Cannabis as part of traditional herbal medicines practices.* As a 2015 WHO global survey revealed, most countries have adopted regulatory systems that allow the use of herbal medicines that do not meet the same requirements as those for pharmaceutical medicines.⁵ As the EMCDDA explains, 'manufacturers of traditional herbal medicines with well-established uses are not usually required to provide evidence of efficacy and safety from clinical trials. Instead, they are required only to show evidence of product quality and consistency to ensure that consumers receive standardised doses of herbal products that are free from contaminants and adulterants. [...] The justification for this minimal regulatory approach is that herbal medicines have histories of traditional or well-established use, generally in the absence of reports of serious adverse events'.⁶ To date, however, very few countries (Jamaica, South Africa, Thailand) have regulatory exemptions in place for cannabis-based traditional and herbal medicines, due to their strict classification as narcotic drugs under the UN treaties and consequently under national drug-control laws.

(4) *Low-THC / CBD products* (health products, dietary supplements), especially in Europe, have been one of the fastest-growing cannabis-related markets, derived from hemp cultivation. In 2011 Switzerland increased the limit defining how a cannabis plant is classified under the Narcotics Control Act from 0.3% to 1% THC, and 'following the expansion in the sale of low-THC cannabis products in Switzerland, similar situations arose in neighbouring countries'.⁷ In 2017, new products appeared on the market in Austria and Italy, before spreading across Europe from 2018. 'While cannabis-themed products can now be found in everyday retail outlets, such as health food chain stores, chemists and cafes, there are also dedicated shops selling low-THC cannabis products'.⁸ Concerns about inconsistent content (including THC levels above the threshold), potentially poor product quality, presence of contaminants (pesticides, fungi), and inadequate product labelling; and legal uncertainty about permitted THC thresholds and whether these new products should be considered as falling under drug control, medicines, herbal medicines, dietary supplements or 'novel food' regulations, led to market interventions by regulatory authorities in several countries. The classification of CBD products under the UN Conventions subsequently became a major issue in the WHO review of cannabis-related substances, and their legality was questioned by the INCB, which took the position that CBD preparations are under international control, no matter their source or how low the THC content. Once the legal status is clarified and proper quality controls put in place, however, this may well represent the market segment with the lowest barriers to entry for small farmers. 'Keeping abreast of regulatory changes will be a challenge for small businesses, and increasing regulation is likely to favour bigger companies', warns the EMCDDA, but there are indications that CBD oil is 'one of the products with the greatest potential for lasting demand'.⁹

As the EMCDDA concluded, in Europe '[t]he regulation of cannabis and cannabinoids for medical purposes is a complex patchwork of approaches', mainly defined by

BOX: INCB figures and guesstimates of the cannabis market for medical use

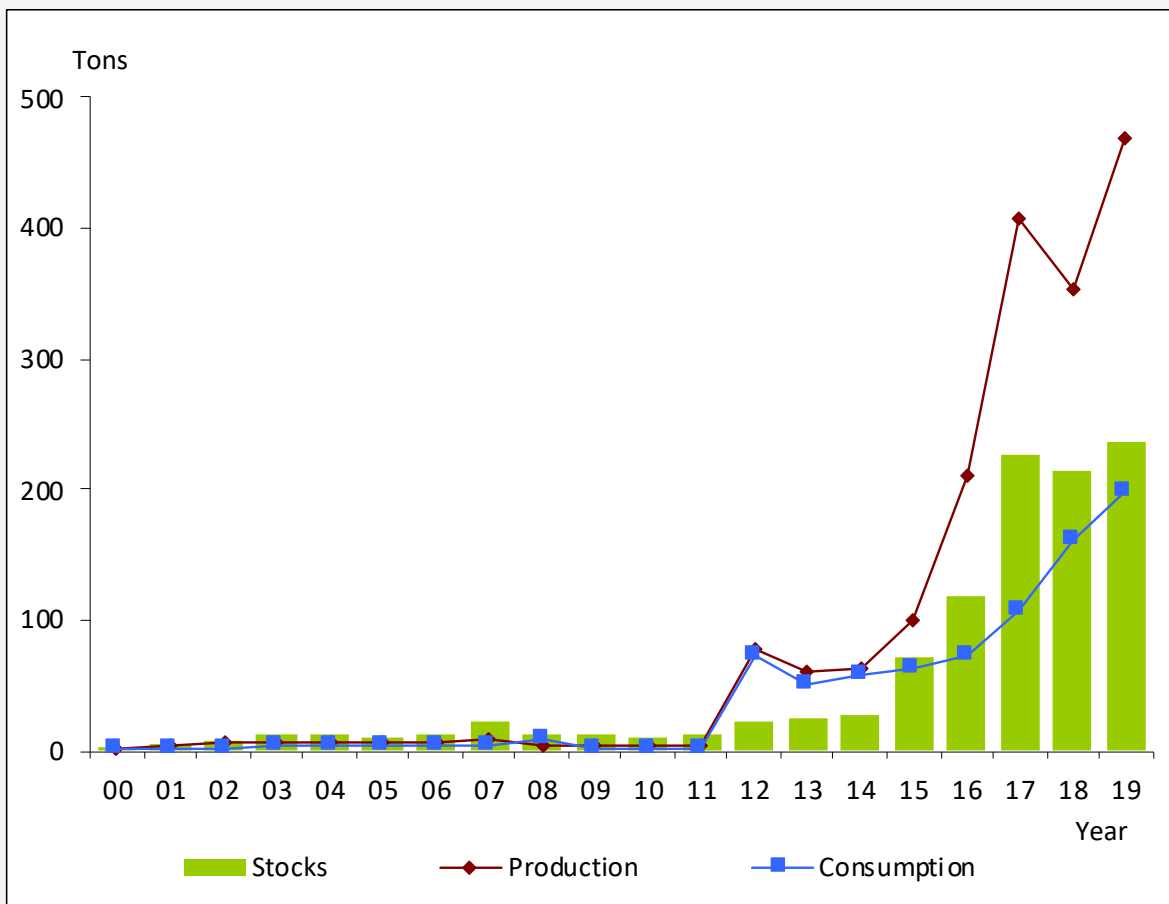
'Before 2000, licit use of cannabis was restricted to scientific research', according to the INCB, but since then, 'more and more countries have started to use cannabis and cannabis extracts for medical purposes'. Because cannabis is controlled under the 1961 Single Convention, countries that wish to use it for medical or scientific purposes are required to report to the INCB the volumes produced and used domestically, and traded internationally. In 2000, total licit production of cannabis flower reported to the INCB was 1.4 tonnes, and by 2019 was 468 tonnes. Among the 22 countries listed in the latest INCB report, the principal producing countries in 2019 were: the UK (320 mt, calculated by INCB based on UK estimates); Canada (38.4 mt); Spain (37.4 mt); Lesotho (30.7 mt in 2018); Israel (26.7 mt); Jamaica (23.3 mt, appearing for the first time on the INCB list as a cannabis-producing country); Uruguay (5.5 mt); the Netherlands (5.4 mt); Colombia (4 mt); Australia (3.2 mt); and Denmark (2.1 mt).¹⁰ In addition to the listed 22 countries, Germany, Malawi, Malta, St. Vincent and the Grenadines, South Africa and Uganda all furnished estimates on medical cannabis production for 2020 and/or 2021. Global manufacture of the isolated cannabinoid *delta-9-THC*, scheduled under the 1971 Psychotropics Convention, also increased since 2016 and reached a record high of 640 kg in 2018, either extracted from the plant or produced synthetically. The main THC-producing countries reporting to the INCB for 2018 were Switzerland (318 kg), Germany (172 kg) and the US (146 kg).¹¹

What does this exponential growth in production mean for small farmers who could potentially benefit from the medical cannabis market? At first sight, looking at the reported number of hectares under production, it does not look at all promising. According to the INCB report, the total volume of 468 tonnes reported for 2019 was grown on just 480 ha. It would appear, therefore, that in spite of the booming figures not that many farmers could have benefited from the medical market at all. The INCB figures, however, provide an imprecise picture for only a small segment of the total market.

First, the INCB numbers relate only to the most-controlled segment of the medical cannabis market (pharmaceutical preparations, standardised flower) where most production takes place in highly sophisticated indoor facilities. The UK – the largest producer on the INCB list – in 2019 produced about 320 mt on only 40 ha, so 8,000 kg/ha; the yield in Colombia was about 3,000 kg/ha; and in Spain 2,255 kg/ha.¹² In comparison, for example, the yield of small traditional farmers in the high Rif region in Morocco averages around 440 kg/ha and in Colombia around 700 kg/ha. The total amount produced, in theory, would thus have required many more hectares if cultivated outdoors by small farmers under those conditions.

Second, not everything is reported to the INCB. Most notably, the US, by far the largest medical cannabis market in the world, reported only one hectare of licit cultivation in 2018, because medical cannabis is not approved at the federal level. The US does not report to the INCB the large volumes produced in states that have medical programmes: the figures '*refer only to the cultivation of cannabis plant authorized at the*

federal level' as the INCB report specifies, which means only small amounts produced for research purposes.¹³ Obviously, countries where traditional medicinal cannabis



Cannabis: global manufacture, consumption and stocks, 2000-2019

International Narcotics Control Board (2021)

Finally, and probably most significantly, the INCB figures leave out almost entirely the CBD market because most countries take the position that CBD extracted from hemp is not controlled under the 1961 Convention and therefore they are not obliged to report this to the INCB. They believe that hemp cultivation falls under the treaty exemption for industrial purposes (article 28) and that – unlike THC – CBD is not listed in any of the treaty schedules. Hemp cultivation in Europe for fibre, seeds and CBD production doubled between 2016 and 2019 from 25,000 to 50,000 ha. In 2019 roughly 3,000 tonnes of hemp flower and leaves was used for CBD extraction, representing about a third of the global CBD market. In the US, hemp cultivation increased from zero in 2013 to nearly 60,000 ha (146,065 acres) in 2019.¹⁴ China, the world’s largest producer of hemp fibre (according to industry estimates around 66,700 ha in 2019), has recently also allowed CBD extraction from the hemp leaves in the provinces of Yunnan (since 2010), Heilongjiang (since 2017) and Jilin (since 2018), for export, and for cosmetics and wellness products for the domestic market.¹⁵ The multi-billion global CBD market, therefore, seems to offer particularly promising prospects for small farmers in traditional producing countries, even though they will have to compete with the highly-industrialised, well-established and fast-growing hemp industry in Europe, North America and China.

decentralised procedures by national regulatory authorities.¹⁶ Certain types of new medications are required to follow the centralised procedure under the responsibility of the EMA, which allows a single EU-wide marketing authorisation. To date, ‘Epidyolex’ is the only cannabis-derived medicine the EMA has approved since 2019, while several countries have authorised other medications – including nabiximols, cannabis flower or magistral preparations – at the national level, *‘and each country has its own rules and procedures for allowing cannabis preparations to be provided to patients’* often using compassionate or other exceptional access schemes.¹⁷ Moreover, under the EU’s 2001 medicinal products directive, according to the EMCDDA, *‘drugs under international control must be distributed on prescription, whereas herbal medicines, with a simplified registration procedure (based on traditional use), are usually non-prescription. On this basis, cannabis would be difficult to regulate as a traditional herbal medicine in the European Union while it remains a drug under international control or while the national legislation in many countries classifies cannabis as a drug that has no medical uses’*.¹⁸

Adding to complications for designing more uniform global standards, there is currently no scientific definition of ‘hemp’ or a globally recognised standard for the maximum THC concentration allowed in cannabis cultivated for industrial purposes. The EU and some African countries currently apply a 0.2% THC threshold for hemp, and there is an initiative in the European Parliament to increase it to 0.3%, the same level established in the US by the 2018 Federal Farm Bill. The European and US hemp industry has been lobbying for a 1% threshold, the level already applied in, for example, Australia, Belize, Colombia, Ecuador, Switzerland and Uruguay. The problem with a lower threshold is that even when using standardised seeds, the exact THC content depends on the climatological conditions during the cultivation period, the moment of harvesting, the storage temperature, and several other factors. To maintain a threshold of 0.2% requires sophisticated cultivation,

harvesting and storage techniques and regular – and expensive – testing, and will inevitably lead to destroying part of the harvest that tests above the threshold. Hemp cultivars with the lowest THC level of around 0.1% usually also contain much less CBD than varieties with slightly higher average THC levels (e.g. around 0.5%). This results in considerably lower CBD yields from the same amount of plants and therefore additional production costs that only major producers can afford, meaning that traditional small farmers will be unable to enter the legal market.

‘It is clear that plant-based products can never be perfectly standardized for content of active components, as they are dependent on too many environmental factors to completely predict the chemical composition of the final product’, as Hazekamp and Fishedick, and other experts, have explained.¹⁹ For that reason, for example, a variability of up to 15% is allowed for the THC and CBD levels in the Dutch medicinal cannabis, even when grown in Bedrocan’s highly controlled indoor growing facilities.

The trend towards legal regulation and the expansion of diverse and overlapping licit cannabis markets does not stop at a fictional medicinal border. While the legal boundaries may be clearer, including with regard to what is allowed under the UN Conventions, lines are often not so easy to draw in practice. As mentioned above, traditional medicinal practices across the world have largely been driven underground, and the more informal and decentralised traditional practices are still not easy to legally justify under the current treaty regime because of its strict control and prescription requirements. A significant proportion of the currently illicit market in countries with a long cannabis history, therefore, is de facto supplying the surviving traditional medicinal and ceremonial uses.

