



Cannabis and Sustainable Development: Examining the Social, Environmental and Economic opportunities presented by changing the legal status of cannabis in Ireland.

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Executive Summary

This report attempts to assess the potential social, environmental and economic implications of decriminalisation or legalising cannabis in Ireland. It attempts to understand whether the risks and benefits and present its findings dispassionately in the hopes of providing an evidence-based grounding for the current discussion in Ireland regarding the criminalisation of cannabis and those who use it.

The report does this by first looking at the history of cannabis and the use of the hemp plant more generally in Irish history. It charts the history of the plant in Ireland, from the 16th century, when it was illegal to own more than 60 acres and ***not*** grow hemp, through the Irish Free State's ratification of the International Convention relating to Dangerous Drugs banning cannabis in 1931 when elected representatives seemed not to know what cannabis was. It follows the increasing usage of cannabis in Ireland beginning in the 1960s and the strengthening anti-cannabis laws in the 1970's up to the current day, and the introduction of the Medical Cannabis Access Programme. It also assesses the current landscape of political perspectives on status of cannabis, based on election manifestos produced for the General Election in 2020.

The report then considers the social, environmental and economic arguments for and against decriminalisation in order. The evidence assessed was collated from available peer-reviewed research.

Social Considerations

- There is conclusive evidence that cannabis is far less dangerous in terms of public health than the legalised drugs alcohol and tobacco.
- There is conclusive evidence of the health benefits of cannabis in the treatment of chronic pain, multiple sclerosis spasticity symptoms and chemotherapy-induced nausea. Other health benefits with moderate or limited supporting evidence include improved sleep outcomes, decreasing weight loss associated with HIV/AIDs, symptoms of Tourette syndrome, anxiety symptoms and symptoms of post-traumatic stress disorder
- The primary public health concern related to cannabis use is psychosis or schizophrenia. Evidence points to a small increase in the risk of psychosis or schizophrenia with use of cannabis which increases to a doubling of risk with daily use. Other public health concerns include a large increase in dependence with daily use, and bronchitis with daily smoking.
- The social toll of criminalisation is significant, particularly in low-income communities, where it serves to perpetuate existing socioeconomic disadvantage. Despite there being insufficient research to understand the full toll of criminalisation of cannabis in Ireland, there are clear

issues of stigmatisation, debt, lost employment opportunities and poverty stemming from convictions. Decriminalisation would help to break cycles of poverty and marginalisation. Criminalisation can start at a young age and can lead to lifelong challenges for individuals in terms of accessing jobs, accommodation and maintaining a reasonable standard of living.

- There are commonly held misconceptions about cannabis that need critical interrogation. For instance, the reputation of cannabis as a “gateway” drug has never been substantiated by research. Similarly, while many studies have found a consistent and robust association between cannabis use and the development of psychotic disorders, the exact nature of this relationship has been controversial and deserves more critical exploration.

Environmental Considerations

- Hemp is a frontrunner to provide a “nature-based solution” to the climate crisis. Hemp's rapid growth makes it one of the fastest CO₂-to-biomass conversion tools available, making it more efficient than many agro-forestry models. One hectare of industrial hemp can absorb 15 tonnes of CO₂ per hectare per year.
- While the planting of hemp should be considered as a climate action, the belief that planting hemp on Irish peatlands to facilitate recovery and sequestration is misguided. Studies show hemp grown on peat will yield lower amounts and quality of fibre. Yield and quality of fibre could be enhanced through supplemental application chemicals, but simply allowing the bogs to recover would likely be a more cost-effective approach.

Economic Considerations

- Estimates for the growth of the global cannabis market vary wildly – with the 2030 market work from USD 50 billion to USD 166 billion depending on source. Prohibition Partners, estimate that, by 2028, the market for medicinal cannabis in Ireland could be EUR 1 billion
- This would make the Irish cannabis market akin to that in Colorado, a state of 5.7 million people, where cannabis has been legalised since 2014. With recreational and medicinal sales reaching almost USD 1 billion in 2015, Colorado collected more than USD 135 million in taxation revenue and fees. The tax in Colorado is relatively low – 15% - significantly below the VAT rate in Ireland and minimal compared to Irish tax on tobacco which stands close to 80%.
- Ireland is seen as an attractive location for corporate cannabis – towards the end of the last decade, with cannabis stocks soaring, two large north American companies Aurora Cannabis and Tilray declared their intentions to enter the Irish market - with Tilray going so far as to set up an Irish division, Tilray Ventures. However, since then, falling cannabis prices caused

the Aurora share price to collapse as the company lost USD 2.5 billion while Tilray's market valuation collapsed to a fraction of its 2018 heyday.