In modern settings, the distinctions are in practice more blurred than most regulators would like to admit. For many cannabis users, there is an element of self-medication underlying their consumption. It is difficult to classify someone who smokes a joint in

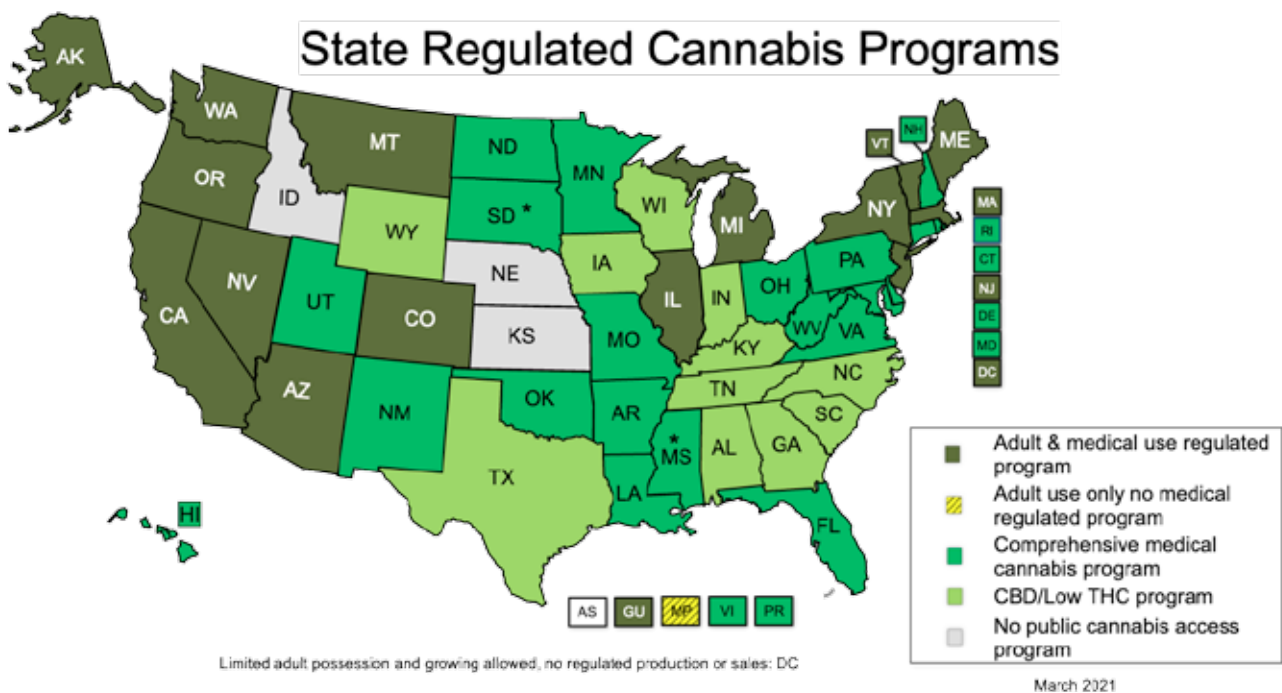
the evening to have a better night's sleep, or who vapes cannabis to reduce period pains, as a purely recreational user. An excessively restrictive pharmaceutical cannabis system that offers currently self-medicating patients limited choices is unlikely to fully absorb those parts of the illicit market: *'An important reason for patients to keep purchasing their materials from illicit markets is the fact that, by trial and error, they have found a strain that works optimally for treatment of their specific symptoms. With the limited choice of Cannabis varieties currently available from official sources, it is hard to deny the value of such choice'*.²⁰

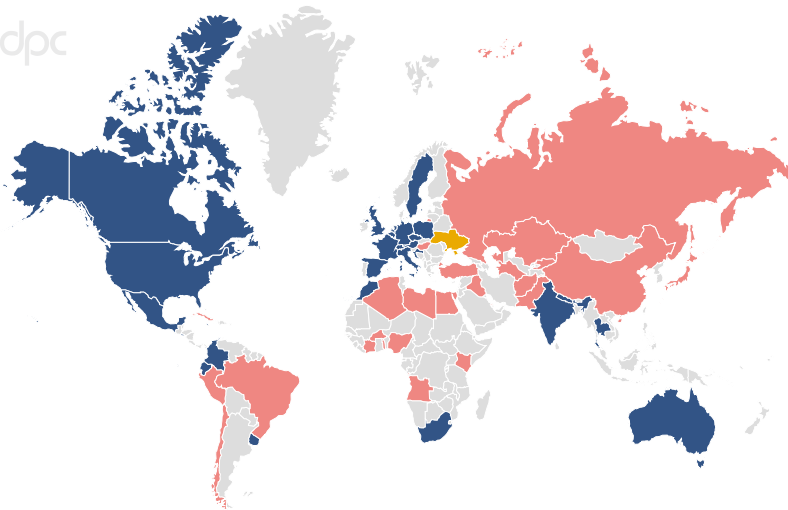
Meanwhile, several countries have started moving beyond medicinal uses in their legally regulated cannabis market. Beginning with policy shifts in 2012 in a few US states, now 15 states and the District of Columbia have approved ballot initiatives or passed laws to regulate cannabis for adult use (see map).²¹ Uruguay in 2013 and Canada in 2018 enacted comprehensive national laws granting regulated access for adult use. These new frameworks for the legal regulation of the whole cannabis market, including non-medical or 'adult' or 'recreational' uses, are consolidating and are likely to spread to new jurisdictions in the course of 2021 and beyond. Cannabis regulation is close to

adoption in Mexico, on the agenda in Israel and Luxembourg, and a new initiative was recently announced in the US Congress to proceed to federal-level regulation, which has a chance of being adopted under the Biden administration. The Dutch government has recently started a four-year programme of local experiments in regulated cannabis production to supply the 'coffeeshops' where purchase and use has been tolerated since the 1990s, and similar experiments are also to take place in Switzerland. In all these cases, the chosen framework is a closed domestic system, not allowing any international trade, but in the future this policy trend may well offer even more promising options for small traditional cannabis farmers who have been supplying parts of these consumption markets illicitly for decades.

6.2 Medical cannabis in the UN debate

In the late 1950s, the WHO representative, Dr Halbach, told the UN Commission on Narcotic Drugs (CND) that *'he was convinced that the Expert Committee's statement on the obsolescence [sic] of cannabis as a therapeutic agent would remain unchanged'* and asserted that *'it was not easy to imagine, in the present state of knowledge, the reintroduction of cannabis as a means of*





REMOVAL OF CANNABIS FROM SCHEDULE IV VOTE AT THE CND 63RD SESSION (RECONVENED)

27 Member States out of the 53 members of the Commission voted to remove cannabis from Schedule IV of the 1961 Single Convention on Narcotic Drugs. This formal, and long overdue, recognition of the medical usefulness of cannabis (including in herbal form) should facilitate much-needed medical provision and further research.

YES ✓

- | | | |
|-------------------|------------------|--------------------|
| 1. Australia | 11. Germany | 21. Spain |
| 2. Austria | 12. India | 22. Sweden |
| 3. Belgium | 13. Italy | 23. Switzerland |
| 4. Canada | 14. Jamaica | 24. Thailand |
| 5. Colombia | 15. Mexico | 25. United Kingdom |
| 6. Croatia | 16. Morocco | 26. United States |
| 7. Czech Republic | 17. Nepal | 27. Uruguay |
| 8. Ecuador | 18. Netherlands | |
| 9. El Salvador | 19. Poland | |
| 10. France | 20. South Africa | |

NO ✗

- | | | |
|------------------|----------------|------------------|
| 1. Afghanistan | 10. Cuba | 19. Nigeria |
| 2. Algeria | 11. Egypt | 20. Pakistan |
| 3. Angola | 12. Hungary | 21. Peru |
| 4. Bahrain | 13. Iraq | 22. Russia |
| 5. Brazil | 14. Japan | 23. Togo |
| 6. Burkina Faso | 15. Kazakhstan | 24. Turkey |
| 7. Chile | 16. Kenya | 25. Turkmenistan |
| 8. China | 17. Kyrgyzstan | |
| 9. Côte d'Ivoire | 18. Libya | |

ABSTENTION ∅

- Ukraine

rational therapy based on modern conditions’.²² As a result, cannabis and cannabis resin were placed in the strictest schedules I and IV of the 1961 Single Convention, the latter reserved for substances with particularly dangerous properties and little or no therapeutic value. It took six decades before the WHO Expert Committee on Drug Dependence (ECDD) released in January 2019 the outcomes of the first-ever critical review of cannabis, finally recognising its therapeutic value and recommending changes in the scheduling of cannabis-related substances under the UN drug-control conventions.²³ After two years of polarised debates, the CND voted in December 2020 with a narrow margin in favour of the ECDD’s key recommendation, namely the removal of cannabis from Schedule IV (see map).²⁴

The INCB Annual Report for 2018, released on 5 March 2019, devoted its thematic chapter to ‘Cannabis and cannabinoids for medical, scientific and ‘recreational’ use: risks and benefits’.²⁵ Throughout the chapter, the Board puts ‘medical cannabis’ and ‘medical use’ in quotation marks whenever it refers to the cannabis plant to indicate that – according to its treaty interpretation – only the use of cannabinoids in pharmaceutical preparations constitutes legitimate medicinal use. ‘Under the Convention, cannabinoids may be evaluated

in controlled clinical trials to assess the benefits and harms of their use in medicine’,²⁶ according to the INCB, but ‘[a]ttempts to market and promote the medical use of cannabis products as ‘herbal medicines’ are inconsistent with the classification of cannabis and its derivatives under the 1961 and 1971 conventions. Pharmaceutical-quality cannabinoids should be approved for clearly defined medical uses by the country’s pharmaceutical regulatory system.’²⁷

There is not a single reference in the drug conventions, the commentaries or the conference proceedings, however, that sustains the INCB claim that only pharmaceutical preparations of cannabinoids can qualify as legitimate medical use. On the contrary, the 1961 commentary says: ‘The term ‘medical purposes’ does not necessarily have exactly the same meaning at all times and under all circumstances. Its interpretation must depend on the stage of medical science at the particular time in question; and not only modern medicine, sometimes also referred to as ‘western medicine’, but also legitimate systems of indigenous medicine such as those which exist in China, India and Pakistan, may be taken into account in this connexion’.²⁸

WHO Director-General, Dr Margaret Chan, stated in 2013 that ‘traditional medicines, of proven quality, safety, and efficacy, contribute to

BOX: Development with coca, the alternative from Bolivia

After the 2006 election of president Evo Morales, the new Bolivian government launched in 2007 the *Bolivian Strategy in the Fight against Drug Trafficking and the Revalorisation of the Coca Leaf*, looking to distance itself from previous governments that aimed for 'zero coca'. Under the slogan 'Coca yes, cocaine no', the government committed to stricter enforcement of the prohibition of cocaine paste and cocaine, and announced plans for 'development with coca' to promote the creation of an industry with a variety of products based on or containing coca leaf. The intention of the Morales administration to address the ancestral tradition of coca leaf consumption in government policies underpinned this strategy, opposing the simple substitution of the highly valued and constitutionally protected crop.²⁹

Another basic element of this new approach reducing the coca crop was to reach prior agreement with communities about the eradication of the surplus crops, through dialogue and consensus. The concept of 'social control' was used in a specific interpretation as the basis of this crop-control strategy. This new strategy was dubbed a 'sovereign' policy, indicating it would be a result of an internal process, and not imposed from outside, as embraced by previous governments, and particularly referring to those set by the US. Since Bolivia no longer considered the US to be a strategic partner country, the EU supported this new strategy and also provided the funding for the national survey to establish the amount of coca needed to fulfil demand for traditional use.

Unfortunately, the expansion of a domestic coca industry was hampered from the start by the lack of export opportunities, as the internal market was already saturated. There was inadequate public and private investment, and there were many remaining barriers for the development of the existing industry. A government-assisted attempt to produce a soft drink based on coca miserably failed. The government did little to facilitate or improve market access for coca-based products abroad, as it is bound by the international drugs treaties, even after obtaining in 2013 a special reservation under the Single Convention, legitimising under the treaty the right to use coca domestically in a traditional manner.³⁰

Internally, many argue that the development with coca strategy amounted to empty rhetoric. The Coca Law of 2017 established a new national limit on cultivation of coca for traditional use, and the geographical spread of the coca crop. It also set parameters for the national commercial exploitation of the crop (excluding cocaine extraction), but was criticised for increasing bureaucratic control measures. Efforts to negotiate bilateral or multilateral inter se modification agreements between Bolivia and other countries are worth considering in order to open up export opportunities, in particular with Argentina as the most relevant neighbouring country with a significant coca consumption.³¹

the goal of ensuring that all people have access to care. For many millions of people, herbal medicines, traditional treatments, and traditional practitioners are the main source of health care, and sometimes the only source of care. This is care that is close to homes, accessible and affordable. It is also culturally acceptable and trusted by large numbers of people. The affordability of most traditional medicines makes them all the more attractive at a time of soaring health-care costs and nearly universal austerity’.

While the WHO Traditional Medicine Strategy 2014–2023 actively promotes this approach for other types of herbal medicines, these considerations have not been applied in the case of cannabis. The ECDD review of the classification of cannabis-related substances recommended the deletion of cannabis from Schedule IV, but at the same time advised keeping it in Schedule I, still requiring a very strict level of control. A recommendation to place cannabis in Schedule II would have left more discretion to Parties to decide on prescription requirements and thus allow more policy options to regulate and improve access to cannabis-based traditional and herbal medicines.

The WHO review process, meant to update the classification of cannabis to accommodate the new and fast-changing realities of legal medicinal cannabis markets around the world, has been successful with regard to its deletion from Schedule IV, thereby recognising the therapeutic value of cannabis. But it has also shown its limitations in dealing with the complexities of the newly emerging markets, the wide variety of products, and the limited scheduling options available under the conventions. Clearly, the tense and polarised climate at the CND in Vienna is not yet ready to discuss and accommodate the full range of regulatory frameworks beyond the medical; those already being implemented and the many more on the horizon. Countries that have stepped outside the legal boundaries of the drug-control treaties will have to find their own way – individually or collectively – to reconcile their domestic policies with

their international treaty obligations. Individually through reservations, as Bolivia has done with regard to the coca leaf, or collectively by means of a so-called *inter se* treaty modification, changing certain treaty provisions only with respect to the mutual relations among parties of the modification agreement.³²

The option of *inter se* modification is based on article 41 of the Vienna Convention on the Law of Treaties, and according to a legal commentary on that ‘treaty on treaties’, ‘[d]ue to the conflicting interests prevailing at an international level, amendments of multilateral treaties, especially amendments of treaties with a large number of parties, prove to be an extremely difficult and cumbersome process; sometimes, an amendment seems even impossible. It may thus happen that some of the States Parties wish to modify the treaty as between themselves alone’.³³ A major advantage compared to individual legal solutions, is that an *inter se* agreement would also open the possibility of international trade between regulated licit markets, ‘enabling small farmers in traditional Southern producing countries to participate and diminishing the risk of a corporate capture of the emerging licit markets. Closed national systems of regulation are unlikely to fully replace existing illicit markets that are partly dependent on international trade to accommodate product variety and quality, cultural diversity and consumer preferences’.³⁴

Almost 25% of all cannabis sold in coffeeshops in the Netherlands, for example, is hashish imported mainly from Morocco and to a lesser extent from Afghanistan, Lebanon and Nepal, and it will not be easy to develop a home-grown substitute. The government advisory commission for the experiments with legal supply to the coffeeshops acknowledged the problem but reported it could ‘not discuss possible imports of cannabis from abroad, given the international legal obstacles to the production and distribution of cannabis at international and EU level’.³⁵ The commission suggests, however, that the government could ‘develop—in cooperation with other countries—an international-diplomatic strategy, aimed at

reviewing international treaties and agreements where necessary'.³⁶

6.3 Free trade, market dynamics and the risk of corporate capture

The introduction of neoliberal trade policies from the 1980s directly contributed to an expansion of illicit economies. Dramatic crashes in the market price of traditional export commodities such as bananas, coffee and cocoa have forced many small farmers in the tropical countries in which these are produced to take refuge in the illicit cultivation of cannabis, coca and opium. The dramatic decline of the banana economy in the Eastern Caribbean is a case in point (see Box).

What for many small growers started as a survival economy may be under threat again if an invasion of transnational cannabis corporations is allowed unrestricted entry in

these countries in the absence of protective measures for small farmers. Cannabis companies that went public on the Canadian stock exchange accumulated billions of dollars, triggering a financial bubble driven by highly speculative market predictions. Much of the capital generated from those early share sales was invested in stock promotion, mergers and acquisitions and part of it was used to establish new cultivation and production facilities in traditional cannabis-producing countries or to buy up local licensed companies.³⁷ One of the reasons that Canadian and US cannabis companies are making inroads in the traditional cannabis-producing countries is to bring down production costs. Speaking about why a new Canadian-backed cannabis start-up is interested in investing in cannabis production in St Vincent and the Grenadines for example, the company's Chief Operating Officer stated that 'We're looking for opportunities outside of Canada. The Canadian market is pretty diluted. And we're

BOX: The fall of bananas and the rise of cannabis in the Caribbean

In Jamaica, the arrival of transnational bauxite companies displaced many small farmers from their lands. Many Jamaicans emigrated in the 1960s and 1970s, seeking better opportunities in Canada, the UK and the US, while many others 'migrated into illegality' by squatting plots of lands to grow *ganja*.³⁸ Subsequently, the dismantling of the EU–Caribbean preferential trade agreement for bananas led to a further increase of cannabis cultivation in Jamaica and the Windward Islands, especially St. Vincent and the Grenadines and St. Lucia. The Eastern Caribbean banana industry was historically dominated by small-scale, family-run banana farms, unable to compete in a free market with the huge agro-industrial plantations in Central and South America.³⁹ A European Commission memo warned in 1997 that such a shift 'would lead directly to the destruction of the Caribbean banana industry and would consequently provoke severe economic hardship and political instability in a region already struggling against considerable difficulty and deprivation', and that the 25,000 banana producers in the Windward Islands 'will look for alternative sources of income'. The memo concluded, 'Unfortunately the most obvious replacement for bananas is drugs'.⁴⁰ Over the following decade, the preferential banana regime was gradually dismantled and – as predicted – many banana growers shifted to cannabis. 'Marijuana is the new 21st century banana', said Foreign Minister Camillo Gonsalves of St. Vincent in 2014, and local growers confirmed that *ganja* 'has schooled children, built homes and allowed residents to survive the economic fallout from the once profitable banana industry'.⁴¹

also looking for... to grow in the sun because in Canada you grow [indoors] for 2 dollars a gram and in the sun you can grow for 20 – 30 cents a gram'.⁴² Similarly, touting a new joint venture in 2018 between the Canadian producer Aphria and the Verve Group and the latter's acquisition of a majority stake in Verve Dynamics, a medicinal marijuana producer in Lesotho, then-CEO Vic Neufeld noted, 'Verve is poised to become one of the lowest-cost producers of medical cannabis extracts in the world'.⁴³

As countries compete to attract investors, there is a danger that low production costs (and more generally lower regulatory standards in terms of social and environmental sustainability) could trigger a 'race to the bottom'. This risk is compounded if countries do not develop a domestic base or market but rely on a purely export-oriented model that lends itself more readily to exploitative dynamics. For example, when the government of Lesotho began the process of issuing licenses for cannabis farming in 2017, the cost of a production license was about US \$ 13,000 (excluding the costs to manufacture, test, and export).⁴⁴ The per-capita income meanwhile at the time stood at \$ 2,925. These high barriers to entry would mean that the most likely role for the country's cannabis farmers would be as labourers on cannabis farms with limited prospects for moving up into more value-added activities.

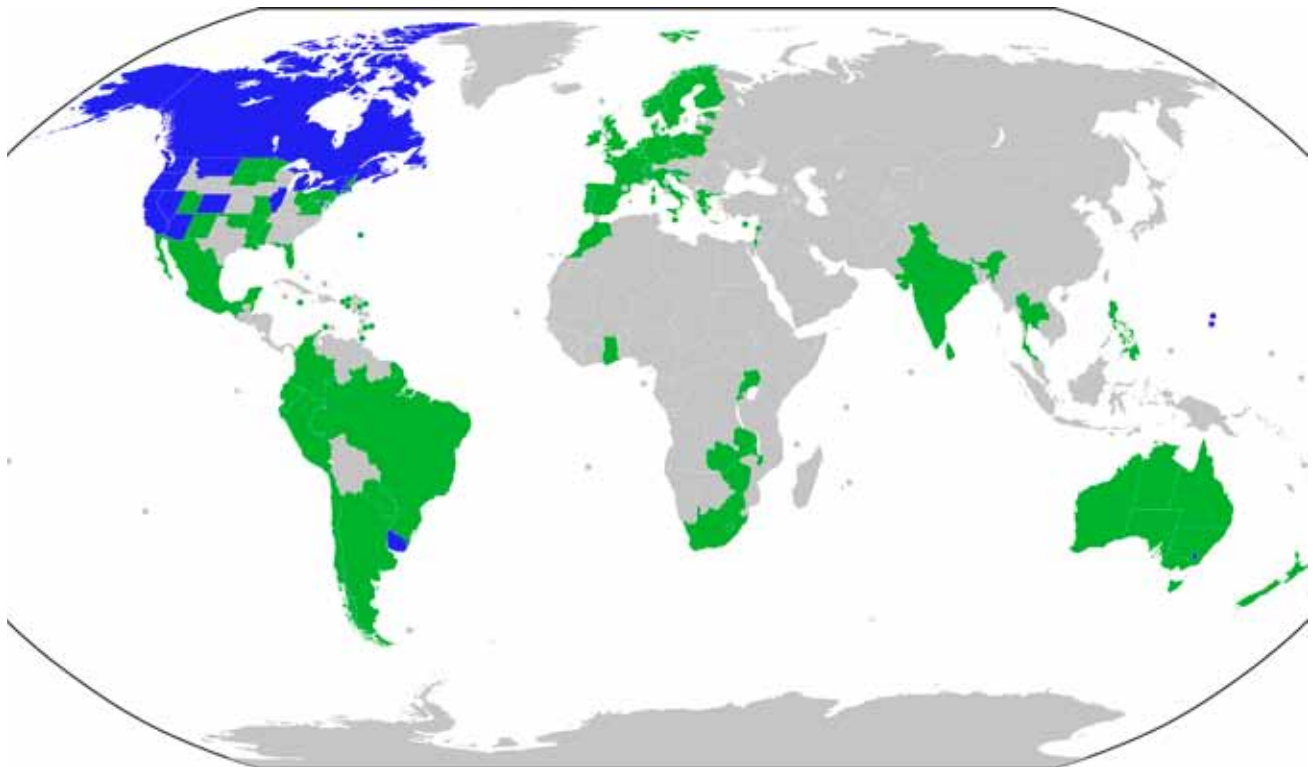
In general, the market dynamics of the global cannabis industry continue to be highly unstable and contingent upon legal developments to allow for international trade. It is unlikely that Canada will soon allow imports in any significant quantity given the differences in production costs noted above which, if competition from low-cost imports were allowed, would essentially destroy a market in which millions of dollars have already been invested. The result is a global market place where expectations for growth are high but where the potential gains (at least for investors) from international trade are still very much untapped. 'With dozens of countries trying to capitalize on export opportunities but only a handful of them importing meaningful

quantities, export-oriented producers are paying close attention to import-dependent jurisdictions', writes Alfredo Pascual, a well-informed analyst of Marijuana Business Daily.⁴⁵

*'Expectations that Latin America would become a significant exporter of cannabis for medical and scientific use have not yet materialized, with total export revenue from the continent estimated to be less than \$15 million. Experts say 2021 will be a key year to demonstrate whether the region can become a global supplier of the medicine. To date, Uruguay and Colombia are the only two Latin American nations that have exported meaningful quantities of medical cannabis. But even those shipments have fallen far short of expectations.'*⁴⁶ By the end of 2019 there was still hardly any international trade in cannabis but clear signs of a bursting bubble. For example, the market value of Canada-based Canopy Growth, still one of the world's largest cannabis companies, dropped from US\$ 18 billion in April 2019 to about US\$ 5.5 billion in mid-November.⁴⁷

According to Fortune magazine, 'investors and entrepreneurs have seen a full boom-and-bust cycle' as 'biblical oversupply has saturated a limited market and crashed prices'.⁴⁸ 'With opportunity in the United States limited by federal law, excited retail and institutional investors pumped so much cash into Canadian firms that several became unicorns. Flush with investment, companies built enormous greenhouse operations, producing more cannabis than the population of Canada, a smaller market than the U.S. state of California alone, could consume. Value in some companies has dropped by 50 percent or more from 2018 highs'.⁴⁹

In the course of 2020, international trade slowly started to materialise, for example, for Clever Leaves, a multinational company with operations and investments in Canada, Colombia, Germany, Portugal, and the US, which exported its products to Australia, Brazil, Canada, Chile, the Czech Republic, Germany, Israel, Netherlands, Peru, Poland, Spain, South Africa, the UK and the US, navigating the countries' many different regulations and standards.⁵⁰ Clever Leaves' facilities in Colombia were the first in Latin



Map showing legal regulation of cannabis in April 2021

■ Cannabis legal for some medical purposes ■ Cannabis legal for all purposes.