1. Introduction

Despite a century of global prohibition, in 2015, an estimated 192 million adults (range 166–234 million) or 3.9% of the global adult population used cannabis¹. The EU's European Drug Report 2019 records a lifetime usage rate for Irish adults at 27.9% with use among Irish adults over a 12 month period at 13.8%².

Cannabis is the most widely consumed illegal substance in the world and for decades, advocates have been calling for decriminalisation, and even legalisation, touting the medicinal benefits of the drug and the harm reduction that changing its status could bring. Today, people are increasingly looking to the cannabis plant for its potential to play a role in the fight against climate change, as a tool of carbon sequestration.

Globally, the winds of change are blowing and increasingly, countries are looking to liberalise their laws regarding cannabis. Significantly, in December 2020, the UN Commission for Narcotic Drugs, based in Vienna, considered a series of recommendations from the World Health Organization on reclassifying cannabis and its derivatives, and voted to remove cannabis for medicinal purposes from a category of the world's most dangerous drugs. This was a highly anticipated decision that could clear the way for an expansion of marijuana research and medical use.

There have been two global waves of a cannabis policy change. The first removed criminal penalties for possession of small amounts of the drug.³ This occurred in the 1970s in the USA and in the Netherlands, and these countries also stopped enforcing criminal penalties on small retail cannabis sales in coffee shops. These reforms stopped short of legalising cannabis production, but did enable recreational use through a back door.

More recently, two trends have transformed cannabis policy in, beginning in North America in the 1990s with the legalisation of medicinal cannabis use in some states in the USA and in Canada. Medicinal use was initially permitted for a short list of medical conditions, but in Canada and certain US states (e.g., California, Colorado, Oregon, and Washington state) the conditions qualifying for

¹ UNODC. World Drug Report 2018. New York: United Nations, 2018

² European Monitoring Centre for Drugs and Drug Addiction. (2019). European Drug Report 2019: Trends and Developments, Luxembourg: Publications Office of the European Union. Available at: https://www.emcdda.europa.eu/system/files/publications/11364/20191724_TDAT19001ENN_PDF.pdf

³ Room R, Fischer B, Hall WD, Lenton S, Reuter P. Cannabis policy: moving beyond stalemate. Oxford: Oxford University Press, 2010.

medicinal use were progressively broadened, enabling almost any adult in those jurisdictions to obtain a medical recommendation and purchase cannabis from retail dispensaries.⁴

Countries in Europe, Oceania, Africa, and Asia have since allowed use of medicinal cannabis.

The second, more radical change, was the legalisation of large-scale commercial cannabis production and sale of cannabis for non-medicinal use, sometimes called recreational use. This happened first by popular vote in the US states of Colorado and Washington State in 2012. Another eight states in the US followed, and more are considering this change. However, cannabis remains illegal under US Federal law.⁵ The Government of Uruguay legalised cannabis in 2013, but cannabis supply only began in 2015 under more restrictive regulations than in the USA. In 2018, Canada legalised cannabis nationally, and Luxembourg and Mexico propose to legalise cannabis in the near future, perhaps within the next 5 years.⁶

Today, cannabis remains illegal in Ireland. However recent steps to provide access to medical cannabis through the Medical Cannabis Access Programme, as well as the inclusion of possession of personal amounts of cannabis under the Adult Cautioning Scheme indicate a relaxing of age-old restrictions. The question now is “what comes next?”

This report explores the social, economic and environmental dimensions of cannabis and the potential benefits and costs of decriminalisation or legalisation of the substance in Ireland.

2. Background and Context

2.1 The basics – what is cannabis?

Cannabis – also known as marijuana and at least 1,200 other names⁷ - is a plant with psychoactive properties which has been used around the world for medicinal, recreational, and religious purposes. Compounds found within the plant are called cannabinoids, the most well-known of which are tetrahydrocannabinol (THC), the primary psychoactive compound in cannabis, and cannabidiol (CBD)

⁴ Hall WD. Medical use of cannabis and cannabinoids: questions and answers for policymaking. 2018. http://www.emcdda.europa.eu/system/files/publications/10171/20185584_TD0618186ENN_PDF.pdf (accessed Aug 14, 2019)

⁵ Caulkins JP. Recognizing and regulating cannabis as a temptation good. *Int J Drug Policy* 2017; 42: 50–56.