America to be granted EU GMP certification, allowing the company to export extracts and pharmaceutical-grade cannabinoids to the EU. Its Portuguese cultivation license also allows Clever Leaves to export dried flower, something Colombia still does not permit. A broad coalition of Colombian producers, including the Association of Small and Medium Cannabis Cultivators (Asocannacol), recently appealed to the Colombian government to lift the ban on exports of dried flower, arguing that ‘in countries with more mature regulated medical cannabis markets, such as the United States, Canada, Germany, Switzerland, the Netherlands, Portugal, Israel, the United Kingdom and Australia, among others, dried flower is the most developed market segment, accounting for more than 50% of the industry’s total sales’.⁵¹

6.4 ‘Inclusive business’ and the global value chain

For small farmers growing for the illicit market, cannabis has mainly been a cash crop to complement household income, often grown alongside food crops. Entering the

legal medicinal market could potentially give value-added to the agricultural product by not just selling the raw material but becoming involved in the processing, especially the production of whole-plant extracts. ‘Adding value to agricultural production in rural areas (e.g. through processing industries) offers tremendous potential to boost rural employment, incomes, reduce poverty and improve nutrition. Policies, incentives and frameworks promoting agroindustries, in particular small and medium enterprises has proven to be a very effective pathway to lift rural populations out of poverty in many countries’, according to the FAO.⁵²

As few legal cash crops can compete with the price of crops used for illicit drug production, the strategy of adding value by enabling farmers to move up the global value chain(GVC) is often applied in AD strategies aimed at substituting coffee, cocoa or palm oil for illicit coca crops, for example in the San Martín region in Peru.⁵³ Farmers’ cooperatives can become shareholders in small processing factories, so that more revenue remains in the farming communities. These strategies often involve partnerships with private industry, especially for the distribution and export

parts of the value chain. Indeed, as *‘public development finance has been scaled back in the context of free market reforms, governments have increasingly looked to the private sector to bring new investment into rural areas’*.⁵⁴ Funding for AD in the context of drug control has been declining even more sharply than development aid overall, underlining the need to explore the option of connecting small farmers to the global value chain of medicinal cannabis.

The concept of ‘inclusive business’ has emerged to *‘enhance the compatibility between agribusiness expansion and rural livelihoods’*; *‘it tends to imply vulnerable, small-scale actors benefitting through their integration into (agri) business value chains. By integrating smallholders, benefits are said to accrue to both private investors and small-scale actors.’*⁵⁵ UNDP has also adopted the discourse on inclusive business and the crucial role of the private sector in opportunity creation in relation to Africa, arguing that inclusive businesses *‘integrate low-income individuals into value chains in various capacities, be it as consumers, producers, employees and entrepreneurs. Thus, they bring the benefits of growth directly to low-income communities. This is not charity. Inclusive businesses create a strong foundation for profit and long-term growth by bringing previously excluded people into the marketplace’*.⁵⁶

An article published in the journal *World Development* on the proliferation of donor-led approaches aimed at integrating producers into GVCs highlights several caveats regarding the growing interest in the notion of ‘inclusive business’ and emphasis on private sector-driven development processes. Picking apart in detail the experiences in various types of industries, the article shows that any business model, including those aiming to integrate smallholders into global value chains, *‘can disempower by exacerbating risk, marginalizing local voices, or appropriating local land and labor on unfair terms’*.⁵⁷ While the study does not address the emerging licit cannabis industry, the many examples from other agribusiness value chains represent worrying lessons, underscoring the many challenges small

farmers face if they wish to enter the nascent global value chain of medicinal cannabis. *‘Market liberalization and structural adjustment reforms emerge as key historical junctures that have reshaped space for inclusiveness across value chains’*, the authors conclude, warning that – with partial exceptions – *‘the evidence emerging across value chains suggests that these trends are working at cross-purposes with the logics of social inclusion’* and that *‘inclusion in global value chains through relations established with dominant firms emerges only rarely as a viable and scalable pathway to poverty alleviation’*.⁵⁸

Findings from the review of experiences in sectors such as palm oil, cotton, coffee, cocoa, cassava, soy or sugarcane, reveal that the evolution of value chains *‘point to a clear challenge to smallholders whereby value chains are governed for competitiveness and efficiency, concentrating ownership, control, and value in larger firms and downstream segments and more limited emphasis on arrangements bringing the smallholder voice into sector decision-making, or helping them to overcome barriers, manage risks, or capture value’*.⁵⁹ Relevant to small cannabis farmers moving out of the illicit market to the opening legal space, the authors mention that smallholders *‘face entry barriers to higher value chain activities, even for the value chains they have historically dominated’*. Critically questioning the narratives that agribusiness-driven inclusion in global value chains *‘can create ‘win-win’ outcomes that benefit both corporate businesses and small-scale actors’*, the authors argue that most gains for small farmers are in fact made *‘by placing local aspirations and self-determination at the center of rural transformation agendas’*.

Among the few positive examples of alternative value-chain arrangements, the authors mention the farmer cooperatives’ shareholding structure of the palm-oil mills established in the context of the Peruvian AD project in San Martín, which also allows farmers to *‘retain ownership of their land and freedom to reallocate land and labour to other productive activities if desired – thereby avoiding a ‘lock in’ that forecloses future options or erodes the land base available to family farming’*.⁶⁰ But

the example is also used to highlight *‘the need to re-consider the use of public policy, finance, and gate-keeper functions to level the playing field and enable real economic empowerment as an option’*, because the problematic reality of the corporate-driven palm-oil industry leaves no doubt that this represents an exception to the rule that would never have existed had it been left to the dynamics of the ‘free’ market without substantial national and international alternative development assistance. In that regard, the study debunks any illusion about *‘public narratives that suggest such support should be premised on for-profit relations and business-driven’*.⁶¹

Elizabeth Bennett has usefully analysed the multiple voluntary sustainability certifications (VSCs) that have recently emerged in the US, meant to steer the cannabis industry in a more sustainable direction. She concludes, however, that such voluntary schemes *‘are highly vulnerable to industry capture’*. Some *‘are organized as for-profit organizations whose owner(s) set standards, conduct audits, and direct the overall strategy of enforcing rules. These VSCs compete against one another for market share and some founders report instances of “certification shopping” in which growers seek the most accessible certification instead of improving practices to meet higher standards. In this context, each VSC has an incentive to dilute standards or relax auditing procedures in order to gain market share and generate profit, and none have governance or transparency processes that would inhibit the owner from doing so’*.⁶²

Looking at experiences from other sectors no voluntary scheme is likely to make fundamental improvements in the terms of engagement for rural communities or marginalised and criminalised groups in the legal cannabis industry.⁶³ Legislative and regulatory rules are essential to enforce the basic parameters removing barriers to entry, providing preferential access and compensation, and imposing restrictions to free-market dynamics, monopolisation and corporate capture. One such initiative is currently underway in the US Congress, the Marijuana Opportunity Reinvestment and

Expungement Act of 2019 (MORE Act). The Act was passed by the House of Representatives in December 2020 and, if enacted, would expunge past federal cannabis offences and provide funding for loans to assist small cannabis businesses that are owned and controlled by persons who are socially and economically disadvantaged. Speaker of the House Nancy Pelosi called it one of the most important criminal justice reform bills in recent history, that *‘helps end the devastating injustices of the criminalization of marijuana that have disproportionately impacted low income communities and communities of color, [...] and finally secures justice for those negatively impacted by the brutal, unfair consequences of criminalization. This landmark legislation will also open the doors of opportunity for all people to participate in the growing cannabis industry and provide revenue and resources to communities to grow’*.⁶⁴

Similar public interventions to provide normative guidance – for the medical as well as non-medicinal markets – will be needed to assure meaningful participation of small farmers across the world. Some countries are taking a lead in this, with positive results. For example, St. Vincent and the Grenadines introduced an Amnesty Bill in 2018 that allows cannabis producers who have faced conviction to transition to legality if they declare themselves to the authorities.⁶⁵ They also promote the formation of cooperatives and joint ventures between investors and local groups as well as a number of other measures to encourage the participation of small and traditional cultivators in the licit medical market. This has also opened up new pathways for investors to partner with local cannabis farmers. An example is that of Green Lava Labs, the first company to begin cultivating legal cannabis in the country. It is based on a 25 acre grow site with a license for extraction and with the aim of exporting medicinal cannabis flower as well as oils to the European medical market. In late 2019, it signed two MOUs between Green Lava on the one hand and two farmers associations, the Greiggs Rastafarian Progressive Society and Farmers Solution SVG, on the other.⁶⁶

According to the Chief Operating Officer, the regulatory framework established by the government of SVG contributed to the partnership:

So what's really cool about the way that St. Vincent did this, unlike in Canada where if you have a cannabis criminal conviction you really can't participate in the legal system, whereas in St. Vincent they're encouraging the traditional cultivators to come through and join the new legal market which is really cool so we're really happy to work with them. So basically, the law states that for us to be here, we have to take at least 10% of our product from the traditional cultivators.⁶⁷

The example speaks to the importance of establishing the right regulatory frameworks to encourage opportunities for small and traditional cannabis farmers to benefit from investments in the licit market.

6.5 Fair trade and sustainable development

The notion of 'fair' or 'just' trade emerged out of concerns in the 1960s and 1970s about global levels of poverty and inequality, particularly for countries that were shaking off the legacies of colonialism. Fair or just trade seeks to redress these global inequalities by granting producers of products such as bananas, cotton, or cut-flowers better opportunities to markets and consumers, predominantly in wealthy countries.⁶⁸

Some activists and academics have started to think about what fair(er) trade principles would look like in the context of cannabis.⁶⁹ It remains an open question to what extent such a model can serve the socio-economic needs and interests of small-scale and traditional cannabis farmers. Significant obstacles remain, not least the fact that while Fair Trade markets for products like bananas, cocoa and coffee, have provided small producers with certification that has enabled them to maintain a foothold in these global markets, these three products require climatological conditions that make

it impossible for them to be produced in temperate climates. Cannabis, on the other hand, can be grown anywhere, depending on the strain. The illicit and emerging licit cannabis markets have experienced a process of import substitution in the major European and North American consumption markets with rapidly expanding greenhouse and indoor cultivation. This poses additional challenges for traditional cannabis growers across the world and for the development of comparable fair(er) trade scenarios to protect them. There will need to be greater emphasis on 'ethical consumerism', or branding based on quality advantages of native cannabis strains and traditional cultivation techniques, using 'geographical indications' or 'denominations of origin' certification for example;⁷⁰ as well as a recognition of the costs associated with the significant carbon footprint of indoor/greenhouse production.



Cannabis flower, Columbia, Prince, august 2018

In the US context, Ryan Stoa (2017) makes the case for a marijuana appellation system centred on the unique place-based characteristics of particular cannabis strains, growing conditions, and other quality or stylistic standards.⁷¹ Such an appellation system could be implemented under what he calls ‘American Cannabicultural Areas’, which would delineate a series of environmental and social quality controls and best practices. This would offer a number of advantages including a recognition that environmental conditions influence cannabis quality as well as increased transparency and consumer protection based on a set of agreed indicators including information about strains, levels of THC and CBD, assurance of origin, ethical

cultivation etc. It would also set a baseline for rural and territorial development and build in a degree of ecological responsiveness into production practices in terms of, for example, energy use for indoor cultivation or water use. Crucially, such a system would prevent markets from being flooded by cheap, generic cannabis products that would drive down prices and leave small cannabis farmers unable to compete. In offering a degree of economic protectionism by allowing differentiated products to cater to differentiated markets, an appellation system can prevent cannabis from becoming just like any other agricultural commodity in a post-prohibition world. In this sense, Stoa argues that ‘...commoditization and consolidation is

Farmers family in North East India, Ernestien Jensema, november 2014



not inevitable. Marijuana appellations have significant regulatory potential and represent a more local and sustainable agricultural model for the marijuana industry'.⁷²

Whether such a model can take root remains to be seen. It should be noted that nothing of the initial 'Green Rush' billions ended up with traditional cannabis growers struggling to get access to the corporate-driven market, despite some governments' intention to encourage local groups and small farmers to enter the market, as described in the previous chapters. There were significant foreign investments in several traditional cannabis-growing countries, but even in regions with ideal climatological conditions for outdoor growing, these focused on buying up local companies and setting up new indoor growing facilities. There was next to no investment in technical assistance or supporting small farmers to transform their cultivation practices in order to meet quality standards and facilitate their entry into the emerging legal market spaces.

At the same time, there has often been insufficient appreciation by investors and policymakers of the unique qualities and strengths of traditional cannabis growing communities. In this vein, the South African non-profit cannabis organisation 'Fields of Green for ALL' makes the case for South Africa to adopt an AD programme for cannabis which combines an inclusive cannabis community empowerment strategy (in particular for victims of prohibition) with respect for the traditional knowledge and cultural expressions of cannabis-growing communities and the protection of natural and genetic resources.⁷³ This would build on the legacy of outdoor cultivation in rural areas of South Africa, where cannabis has been grown for centuries to serve informal markets, and where unique plant varieties have emerged. According to the organisation, these local endemic varieties – which are the product of specific environmental conditions combined with locally adapted cultivation methods – constitute a critical intangible asset and a source of biological diversity that

deserve adequate protection. They encourage the use of community focused intellectual property (IP) protection policies as 'a tool to build local brands that add value to the historical cannabis products and cultural uses, and help create a path to engage in international fair trade'.⁷⁴ This could also set the stage for the development of a regulated domestic cannabis market, generating jobs and income and attracting tourists on the basis of internationally recognised products (that could be labelled through, for example, geographic indications) and the promotion of local cultures and knowledge. Optimistically, the non-profit writes that 'The potential for combining agro-tourism, eco-tourism, and therapeutic or health tourism would likely abound in South Africa with both a community IP protection system, and a programme for the preservation of natural resources in place'.⁷⁵

The need to protect indigenous cannabis cultures, practices and biodiversity is clear, yet little attempt is currently made to do so. For example, as Klein and Hanson (2020) write in the case of Jamaica, 'There is currently no coordinated effort at preserving the genetic heritage of cannabis strains that are indigenous to Jamaica and adapted to tropical conditions. Many strains are at risk due to imported varieties and cross-breeding. The consequence of heavy enforcement has been the loss of technical expertise that is now threatening the comparative advantage attributed to the small farmer: access to indigenous land races with unique characteristics and farming skills'.⁷⁶ This is despite the fact that the agro-ecological conditions for growing cannabis in Jamaica and the wider Caribbean in terms of soils, rainfall, and a long history of organic production offer unique selling points in terms of labelling and the branding of products in the region. The added value created from combining the indigenous and local knowledge of growers with the latest scientific and pharmaceutical knowledge regarding medical cannabis could serve as a dynamo for attracting health tourism and the export of medical cannabis products.

A model for cannabis centred on community empowerment, indigenous knowledge, protection of natural heritage, and fair(er) trade principles could thus have much to offer. A 2018 report by the CARICOM Regional Commission on Marijuana notes the potential game-changing impact cannabis could bring to the Caribbean region if a properly defined regional policy framework is developed: 'In addition, the region's already established and developing tourism economy can be leveraged further by a cannabis industry located in safe and secure environments. Cannabis can be produced for export as well as for local healing and can be the foundation for a new and vibrant wellness tourism industry. The development of an industrial hemp industry is also envisaged. Cannabis produced organically and outdoors can also provide for the already lucrative recreational market'.⁷⁷ Similarly, cannabis farmers who participated in a workshop on sustainable development and cannabis in Morocco highlighted a number of unique selling points upon which a future licit cannabis economy could be built. This includes the potential for cannabis-based alternative health products to be integrated into the country's network of hammams as well as the development of a sustainable cannabis tourism industry based on mountain-biking and hiking trails in the Rif region along with the organisation of an annual Amazigh cultural festival attracting artists, musicians and foreign visitors to join in an experience of indigenous cannabis culture.⁷⁸ Such a multi-faceted territorial framework in which forward and backward linkages are fostered across sectors such as agriculture, health and wellness, medicine, tourism, science and manufacturing will also help to develop economies of scale for the production of cannabis, reducing dependency on foreign investment and allowing for greater economic returns.

There are a number of specific requirements within the current medical cannabis framework that require particular attention in order to pursue a fair(er) trade model. According to the Guide to Good Manufacturing Practice for Medicinal Products, 'Because of

their often complex and variable nature, control of starting materials, storage and processing assume particular importance in the manufacture of herbal medicinal products'.⁷⁹ Under the Pharmaceutical Inspection Co-operation Scheme (PIC/S), a non-binding, informal cooperative arrangement between Regulatory Authorities in the field of Good Manufacturing Practice (GMP) of medicinal products for human or veterinary use,⁸⁰ special protocols have been developed for Good Agricultural and Collection Practices (GACP) for medicinal plants and raw materials for the manufacture of herbal medicinal products. Outdoor cultivation, while posing additional challenges, is by no means an insurmountable obstacle to meeting basic GACP standards. Most plants used as herbal medicines or used as raw material for the production of pharmaceutical preparations are in fact grown outdoors, including the extensive licit opium poppy cultivation for the production of morphine, codeine and other opiate medicines, and including – in the case of poppy in India and Turkey – by small farmers.

Most companies producing medical cannabis products prefer intensive indoor cultivation because it is easier to meet the rigorous requirements for standardisation while avoiding the laborious and difficult process of establishing collaboration with small farmers currently growing cannabis illicitly in often remote areas. Moreover, those communities are stigmatised, criminalised, and therefore usually poorly organised, and their cultivation methods are often unsuitable for medicinal uses that require considerable time and investment in technical advice and training. Few companies have been willing to take that course of action voluntarily, and are unlikely to do so in the foreseeable future. Pressure therefore needs to come from these farming communities to demand access to the legal market, for which they need support to form cooperatives especially if they want to move beyond selling raw material and move up the cannabis value chain. But it also will need pressure from legislators and regulatory authorities, establishing special preferential access schemes, subsidies and



Landrace cannabis cultivation, High Rif, Morocco, Abdellatif Adebibe, August 2020

perhaps benefits to companies choosing to comply with principles of social justice and sustainable development.

There is certainly the will on the side of at least some investors to contribute to local development and conduct ethical business. Asked about the role of cannabis investors to support a fair(er) trade model, ensure decent working conditions, and empower small farmers, the Chief Operating Officer of a Caribbean based medical cannabis company responded as follows:

Well, I think that it's very easy for a cannabis company to pay much higher than normal wages. So we've done that, we're doubling the wages of the average wage which is still... there's still room for improvement there but we haven't harvested anything yet so I think upon harvest, our employees are gonna see

some nice benefits there or bonuses you could say. But I think, more so than many industries, there's the opportunity to get that fair trade deal because it's just so regulated from the government that, unlike, say coffee where it might happen up in a mountain and who knows really what's going on behind the scenes, whereas this is so regulated by the government that they could actually set the minimum wage. They haven't yet and I don't know if they will but a company like ours wouldn't go too far if we were paying really bad wages would we? Because this business is so publicised, nothing is hidden in this business, it's all up front, you know.⁸¹

Another element is that of consumer education and awareness raising. In the field of licit medical cannabis, there is a consumer-driven need for a safe product. However, with huge variations worldwide

Public policies to shape emerging, licit cannabis markets⁸²

Policy tool	Description
Quotas	Requirement that a certain percentage of cannabis is sourced from small farmers e.g. in Colombia, Law 1787 of July 2016, which opened up the medical cannabis market, stipulates that companies must obtain at least 10% of their cannabis from small growers.
Production ceilings	Regulations on the maximum size of grow sites to curtail corporate consolidation and takeover e.g. in California, cultivation sites are not to exceed one acre until 2023
Restrictions on foreign ownership and investment	Caps regarding majority ownership by foreign persons and companies in licensed operations e.g. in Jamaica, domestic companies/producers must retain a minimum of 51% ownership. A complete moratorium on foreign investment can also be considered as part of a transition period to allow a domestic base to be developed before opening up the market to foreign entry and competition as has been done in Thailand.
Minimum pricing	Producers guaranteed a minimum price for delivery of cannabis so that growers can be assured of a specified income
Licensing regulations	Affirmative licensing laws which prioritise small and traditional growers and frontline communities e.g. Jamaica has introduced a tiered licensing system for applications with different areas of land, licensing fees for small farmers are significantly less than for large farms, and mechanisms exist to allow small farmers to postpone payment until after harvest. In the US, San Francisco, Los Angeles, Oakland and Sacramento are pioneering social equity programmes that prioritise licenses for people with low incomes who have lived in an area ravaged by the drug war.
Development fund	Fees collected from the issuing of licenses and/or other revenue collected by the state from the marketing and export of cannabis to be re-invested in cannabis-growing communities and regions e.g. in St. Vincent and the Grenadines foreign companies are required within the first of year of licensing to pay a 250,000 XCD food-security fee which is channelled into alternative livelihood projects.
Cooperative laws	Making use of cooperative laws and amending them where necessary to allow cannabis growers to register themselves as collective bodies, taking advantage of the benefits (in terms of the pooling of resources and risks) that this can confer e.g. Article 7 of Morocco's new proposed cannabis bill (Bill 13-21) setting out the eligibility criteria for licenced cannabis production, stipulates that they would need to belong to a cooperative.
Public cannabis research and development	Setting up public cannabis seed banks, research stations and centres of excellence to collect information and further scientific knowledge on seeds, landraces, growing conditions, and medical benefits and uses. Focus should be on safeguarding indigenous strains and native seeds. This knowledge should be made accessible to cannabis growers rather than leaving this in private hands which can result in growers having to pay for access or even being excluded completely due to patented technologies.

in terminology, testing regimes, quality controls and standards, it is a significant requirement to be an informed consumer of medical cannabis.⁸³ Standard setting bodies must be geared towards forms of patient-focused certification, working with medical practitioners, public health bodies, and patient advocacy groups to increase education and awareness. Especially in a context driven by rapid commercialisation and commoditisation (and where instances of non-compliance, misrepresentation and fraud are also a reality), these outreach efforts are crucial, for both the successful export of medicinal cannabis as well as for building up a domestic consumer base. In other market settings, where cannabis is regulated for adult use, consumer education in relation to growing conditions and social and environmental impacts is also important to allow small farmers to benefit from niche markets and associated branding strategies in the same way this takes place in, for instance, the organic agriculture or craft brewing sectors. Research shows that consumers are, in principle, interested in considering questions about fair trade and environmental sustainability, even if there remains only limited knowledge about what this means in practice.⁸⁴

The opportunity for public policies to shape emerging, licit cannabis markets is significant, given the highly regulated frameworks within which licit cannabis production and trade currently take place. In general, there are two types of public policies that can steer licit cannabis markets in a more equitable direction and guard against corporate capture: policies to *lessen* the barriers to entry for certain groups, such as small and traditional growers, and policies to *raise* the barriers to entry for others, such as large, cannabis companies. The table gives an overview of some of the public policy tools that have been used or considered by governments with regard to regulating the licit cannabis market.

Of course, in a highly unequal, unpredictable and ever-evolving global market, not all

these measures will necessarily have the desired effects, particularly if there is a lack of strong follow-through, due diligence, and on-the-ground monitoring of impacts. Quotas to involve small growers can become tokenistic or end up turning them into day labourers on cannabis plantations as has been observed in Colombia.⁸⁵ Many loopholes still exist. In California, big cannabis groups have weakened the anti-monopoly provisions in place by successfully lobbying for the stacking of licenses, effectively circumventing existing grow size limits.⁸⁶ Other countries that have regulated cannabis have also seen similar forms of vertical integration as a handful of operators and big investors exercise control.

In sum, steering cannabis markets in a more sustainable and equitable direction will require states to exercise regulatory and discretionary power in order to set the rules of the game, attract responsible investors, and line up suitable buyers and market outlets. This is not within the gift of any one actor or investor alone. Rather, it will require a strategic compact between enlightened public policy makers, responsible investors, and organized growers' communities to develop country and/or regionally owned visions for how cannabis can be part of a broader developmental success story.

7. Cannabis and Development: Redux

7.1 The evolution of cannabis regimes over time

In advocating for a model of development *with* cannabis, this report charts a new course for how the drug policy and development communities can engage and interact with one another. Rather than seeing cannabis as an anti-developmental scourge to be expunged through punitive, securitised, or militarised approaches to drug control, cannabis, in its many different forms, is recast as a potential driver of development. The implications of such a paradigm shift are significant as formerly criminalised peasant and rural communities are engaged, perhaps for the first time, as political subjects in their own right. While their agency is far from assured in the emerging licit cannabis market, it shifts the terrain of contestation away from one of the drug control framework and its associated bureaucracies of monitoring and surveillance (including well-rehearsed anxieties within AD projects around proper targeting and sequencing, balloon and displacement effects, attribution, conditionality, scope etc.), to one of substantive questions of political power and representation, the distribution of wealth and opportunities, and the ways in which these are stratified along class, gender, racial, ethnic, and generational lines. Hence, the emphasis this report has placed on asking questions around the terms of inclusion of cannabis farmers in newly emerging cannabis value chains and the threats posed by corporate capture.

Of course, simply being attuned to these dynamics does not in and of itself guarantee more development-oriented or equitable outcomes. An AD *with* cannabis approach does not start with a *tabula rasa* but must grapple with the very real legacies of colonialism, prohibition, conflict, criminality, and the past history of development and state failures. If a development *with* cannabis model is simply used to assert new forms of (predatory) state and corporate control leading to

Cannabis drying, Toribio, Columbia, Martin Jelsma, August 2018



renewed dispossession and/or adverse incorporation, then, arguably, it does little to advance the position of cannabis growing communities compared to the previous framework of prohibition. In fact, legalisation could, paradoxically, even represent a step backwards.¹

It is important in this sense to acknowledge the dual character of what is being proposed here with the ‘alternative’ within the alternative development *with* cannabis model signalling both an alternative to the hegemonic drug control regime and an alternative to an extractivist development model. To separate out these two dimensions would be to fundamentally misdiagnose the nature of the cannabis survival economy today, its historical origins, and would be to substitute one historic injustice for another. As example after example in this report documents, the emergence of cannabis subsistence economies is a response to poverty, social exclusion, precarity and the struggle to sustain agrarian and land-based livelihoods in a rapidly urbanising and industrialising world economy. Failure to fully recognise and learn from this would be to engage in a damaging exercise of revisionist history.

To fully address the underlying tensions and contradictions in current drug policy and development circles requires looking at how competing visions of cannabis drug policy have gained prominence over time, rising and falling with geopolitical shifts and the positioning of dominant actors and institutions. Distinct cannabis regimes can be said to cohere over time, as described in this report, whereby a regime is understood broadly as an ordered system of rules, regulations, norms and assumptions that combine to form an overarching governance logic. These regimes are operationalised through associated actors, institutions, tools, methods, indicators and enforcement mechanisms. As such, they reveal underlying assumptions of who the key political subjects are that animate various theories of change. In this sense, the development *with* cannabis

model stands at a somewhat unique juncture between a model which harkens back to the era of repressive drug control (which is still a reality in many if not most parts of the world) and a forward-looking vision for the liberation and emancipation of formerly oppressed, persecuted or marginalised groups. How the development *with* cannabis model responds to these fundamental threshold questions is likely to be the subject of much negotiation and struggle over the coming years, especially as it is unfolding within a global context of dramatic inequality, untold ecological destruction and climate crisis, flagrant human rights violations, and alarming authoritarianism and democratic backsliding. It is also highly contingent on how existing treaty tensions are ultimately resolved and the ways in which nascent licit cannabis markets can build durability and strength.