⁶ Van Keymeulen E. Cannabis legal & regulatory update: October–December 2018. Paris: Allen and Overy, 2019. <https://www.jdsupra.com/legalnews/cannabis-legal-regulatory-update-53730/> (accessed Aug 14, 2019)

⁷ <https://time.com/4747501/420-day-weed-marijuana-pot-slang/>

which is not psychoactive.⁸ There are at least 144 different cannabinoids isolated from cannabis, exhibiting varied effects⁹.

In Ireland, THC is a controlled drug in accordance with the Misuse of Drugs Act 1977, with no threshold or tolerance currently in place¹⁰. Under EU regulations cannabis plants may be grown as long as their THC content (the psychoactive component) is less than 0.2 per cent¹¹. Cannabis plants with negligible THC content are often referred to as “hemp”. The growing of hemp is promoted by the EU’s Common Agricultural Policy (CAP) which provides subsidies to support production¹². In Ireland cannabis or hemp may be grown as a food product under the same conditions.

For the purposes of this research we will use the term cannabis to describe the plant with sufficient THC content to be psychoactive and hemp to describe the plant with negligible THC content.

2.2 Ninety years of prohibition – where does the ban on cannabis come from?

Cannabis has been illegal in Ireland since 1931 when the Irish Free State ratified the *International Convention relating to Dangerous Drugs*. The process faced no opposition and indeed was not seen as a matter of concern to Ireland. During a debate on the ratification in 1930, Minister for External Affairs, Dublin North-Central TD Patrick McGilligan of Fine Gael stated the reason for ratification was symbolic – to give “moral support” to the world outlook on drugs – while asserting that the Irish Free State had little to do with the matter of opium or dangerous drugs¹³. What discussions there were on drugs at the time focused on the control of access to morphine and heroin¹⁴. It wasn’t until 1968 that cannabis was mentioned in relation to drug control in Dáil Éireann¹⁵.

So, if Ireland did not ratify the International Convention relating to Dangerous Drugs out of any domestic need, then what was the world outlook the ratification was supporting and where did it originate? Remarkably, the prohibition of cannabis in Ireland can trace its origins to the geo-politics

⁸ Newton DE (2013). Marijuana: a reference handbook. Santa Barbara, Calif.: ABC-CLIO. p. 7.

⁹ Aizpurua-Olaizola, O., Soydaner, U., Öztürk, E., Schibano, D., Simsir, Y., Navarro, P., ... & Usobiaga, A. (2016). Evolution of the cannabinoid and terpene content during the growth of Cannabis sativa plants from different chemotypes. Journal of natural products, 79(2), 324-331.

¹⁰ Misuse of Drugs Act (1977)

¹¹ Regulation (EU) No 1307/2013

¹² [https://www.europarl.europa.eu/RegData/etudes/STUD/2015/563386/IPOL_STU\(2015\)563386_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2015/563386/IPOL_STU(2015)563386_EN.pdf)

¹³ <https://www.oireachtas.ie/en/debates/debate/seanad/1930-06-20/4/>

¹⁴ “It is fairly safe to say that no smuggling of drugs, at any rate in quantities, has taken place. Medical Deputies will no doubt be able to corroborate this. One of the chief obstacles to suppressing illicit traffic in countries in which such traffic was prevalent was the fact that certain manufacturing countries permitted the export of drugs such as morphine and heroin practically without control or restriction. Quantities of these drugs far in excess of the medicinal requirements of the world were being produced and exported. Accordingly at a Convention signed at Geneva in 1931, it was agreed between the parties that steps would be taken for the limitation of the manufacture of these drugs.” – The Attorney General, 1933

(<https://www.oireachtas.ie/en/debates/debate/dail/1933-11-22/36/>)

¹⁵ <https://www.oireachtas.ie/en/debates/debate/dail/1968-11-19/36/>

of the opium trade in Southeast Asia, the colonisation of the Philippines by the United States and the anti-opium sentiment that existed in America's Protestant Episcopal Church. When the United States joined other western nations in the colonisation of Southeast Asia, the opium trade was transitioning from a farm model that was taxed and controlled by colonial states, to state-run opium monopolies that provided significant revenue for colonial powers¹⁶.

In the Philippines in 1896, under the American military government, the opium farm system – a legacy of Spanish colonialism – was abolished in favour of a tariff on opium imports. The Philippine Commission attempted to reverse this decision five years later but were met by a fierce backlash from missionaries and evangelical reformers, led by Episcopal Missionary Bishop, Charles Henry Brent. Despite a flagging anti-opium movement globally, Bishop Brent's protests were successful and not only drove the Philippines to become the first country in Southeast Asia to totally prohibit the sale of non-medical opium, but also provided some much-needed momentum to the anti-opium movement¹⁷.