This report has made the case for a vision which moves towards a sustainable future for cannabis farmers, identifying cannabis growers and communities as the central agents of change in the newly emerging licit cannabis markets. What this means in practice will vary according to context and the constellation of political, economic and social forces, including how well cannabis farmers are themselves organised and able to articulate and push through their vision and demands. In this sense, it is important to recognise that cannabis growing and dependent communities are not homogenous, but are subject to internal hierarchies and attendant forms of (self) exploitation and social control. These forms of social differentiation will only increase as the operation of inclusion thresholds in new investment projects and market ventures will inevitably produce winners and losers. How states will accommodate ‘losers’, manage expectations, deliver on promises, and honour deals, all within the framework of a transparent, inclusive and democratic process will surely be a significant challenge. It points above all to the importance of coalition and alliance building, firstly within and amongst cannabis growing communities

themselves, but secondly also through various forms of state–society interaction across different levels of governance and decision–making. Other actors, whether they be from the policymaking, practitioner, academic, or private sector worlds, will also need to be engaged if adaptable and enlightened public policy is to prevail.

We go on to outline some key areas of concern for those pursuing a development *with* cannabis model. Some of these relate to long–standing blind spots in the intersections between drugs and development. Others have emerged more specifically in the context of particular cannabis regimes and how these have evolved over time. Importantly, these ‘sticky questions’ or ‘thorny issues’ do not present matters of pure academic concern. Policymakers are grappling with these issues in real time and with real world consequences for cannabis farmers, communities and development writ large.

7.2 Understanding the dynamics of agrarian change: how land, labour and capital interact within cannabis production

If an AD model is to serve as a potential vehicle for the creation of sustainable livelihood options for farmers in the licit cannabis market, then much closer attention needs to be paid to understanding the dynamics of agrarian change across time and place. While tentative steps have been taken to rectify this deficit with the gradual shift towards more development–oriented drug policy, there is still very little intellectual effort expended in asking key agrarian questions to better inform policy design and implementation.³ Yet these questions are critical to understanding the framework conditions under which cannabis–producing communities and regions will engage with AD programmes and whether they stand to gain or lose in the shift to legality. This section cannot cover all aspects in relation to this but will examine some of the main features and the questions to which these give rise. The

resolution to these questions will have to be worked out in each context and situation, and will depend on the prevailing balance of social and political forces.

a) On capital, class, and technology

As this report has described, cannabis farming has tended to attract poor or socially marginal farmers who are already vulnerable and thus willing to take on the risks of illicit cannabis cultivation as a survival strategy. In cannabis–producing regions across Africa and the Middle East, Asia and Latin America and the Caribbean, these survival strategies are a response to the failures of globalisation and the rolling back of the state; the dislocations and insecurities brought about by structural adjustment; and the devastating impacts of ecological destruction, land and resource grabs, all conspiring to produce an enduring crisis of development. Far from seeking out high–risk criminal activity for the potential lucrative rewards it can bring, cannabis production then is recast as a rational response to economic insecurity, a form of agricultural diversification and livelihood stabilisation for farmers facing declining terms of trade in legal cash crops. It is not accidental for example that the rise of cannabis production in sub–Saharan Africa (unofficially estimated to be Africa’s largest cash crop) over the past decades has coincided with the failures of state–led development projects, waves of deregulation and liberalisation of trade and investment policies, commodity busts and booms (coffee, cacao, rice), and a burgeoning ecological crisis (droughts, exhaustion of forest reserves, land degradation, soil erosion, desertification, etc.). Against this backdrop, cannabis has in many senses served as a driver of development: according to *Observatoire Géopolitique des Drogues* (OGD) studies with African farmers, during the 1990s cannabis had become the main cash earner on the farms where it was grown, bringing in at least 75% of income, regardless of the socio–economic backgrounds of these farms.⁴

This does not mean that cannabis has been a vehicle for economic liberation – in fact, far

from it. The vast majority of cannabis farmers have remained in poverty and/or under the influence of mafias and trafficking networks as agricultural economies disfavour those who lack capital and power resources. Cannabis economies are in this sense not dissimilar to other agrarian drug economies in that they are fraught with social inequity, politico-economic violence, and environmental harm. Rather, cannabis should be understood as performing a safety-net function, serving as a 'compensation crop' when other legal cash crops fail to secure an income, and allowing agrarian and land-based livelihoods to provide at least a modicum of security, continuity, and social reproduction. This is to say nothing of the role that cannabis plays in the utilitarian consumption habits of the working poor as a way to cope with crushing workloads and the vagaries and cruelties of life.⁵ It should follow from this that any analysis which romanticises all cannabis farmers as independent operators or homogenises

cannabis communities without taking questions of class into account is inadequate. This must include an examination of the different classes of labour as many of those involved in cannabis-production economies are not 'farmers', 'growers' or 'cultivators' in the classical sense but (near)landless workers, processors, packers, women and children doing unpaid work (often within the family) and so on.

This offers a number of considerations for an AD *with* cannabis model.

The first is to question a cannabis-development strategy solely based on an (industrial) agro-export model. Especially given the failings of earlier rounds of export-led commodity-growth strategies, it is unlikely that a new iteration of this pathway now with cannabis will succeed in achieving broad-based development outcomes. This is compounded in the case of cannabis by



Family producing hashish, Morocco, Pien Metaal, 2009

the fact that a number of countries have appeared to opt entirely for this model, soliciting foreign capital investment without amending their domestic drug laws. This means that domestic market channels are completely shut off as a source of income and revenue. Meanwhile, the way in which the global cannabis market is structured means that huge advantage is conferred to prime/early-mover investors located largely in countries in Europe and North America where cannabis law reform has been a reality for longer. The benefits of this in terms of enhanced capital, technology, and knowledge are immeasurable and make it likely that the primary lens through which these investors will engage with cannabis farmers in traditional producing countries is as labourers on cannabis plantations, even if promises are made to eventually elevate them above the level of raw-commodity producers through investments in training

and skills within 'inclusive' value chains. At the same time, a number of countries in Europe and North America are also looking to expand their domestic production, calling further into question the sustainability of this development strategy.

Instead of putting all the eggs in the basket of an export-led growth model, it would be wiser for governments to pursue an 'all of the above strategy' that focuses on as many markets as possible (foreign, domestic, general, niche; food, cosmetics, textile, industrial, therapeutic, medical, scientific, recreational). If this means amending drug policy, medical frameworks, food-safety laws and others to allow for this then this is something that should be seriously considered, with the overall aim of retaining or returning as much of the wealth generated by cannabis at the national or territorial level. Maintaining these diversified development pathways can serve



Donkeys and kif, Morocco, Pien Metaal, august 2009

as an effective risk management strategy, taking into account the experience of prior commodity busts and booms.

The second, and related, consideration is to better understand how technology enters into the equation, especially for the development of the medical market. Medical cannabis occurs in tightly controlled industrial settings, including through sophisticated growing techniques, such as hydroponics, hybrid varieties and high-quality seed selection, as well as adherence to GACP and GMP standards. This means high-cost investments in track and trace, seed-to-sale systems, fencing, video surveillance, professional accounting and cash flow controls, and a plethora of other bureaucratic and legal requirements. As such, medical cannabis production facilities not only foster forms of technological alienation as they are largely removed from their land and environment, they also operate through technologies that may in principle be scale neutral, but in practice are far from resource neutral. This is the reason why even in settings in Europe and North America, such as in California, the shift to legality has tended to favour an exclusive set of larger growers with the financial resources to pay licensing fees, alter their practices, and remain competitive in legal markets.⁶ This has led to consolidated supply chains and a small number of licensed distributors.

A number of states including Jamaica, St. Vincent and the Grenadines, Colombia and others have tried to facilitate the entry of small and traditional cannabis farmers through, for example, tiered and priority licensing systems; the lowering or temporary waiving of fees; the introduction of quotas, partnership agreements or joint ventures; fostering the formation of cooperatives; assigning dedicated liaison officers from newly created medical cannabis agencies to work with growers etc. All of these efforts are commendable and will be crucial to build on and learn from. Nevertheless, one should not underestimate the significant challenges and barriers to entry facing small and traditional

cannabis growers into the global cannabis industry. While technical innovations ('modern' growing techniques, 'high quality' seeds, new strains) can serve as a basis for rapid capitalisation, they will also produce new forms of inequality and exclusion as they displace local traditional practices, indigenous knowledge, and landraces which may be more adapted to their cultural and ecological context, with potentially deleterious effects on ecosystems, agrobiodiversity, resource use, and communities.

Given their critical importance, safeguarding these plant genetic resources from biopiracy or private appropriation is an area deserving of much greater attention. Investments in public cannabis seed banks and scientific research are vital at a time when we are already witnessing the effects of contamination and cross-pollination. How to make such knowledge accessible to cannabis farmers is of equal concern with the peer-to-peer knowledge-transfer methodologies as practiced in the global network of agroecology schools⁷ or the use of participatory guarantee systems in the organic agriculture movement perhaps serving as good examples.⁸ As cannabis farmers enter into the licit cannabis market, it will be important to protect their rights to seeds as enshrined, for example, in the United Nations Declaration on the Rights of Peasants as well as the International Treaty on Plant Genetic Resources.

b) On land and labour

Who has access to and control over land and who can command labour are critical agrarian questions that inform also the cannabis production economy. The question of land has received some, if still insufficient, attention in debates on cannabis and development. Hanson for example notes the deeply entrenched historical and racialised inequalities in land ownership in Jamaica which have meant that traditional ganja growers have had to rely on illegally occupied private properties and government holdings.⁹ She argues that for a sustainable AD programme for ganja growers to succeed, the Jamaican government

must recognise the rights of squatters and regularise growers' access to (public) land, such as land previously used by large sugar plantations. In St Vincent and the Grenadines, where ganja growers have also occupied Crown Land forest reserves illegally to grow cannabis on mountainous hillsides, land reform has featured as part of their medical cannabis development programme, if still in a rather narrow and geographically circumscribed way. In Colombia, land distribution has also been part of the peace settlement agreement, with a territorial approach to development and the granting of new land titles which are also, at least in theory, set to benefit cannabis farmers. How different land access and property regimes are reformed, and how also those currently without any access to land are taken care of, will be determinative of whether cannabis farmers stand to benefit from new market openings. There is much the AD community can learn here from best practices in other fields, for example by drawing on international governance instruments such as the FAO Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests.¹⁰

Questions of labour are equally important. The precarious, at times brutally exploitative, conditions of labourers working on illicit cannabis fields have been documented in various countries.¹¹ In Morocco for example, Afsahi (2020) notes the exploitation of vulnerable populations (women, children, seasonal and landless agricultural workers) ever since Rifian agriculture was first integrated into colonial capitalism.¹² This has continued to this day as the rugged, mountainous terrain has hindered the introduction of labour-shedding mechanisation, so that thousands of workers with either precarious status (paid workers or servants) or invisible status (undocumented workers) are used at all stages of cultivation and production, namely sowing, weeding, thinning out, harvesting, drying and storage, sieving, pressing and selling of cannabis. This role of migrant labour (internal as well as cross-border) along with the social

reproductive labour often performed by women are two aspects which are often underexplored and undervalued in discussions of cannabis and (alternative) development, requiring further attention.

There has been much agonising as to the exact model of production that a newly licit, medical cannabis market will be based on. In Africa, according to Duvall, 'the most obvious roles Africans have had are as labourers' given that license fees are unaffordable for the average citizen.¹³ The preference for some large cannabis enterprises to operate on the basis of vertically integrated licensing systems would seem to point in this direction. If this is the case, then much more emphasis than we have seen to date needs to be placed on regulating labour conditions, including around workplace safety and providing a living wage, as well as exploring models of worker driven social responsibility.¹⁴

7.3 Cannabis and questions of identity: how race, ethnicity, gender, and generation come into play

In countries where cannabis has been regulated, oftentimes the benefits disproportionately accrue to socially dominant groups whether defined along the lines of race, ethnicity, class, generation or gender. An AD *with* cannabis model will need to be sufficiently attuned to these forms of social differentiation if it is to avoid reproducing existing forms of oppression and inequality.

a) Gender and social reproduction

While cannabis production is often characterised as a male dominated activity, this overlooks significant geographical variation. In the main cannabis producing region of Pondoland in the Eastern Cape province of South Africa, women make up a significant, if not majority, share of cannabis farmers, with many of the men working in the mines and younger people having left to find work in urban centres.¹⁵ Even where women are less active in productive work,

they play a critical role in the reproduction of the cannabis economy. In Morocco for example, Afsahi (2020) argues that the low visibility of women conceals a gendered division of domestic roles as well as many other inequalities.¹⁶ In addition to their domestic tasks, women are given the role of looking after livestock and children, fetching firewood and water, and preparing meals for the seasonal farm workers. In this way, it is impossible to imagine the continuation of the cannabis survival economy in the Rif region without this largely unpaid, household, and reproductive work carried out by women.