By 1909, Bishop Brent was the American delegate to, and chair of, the International Opium Commission – a 13-state conference convened by the United States¹⁸. From it emerged the first international drug control treaty – the 1912 International Opium Convention¹⁹. Bishop Brent, on behalf of the United States, proposed that "Indian hemp drugs" be included in the Convention but the proposal fell due to a lack of definition and a lack of awareness of cannabis on behalf of delegates²⁰. However, by the Second Opium Conference in 1925, Egypt raised the question of cannabis and proposed the addition of hashish to the list of narcotics to be covered by the convention.

An effort to ban the use of cannabis for all but medical and scientific purposes was blocked by the Indian delegation, who argued that social and religious customs should be considered and expressed doubts as to whether the total prohibition of drugs easily prepared from wild-growing plants could, in practice, be made effective. Ultimately the revised treaty that emerged from the conference called

¹⁶ Nankoe H., Gerlus JC., Murray M.J. (1993) The Origins of the Opium Trade and the Opium Regie in Colonial Indochina. In: Butcher J., Dick H. (eds) *The Rise and Fall of Revenue Farming. Studies in the Economies of East and South-East Asia*. Palgrave Macmillan, London. https://doi.org/10.1007/978-1-349-22877-5_11

¹⁷ Wertz, D. (2013). Idealism, Imperialism, and Internationalism: Opium Politics in the Colonial Philippines, 1898–1925. *Modern Asian Studies*, 47(2), 467-499. Retrieved January 25, 2021, from <http://www.jstor.org/stable/23359828>

¹⁸ The Report of The International Opium Commission. (1909). 174(4500), 1618–1619. doi:10.1016/S0140-6736(01)22070-4

¹⁹ International Opium Convention (1912) The Hague (https://treaties.un.org/Pages/ViewDetailsIV.aspx?src=TREATY&mtdsg_no=VI-2&chapter=6&Temp=mtdsg4&clang=en)

²⁰ UN (1962) The cannabis problem: A note on the problem and the history of international action. Available at: https://www.unodc.org/unodc/en/data-and-analysis/bulletin/bulletin_1962-01-01_4_page005.html

for the “effective control of such a nature as to prevent the illicit international traffic in Indian hemp and especially in the resin” and ultimately had the effect of ushering in legislation around the world which made cannabis illegal. This was the case in Ireland, as the 1934 Dangerous Drugs Act adopted wording from the convention and made the import of “Indian hemp” and cannabis illegal, save for instances where the importer had a Minister granted permit, and in doing so legally equated cannabis with opium, morphine, cocaine and heroin.

2.2 A brief history of cannabis in Ireland

The cannabis plant has a long history in Ireland, having been used for medicine and manufacture of goods since at least the Anglo-Saxon era, more than 1,000 years ago²¹. In 1563, while Ireland was under the rule of Britain, Queen Elizabeth I decreed that any landowner with a holding of more than 60 acres must grow hemp or face a £5 fine²². The plant was of significant importance to the British empire. Rolt’s Dictionary of 1756 explained that hemp is “the foundation of several profitable manufactures; as sail cloth, ticking, sacking, cordage, twine and nets; therefore its culture ought to be encouraged in Britain and its northern colonies”²³.

Throughout history, Irish physicians have been to the fore in the development of medicinal uses for cannabis. In his 2017 paper, Ethan Russo explored the advancement made by a number of prominent 19th century physicians and explored the rational and scientific basis for their discoveries. It began with William B. O’Shaughnessy, an Irish physician in India, who learned of the versatility of hemp in the treatment of rheumatic diseases, tetanus, cholera and epilepsy in 1838. His knowledge was quickly shared with colleagues in Ireland and England. This led in turn to rapid advances in therapeutics by Michael Donovan in neuropathic pain states, Dominic Corrigan in chorea and trigeminal neuralgia, Fleetwood Churchill in uterine haemorrhage, and Richard Greene in the use of cannabis as a prophylactic treatment of migraine²⁴.

As noted earlier, at the time of prohibition, there was little to no recreational use of cannabis in Ireland. An uptick in usage occurred in the 1960s and 1970s, though amounts were small²⁵. This increase in recreational use is reflected in an increase in discussions on the topic in the Oireachtas.