If a development *with* cannabis model leads to cannabis farming becoming more professionalised or entrepreneurial in style, key questions need to be asked as to how this kind of productive and reproductive labour (already externalised by capitalist economies) performed by women can be valorised. The incorporation of gender dimensions within the design of policies – and more generally the empowerment of women’s voices in policymaking spaces and debates – will be crucial here.

b) Race/ethnicity and restorative justice

As with the gender dimension, questions of race and ethnicity feature strongly in how sustainable livelihoods can be generated for cannabis farmers. In the global South, this strongly correlates with the legacies of colonialism and imperialism and how to redress historic injustices. In Jamaica for example, racialised property regimes emanate from the pre-emancipation era and still condition patterns of land ownership and structural poverty to this day. The same holds true for many other parts of the Caribbean. A number of measures have been enacted that seek to go some way to confront these inequalities. A development *with* cannabis project in Jamaica seeks to uplift the position of the Maroon community while certain specific provisions have been put in place in Jamaica and a number of other Caribbean states granting special licenses and permissions to the Rastafari

community to grow and consume cannabis for sacramental and religious use.¹⁷ Further to this, states such as St. Vincent and the Grenadines have pursued amnesty bills that seek to facilitate the transition of previously criminalised persons and groups into licit cannabis livelihoods.¹⁸ In Morocco, which was subject to both Spanish and French colonial rule, cannabis has featured in long standing struggles by the Amazigh (Berber) population for liberation and as an assertion of their political, economic, social and cultural rights. An alternative development *with* cannabis model could go a long way to rebalance glaring regional inequalities in the country, providing opportunities for communities historically defined by agro-pastoral and semi-nomadic tribal relations.

These are not just questions confined to the ‘Global South’. Also in the United States for example, concern for the disproportionate impact that the War on Drugs and racialised policing has had (and continues to have) on minority populations has been a driving force behind cannabis legalisation. Movements against mass incarceration and for criminal justice reform have coalesced behind the push for state and federal level cannabis law reform, with special attention paid to the position of Black, Latino and minority owned businesses in the industry. Sponsorship of bills around the expungement of criminal records and other measures related to restorative justice have enjoyed bi-partisan support.

c) Youth and generational renewal

Although this has received relatively less attention in the literature on cannabis and development, the question of youth and generational renewal is no less significant if longer-term, sustainable futures are to be envisioned in the licit cannabis market. The challenges here are stark. Morocco’s main cannabis producing region, the Rif, is one of the poorest areas of Morocco but also has the highest rate of demographic growth, with a population density three times that of the rest of country. The result has been



that cannabis production has taken place on ever smaller parcels of land.¹⁹ Despite the many challenges, it is clear that cannabis has provided a lifeline to the impoverished region, thereby also keeping people in the area and reducing the pressure to migrate for a better future. As Chouvy (2007) notes, “The agricultural cannabis economy not only significantly regulates employment in the Rif region, especially for young farmers, but also emigration flows to Europe”.²⁰

More generally, sustainable futures for cannabis farmers will have to take seriously the question of generational renewal. Against the backdrop of global de-peasantisation, an agrarian and ecological crisis, and a mainstream development paradigm that associates modernisation with a demographic shift from rural to urban, how cannabis can create licit, livelihood opportunities for the next generation of rural youth should be a major priority focus area for drugs and development policymaking. Depending on how the licit cannabis market evolves, there are opportunities for cannabis to generate employment for rural youth, particularly if it is integrated as part of a broader (rural)

development component. As one cannabis activist and horticulturalist from St. Lucia puts it: ‘And we are actually hoping that the move to cannabis, would attract young men back into agriculture and these young men now, instead of just being cannabis farmers, they would also be food producers. So with cannabis you have crop rotation and we want to lower our food import bill, having more organic produce being sold in the country. We hopefully have a more healthier [sic] nation. We create jobs for that section of society that have disqualified themselves from the job market... But the cannabis industry could absorb these things’.²¹

7.4 Environmental impacts and the political ecology of cannabis regimes

Empirical data on the environmental impacts associated with different cannabis production models and regimes is still woefully inadequate – a reflection more generally of the fact that environmental policy is lacking in the cannabis space. This is partly the result of prohibition which has meant that environmental concerns have been completely ignored under the general narrative that ‘growers are bad, cannabis is bad’ to justify (forced) eradication programmes, sometimes involving (aerial) spraying with agrochemicals. These have in turn caused further environmental harms. The cannabis plant itself is of course a natural carbon sequester which can be effectively used to restore/rehabilitate degraded soils by removing contaminants. Hemp can also act as a substitute for wood in paper and construction industries, thereby reducing deforestation.

However, while prohibition has certainly played a role in pushing cannabis farmers into fragile ecological settings to evade detection by state police and drug-enforcement agencies, it would be wrong to reduce the negative environmental impacts associated with cannabis cultivation to this alone as bad natural resource management and

environmental stewardship is common to both legal and illegal cannabis production. Afsahi (2020) provides a useful framework of analysis here, comparing the environmental costs associated with cannabis producing regions operating under illegality in the case of Morocco and legality in the case of California.²² Despite the differences in legal frameworks, she identifies common patterns of how relationships between people and the environment change with the intensification of cannabis cultivation towards cannabis monocultures for export – a process she describes as one of ‘environmental simplification’.

In the case of Morocco, this has meant a shift from a multi-crop landscape (where cannabis used to be grown in small quantities in market and residential gardens alongside traditional crops, fruit trees, and livestock) to the linear, standardised mono-crop production of cannabis for export. This has gone hand in hand with a huge loss of biodiversity and wild animal species, massive deforestation, and increasing water stress and scarcity. These problems have been compounded by former colonial and current state policies that have not respected traditional agricultural and forestry practices, pushing farmers into ever more marginal existence and driving also the expansion of the cannabis frontier into forested areas.

In the case of California, where cannabis grown for the medical market has been legal since 1996 and for the adult use/recreational market since 2016, similar problems around the overexploitation of natural resources are observed. Tony Silvaggio (2018) traces this back to a long history of logging and poor land management which has been exacerbated by the transformation of cannabis agriculture from ‘a small, ecologically benign cottage industry during the ‘back to the land’ era to a corporate greenrush’.²³ This has meant the industrialisation of cannabis production with cultivation expanding and intensifying rapidly from an average of 20 – 30 plants per farm to plantations containing hundreds or even thousands of plants. This has extended

cannabis production into ecologically sensitive and remote watersheds already at risk from water diversion and the further fragmentation of forest landscapes. Silvaggio argues that while regulation has gone some way to curtail some of the most egregious violations, ‘... the promise of an ecologically sustainable cannabis industry has not been met due to resistance to regulation, short term revenue needs of the state, and big corporate cannabis interests’.

In sum, drug policy, due to its historical disconnect from sustainable development and environmental policy, has often failed to rein in – if not actively facilitated and rewarded – poor environmental practices. There is a danger that this will continue under an AD *with* cannabis model if the industry continues along the path towards cannabis monocultures. The damaging impacts of these intensive farming practices and agro-industrial model of production in terms of the overexploitation of natural resources and the social inequalities and conflicts that flow from this have already been documented in other sectors. This issue is likely to intensify as concerns around a ‘green gold rush’ characterised by corporate capture and the influence of Big Cannabis are expressed at a time of unprecedented global environmental change and crisis.

It also connects with comparisons between the indoor and outdoor cultivation of cannabis. The vast majority of cannabis produced in the ‘Global South’ which could find its way to the European and North American medical markets through, for instance, AD *with* cannabis projects is grown outdoors. This stands in contrast to countries such as Germany and Canada where growing conditions generally are less favourable to outdoor cultivation and production takes place in highly controlled, indoor settings. Some have pointed out the superiority of outdoor cultivation given the environmental costs associated with indoor production, noting the high energy use and greenhouse gas emissions that follow from continuous indoor lighting and advanced climate-control systems and the

fossil fuel needed to power generators. For example, Mills (2012) has done some research on the carbon footprint of indoor versus outdoor cannabis cultivation in California prior to legalisation.²⁴ Although the study is based mainly on household-scale indoor growing, it offers some relevant indications. The research estimates that ‘indoor cultivation is responsible for about 3% of all electricity use, or 9% of household use. This corresponds to the electricity use of 1 million average California homes, greenhouse-gas emissions equal to those from 1 million average cars’.²⁵ With regard to associated biomass-related CO₂ emissions, outdoor growing ‘would be on the order of 150 kg CO₂/kg Cannabis (for only one harvest per location), or 3% of that associated with indoor production’.²⁶ In Colorado, Hood (2018) writes that cannabis cultivation accounts for more than 4% of Denver’s total electricity consumption, putting a significant strain on power grids.²⁷ Some of these arguments in favour of outdoor cultivation could thus be compelling, as small-scale, organic, outdoor production uses much less energy with natural sunlight substituting for the electricity in indoor light and cooling/heating systems.

The integration of environmental sustainability criteria in cannabis production can signal a shift towards a greener drug policy where environmental indicators feature as prominently as other social and economic considerations. This includes being attuned to the environmental costs of current production practices, including the agro-industrial model, as well as to the ongoing and future impacts of climate change. While these discussions are not yet commonplace, these issues are being flagged by some. As a cannabis activist and horticulturalist from St. Lucia explains:

But then best practices where we are trying to grow as organic as possible, in St. Lucia, I would say that already 90% of the farmers are already not using any chemicals. They use manure for nutrition and the best agronomic practices. So we don’t have far to go in terms of complying with organic regulations. I believe because we have volcanic soil and

well-drained soil, the quality of the herb is pretty good. I do think with climate change, we have to look at climate-change mitigating agricultural infrastructure. So heavy rains could damage plants in full flower causing bud rot so we may have to in the rainy season, farmers may have to have a certain portion of their land under plastic just so that, you know, you would get a crop in the rainy season so you don’t get all your outdoor crop destroyed. Because right now you really can’t predict how the rain is going to fall, it’s really... you find torrential rain fall where the raindrops are really big and intense precipitation. You would never get that amount of precipitation in former years and we are seeing it more and more. And it’s not only damaging to the cannabis, it’s damaging to agriculture in general.’²⁸

7.5 A shared responsibility: towards a true North-South dialogue on cannabis and development

As many have noted, the AD concept has come to mean different things to different people over time. While this ambiguity can be problematic, it also explains some of the concept’s enduring relevance and potential to this day. As Brombacher and David (2019) point out, “AD was for decades the only socio-economic development element within the global drug control system that was considered legitimate and even had passed the clearing of an UN drug control convention”.²⁹ They trace the evolution of AD approaches including militarized, development-led or in some cases even legalization-oriented approaches of AD. It is to the latter two and especially third approach that this report hopes to make a useful contribution within the context of cannabis.

For this, it is useful to recall two key principles that the AD concept introduced in the 1998 Political Declaration – namely that of *shared responsibility* and a *balanced approach*.³⁰ These speak to the need for a careful calibration between drug control and development objectives and the responsibility

that all countries – traditional producers and consumers – play in the global drug problem in terms of demand and supply. According to Brombacher and David (2019), this notion of co-responsibility has proven to be the ‘life-insurance’ of AD programmes as it justified development aid and spending, in many cases from donors in the ‘Global North’ to countries in the ‘Global South’, for many years.³¹ While all this is true, it is now an open question as to how the concept and practice of AD will respond to the new reality of a rapidly emerging, but still nascent, licit global cannabis market. This report has proposed a model of development *with* cannabis as a response to this new reality, understanding that there remain many contradictions and treaty tensions still to be resolved.

If this model is to succeed however, it will require a serious updating of the notions of development, as already outlined, as well as of how cooperation between the North and the South is conceived. As this report has argued the ongoing legacies of colonialism and imperialism, along with the particular burden that militarised and securitised responses to illicit drugs have placed on countries in the traditional producer countries highlighted in this report, need to be taken into account in considering a new development *with* cannabis model. In order for this model to serve as a true vehicle for economic transformation rather than simply the reproduction of new forms of inequality, this history of uneven development, violence and wealth extraction must be reckoned with. It is for this reason that principles of social justice, fair trade, sustainability, and democratic decision-making have featured prominently in this report, with a particular focus on the position of small-scale cannabis farmers in traditional producing countries.

While these power imbalances and historical injustices must be recognised, it is also important to move beyond these simplistic categories of ‘Global North’ and ‘Global South’ in order to appreciate some of the common patterns of capital accumulation and violence that have underpinned the



Cannabis in Uttarakhand, India, Tom Blickman, september 2018

reality of (cannabis) drug production in many different localities – in both the North and South. While one must always be sensitive to the vast differences in resources, agency and positionality between cannabis producers in different contexts, there are also certain common factors that bind them together. A small, ‘mom and pop’ cannabis business or family farm in California for example is, on a conceptual level at least, not so different from a traditional ganja grower in Jamaica. Both stand in much the same position in the face of a (trans)national elite of cannabis entrepreneurs connected to global finance and technology. In their own context-specific ways, they also share a struggle for independence, autonomous grassroots development and territorial sovereignty as a counterpoint to coercive state control and/or corporate capture. In this way, the debate on development *with* cannabis is re-routed from a one-way flow of information, knowledge, resources and interventions from the ‘Global North’ to the ‘Global South’ to a two-way exchange about how to empower small and traditional cannabis growers within newly emerging political and economic structures in the ever-expanding licit cannabis market.

Summary Conclusions

From the early days of cannabis prohibition, traditional cannabis-producing countries have stressed the importance of finding alternative income opportunities for poor rural communities dependent on cannabis cultivation. Pressured by the 1961 UN Single Convention to abolish traditional cannabis uses within 25 years, countries like Lebanon and Morocco initiated substitution projects triggering a global discussion about 'Alternative Development' that continues until today. But in contrast to ongoing AD projects for illicit coca and poppy cultivation, nowhere have small cannabis farmers been offered any substantial development assistance for moving out of the illegal market. Meanwhile, demand for cannabis in Europe and North America kept growing and cultivation spread to every corner of the world. In some regions, the illicit market could continue to operate under de facto tolerance, but in other parts repression, mass incarceration and forced eradication became the norm.

The moral case for a new cannabis-development model with cannabis growers at the centre is compelling given these historic injustices. As an activist for over 50 years and a self-described 'cannabis elder' states:

Historically, growers have to face the worst of it: growers are imprisoned; growers' crops are eradicated by security forces and unofficial security forces; growers face exploitation by middlemen; growers face being robbed by pirates. So now with the medical cannabis industry, growers have to be remembered for the role they played in this development. We say thanks to the respective governments who have passed the legislation to make cannabis or medical cannabis legal. But we say double thanks, double praises we give, to those who have suffered all their days because in the final analysis, it is those who have suffered, those who have been in it, those who have trod the high waters, those are the ones who have been the main persons responsible for the transformation.'



The wave of policy changes and fast-growing legal spaces in the medicinal cannabis market in recent years may offer new opportunities for farmers to transition out of illegality. Thus far, however, few small farmers have been able to use these opportunities. In fact, the current dynamics of the cannabis-regulation trend are jeopardising the livelihoods of millions of small cannabis farmers. The opportunity to shape the still nascent licit cannabis markets in a more inclusive direction by incorporating principles of social justice and fair trade is rapidly closing given the ongoing corporate capture and the high barriers to entry for marginalised and criminalised populations. Connecting the dots between the debate on cannabis regulation and the sustainable development agenda may still offer prospects for upholding the Sustainable Development Goals' promise to 'leave no-one behind'. This also requires the international community to rethink the AD paradigm: AD in the classical sense of shifting to other crops and income sources is no longer a viable policy perspective for cannabis, if it ever was.

In its new strategy paper on AD, the German Federal Ministry for Economic Cooperation and Development (BMZ) indeed proposes to review *'the feasibility and potential of medical cannabis as a legal value chain for Alternative Development in developing countries'*.² The strategy for 'sustainable change through development-oriented drug policy' acknowledges that *'a change is becoming apparent in the way countries are dealing with cannabis and cannabis products. More and more countries, including Germany, are adopting laws to regulate the medical use. This might increase the demand for legally cultivated medical cannabis and open up development potentials in regions in which cannabis has only been grown illegally to date'*.³

Ironically, the cannabis-regulation trend in the past decade has been most pronounced in those parts of the world where cannabis historically arrived last, namely Europe (medical cannabis and local experiments for adult use) and the Americas (medical as well

as adult use in Uruguay, Canada, Mexico and the US). In Asia and Africa, the continents with centuries-old cultural, medicinal and ceremonial practices – in some places going back thousands of years – cannabis policy reforms are only just getting off the ground. In a positive sign that several countries are cautiously starting to reclaim their long history and traditions with cannabis, India, Morocco, Nepal, South Africa and Thailand all voted in favour of the WHO recommendation to delete cannabis from the strictest Schedule IV of the Single Convention, along with other CND Member States such as Colombia, Jamaica, Mexico, European countries, Canada and the US.⁴ Without the support from those African and Asian countries, which have often taken a zero-tolerance stance in the CND, the WHO recommendation could not have been adopted.

The Moroccan government and parliament have referred to the scheduling change at the UN level as an additional justification for approving, in March 2021, a bill allowing cannabis cultivation for medicinal, scientific and industrial purposes. The legislation provides for cultivation licenses to be given only to Moroccan farmers in the Rif region, organised in a cooperative, who will have to sell their harvest to a state agency. Foreign companies can only become involved in the processing, extraction and export of medicinal products, in collaboration with local companies, and are expected to support the farmers' cooperatives with training and technical expertise to meet the basic GACP standards.

"Promoting a cooperative form of production in CARICOM member states would be beneficial to the development of the industry", according to the Caribbean Fair Trade Cannabis Working Group, *'given the barriers to entering a competitive market for the mostly poorly educated traditional farmers'*.⁵ The cooperative production model, also pursued in St. Vincent and the Grenadines and St. Lucia, has the advantages to share knowledge and resources, build power for negotiating with state entities and private industry, and potentially to

become involved directly in processing as (co-)owner of processing plants in order to appropriate value added directly to the communities.

Supplying local and regional markets provides an important economic base as well as an experimenting ground for different types of products, without immediately having to comply with high GMP standards required for access to international pharmaceutical markets. Countries that are recently introducing legal regulation of the cannabis market should consider keeping foreign businesses at bay at least until a local industry –including small growers – has been able to establish itself, as Thailand for example is doing. Finally, as the Caribbean working group underscores, *‘it is fundamental to any serious*

*attempt towards an inclusive and fair-trade model for cannabis in the region to remove categorically all penal sanctions and criminal records of those involved and committed to becoming licit producers of cannabis’.*⁶

The development of a roadmap setting out country or regionally owned visions for cannabis and development based on inclusive and consultative processes with cannabis farmers, health practitioners, patient groups, legal experts, scientists and other constituencies is critical to set the right framework in place. In the absence of formal structures, this will require governments to foster mechanisms for dialogue and engage in processes of trust building with cannabis farmers and other (formerly criminalised) communities. Benchmarking good practices



Cannabis cultivation in the High Rif, Morocco, Abdellatif Adebide, August 2020

and lessons from public policy experiences to lower the barriers to entry for, small farmers, for instance, while raising them for others, such as large companies, can help to steer cannabis markets in a more sustainable and equitable direction by attracting responsible investors and identifying suitable buyers and market outlets based on principles of community empowerment, the protection of natural heritage, and fair(er) trade.

At the UN level, the WHO and even more so the INCB have promoted a strictly controlled Western pharmaceutical model for the medical cannabis market, giving preference to preparations manufactured on the basis of isolated cannabinoids over herbal cannabis-based medicines and whole-plant extracts. This risks to create a monopoly to pharmaceutical companies and highly secured and standardized indoor cultivation of the raw plant material, accompanied by a narrative that small farmers cannot deliver the high quality standards required for the medical market. This model delivers expensive medicines largely inaccessible for the vast majority of people in the 'Global South', and makes it almost impossible for small farmers to conquer a significant space to supply the local and global medical cannabis markets. Indoor cultivation also comes with a high carbon footprint, yet another reason to consider changing current market dynamics. It also contrasts with the renewed importance the WHO has given to traditional and herbal medicines based on other plants, and the elaboration of special GACP standards for plant-based medicines, many of which are cultivated outdoors by small farmers in the traditional producing countries, belying the narrative that basic quality standards could not be met by small farmers in the case of cannabis.

The preference for this Western pharmaceutical model is largely a legacy of the many decades of cannabis prohibition, as it prioritises reducing risks of 'leakage' to the illicit market over facilitating access to cannabis-based medicines to anyone who can benefit from them. For the benefit of patients

and small farmers, it is urgent to question the dominant discourse regarding medicinal cannabis currently promoted by WHO and the INCB, which has strongly influenced such cannabis policies around the world. The European market in particular is currently offering the best prospects because of high and fast-growing demand, lack of supply and high prices, but has remained closed for imports of medical cannabis produced by small farmers in the Global South.

Developing a sustainable market for licit cannabis will thus mean having to address long-running tensions between drug control and development. This means joining the dots instead of thinking in silos in order to allow for approaches in which public health, social justice, human rights, economic development, environmental sustainability as well as security concerns are embedded.⁷ This will determine whether the licit cannabis industry will ultimately be a niche market, benefiting only a small group of actors or be part of a broader development process, especially for traditional producing countries that have borne the brunt of repression. It will require a deeper analysis of the scope and size of the (potential) licit cannabis market and a level of ambition as well as honesty about what can be achieved.

Notes

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19. Note however that production levels have not suffered due a series of agricultural innovations that have taken place beginning in the mid-2000s including the adoption of high-yielding varieties of cannabis, modern agricultural practices, and modern hashish production techniques. For a discussion of this, see: Chouvy, P.A. & Macfarlane, J. (2018), ‘Agricultural innovations in Morocco’s cannabis industry’, *International Journal of Drug Policy*, 58:2018, pp.85–91.

20. Chouvy, P. and Laniel, L. (2007) ‘Agricultural Drug Economies: Cause or Alternative to Intra-State Conflicts’, *Crime, Law and Social Change*, 48:133–150. <https://doi.org/10.1007/s10611-007-9085-1> https://d1wqtxts1xzle7.cloudfront.net/47338572/Agricultural_drug_economies_cause_or_alt20160718-29440-hnl6u7.pdf

21. Interview with Andre De Caires also known as ‘Pancho’, by Sylvia Kay, November 2019, St. Vincent and the Grenadines.

22. Afsahi (2020).

23. Silvaggio, T. (2018) Presentation ‘Environmental Consequences of Prohibition (Legalization with Prohibition): Lessons from California’ at the Colorado State University Pueblo Institute of Cannabis Research, *Getting High on Anthropology: A Story-Based Approach to Cannabis Research, Education and Funding*, Episode 57. <https://www.denveropenmedia.org/shows/tony-silvaggio-environmental-consequences-prohibition>

24. Mills, E. (2012), ‘The carbon footprint of indoor cannabis cultivation’, *Energy Policy*, 46: 58–67. <https://doi.org/10.1016/j.enpol.2012.03.023>

25. Ibid., p. 59.

26. Ibid., p. 63.

27. Hood, G. (2018), ‘Nearly 4 Percent of Denver’s Electricity Is Now Devoted To Marijuana’, *CPR News*, 19 February. <https://www.cpr.org/2018/02/19/nearly-4-percent-of-denvers-electricity-is-now-devoted-to-marijuana/>

28. Interview with Andre De Caires also known as ‘Pancho’, by Sylvia Kay, November 2019, St. Vincent and the Grenadines.

29. Brombacher and David (2019).

30. A/RES/S-20/2 *Political Declaration*, Resolution adopted by the UN General Assembly, 10 June 1998, New York: United Nations. https://www.unodc.org/documents/commissions/CND/Political_Declaration/Political_Declaration_1998/1998-Political-Declaration_A-RES-S-20-2.pdf

31. Brombacher and David (2019). Although the authors note themselves that AD only accounted for 0.1% of global ODA in 2013 reflecting what can be considered a chronic lack of funding for AD programmes in the context of illicit crops, and especially cannabis.

Summary Conclusions

1. Interview with Junior Cottle, alias Spirit, by Sylvia Kay, November 2019, St. Vincent and the Grenadines.

2. BMZ (2020) *Alternative Development – Sustainable change through development-oriented drug policy*, Berlin: Federal Ministry for Economic Cooperation and Development, p. 13. https://www.gdpsd.org/fileadmin/user_upload/bmz_alternative_development_.pdf

3. Ibid., p. 14.

4. Abhinav Srinivasan (2020) ‘It’s high time that India reclaimed its ganja’, *The Wire Science*, 31 October. <https://science.thewire.in/the-sciences/oshaghnessy-cannabis-ganja-mahal-lunatic-asylums-ndps-act/>

5. Fair Trade Cannabis Working Group (2020), p. 12.

6. Fair Trade Cannabis Working Group (2020), p. 12.

7. Jelsma, M. (2018) *Connecting the dots... Human rights, illicit cultivation and alternative development*. Amsterdam: Transnational Institute. <https://www.tni.org/en/publication/connecting-the-dots>

From the early days of cannabis prohibition, traditional producing countries have stressed the importance of finding alternative livelihoods for rural communities dependent on cannabis cultivation. The first crop-substitution projects in the 1960s in Lebanon and Morocco were the genesis of continuing UN debate on 'alternative development' and 'shared responsibility'. Growing demand for cannabis in the North and crashing prices of agricultural commodities like coffee, cocoa and banana due to free trade policies, turned the ever-expanding illegal cannabis market into a survival economy for millions of people. Almost no-where have small cannabis farmers been offered substantial development assistance for moving out of the illegal market.

The recent wave of policy changes and fast-growing legal spaces in the medical cannabis market offer new opportunities for small farmers to transition out of illegality while continuing to grow cannabis. Several traditional producing countries have started to explore this option of 'alternative development with cannabis'. Barriers to entry, however, are not easy to overcome and few small farmers have been able thus far to conquer some space in the billion-dollar medical cannabis market. The emerging legal markets are increasingly captured by big corporations, pushing out small farmers from the South. This report argues that lessening the barriers for small farmers while raising them for large companies can help to steer legal cannabis markets in a more sustainable and equitable direction based on principles of community empowerment, social justice, fair(er) trade and sustainable development.



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TNI's Drugs & Democracy programme analyses drug policies and trends in the illicit drugs market. TNI examines the underlying causes of drug production and consumption and the impacts of current drug policies on conflict, development, and democracy. The programme facilitates dialogue and advocates evidence-based policies, guided by principles of harm reduction and human rights for users and producers.

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