²¹ Russo E.B. (2017) History of Cannabis as Medicine: Nineteenth Century Irish Physicians and Correlations of Their Observations to Modern Research. In: Chandra S., Lata H., ElSohly M. (eds) Cannabis sativa L. - Botany and Biotechnology. Springer, Cham. https://doi.org/10.1007/978-3-319-54564-6_2

²² Mills J.H. (2003). Cannabis Britannica: Empire, Trade, and Prohibition 1800-1928. Oxford University Press.

²³ Rolt R. (1756) A New Dictionary of Trade and Commerce. London

²⁴ Russo E.B. (2017) History of Cannabis as Medicine: Nineteenth Century Irish Physicians and Correlations of Their Observations to Modern Research. In: Chandra S., Lata H., ElSohly M. (eds) Cannabis sativa L. - Botany and Biotechnology. Springer, Cham. https://doi.org/10.1007/978-3-319-54564-6_2

²⁵ European Monitoring Centre for Drugs and Drug Addiction (2013). Ireland (PDF). Drug Policy Profiles. Luxembourg: European Union. pp. 9–11.

Concern about “the drug cannabis being passed around rather openly in certain places” is expressed by Mayo TD Michael Moran during a Dáil Éireann debate in 1968²⁶.

A year later in another Dáil debate on the topic between Erskine Childers and Dr. Hugh Byrne, we see fears stoked by rumours, newspaper articles and even the conflation of cannabis use and venereal disease²⁷. They were discussing the 1969 Health Bill referred to the Dangerous Drugs Act from 1934, ultimately labelling cannabis as a dangerous or “hard” drug. In the same year, a taskforce on drug abuse established by Childers’ department heard testimony from Ms. Carla Lowe, a substitute schoolteacher from California with no medical qualifications, who told the taskforce that cannabis was “possibly the most dangerous drug of all”. Ms. Lowe continues to be an avid anti-cannabis campaigner to this day and recently founded Citizens Against Legalising Marijuana.

The 1934 classification of cannabis as a dangerous drug was finally amended in 1977 and the Misuse of Drugs Act placed cannabis in a separate legal category from other narcotics. This constitutes the central pillar of law today, though the law has been amended a number of times, by the Criminal Justice Act 1999²⁸, the Criminal Justice Act 2006²⁹, the Criminal Justice Act 2007³⁰ and the Misuse of Drugs (Amendment) Act 2015³¹. Cannabis and its derivatives are, by current legislation, considered a *Schedule 1* drug, meaning they are substances considered by the state to have no medicinal or scientific value and, with consideration given regarding their likelihood of their being abused, are thus considered illegal drugs. As a result, today, anyone found in possession of cannabis or cannabis resin is guilty of an offence, though there has been a recent relaxing of associated punishments. The issues of criminal justice will be discussed further in Section 3.3.

On 26th June 2019, the Minister for Health signed legislation to allow for the operation of the Medical Cannabis Access Programme on a pilot basis for five years. The Programme will facilitate access to cannabis-based products for medical use in line with legislation and with the clinical guidance for the scheme. Medical regulation and use will be discussed further in Section 3.1.

2.3 Current Political Landscape

The current Programme for Government, negotiated by the current government coalition of Fine Gael, Fianna Fáil and the Green Party, commits to examining “the regulations and legislation that apply to cannabis use for medical conditions and palliative care, having regard to the experience in

²⁶ <https://www.oireachtas.ie/en/debates/debate/dail/1968-11-19/36/>

²⁷ <https://www.oireachtas.ie/en/debates/debate/dail/1969-12-04/4/>

²⁸ <http://www.irishstatutebook.ie/eli/1999/act/10/enacted/en/html>

²⁹ <http://www.irishstatutebook.ie/eli/2006/act/26/enacted/en/html>

³⁰ <http://www.irishstatutebook.ie/eli/2007/act/29/enacted/en/html>

³¹ <http://www.irishstatutebook.ie/eli/2015/act/6/enacted/en/html>

Northern Ireland and Great Britain”³². It also commits to convening a Citizens’ Assembly to consider matters relating to drugs use, though it isn’t clear if any special consideration would be given to the legal status of cannabis³³.

In their 2020 General Election manifestos, the Green Party had the most progressive cannabis policies and were the only party of the subsequent coalition to mention cannabis directly, proposing a rescheduling cannabis and its derivatives from a Schedule I drug to a Schedule IV drug. Their manifesto also proposed the decriminalising of possession of small quantities of cannabis products and plants while promoting a more compassionate approach to drug issues in general³⁴. Their coalition partners were both silent on cannabis specifically. However, Fianna Fail’s manifesto very much conflated drug use and gangland crime, promoting the adoption of a law-and-order approach not too dissimilar to the solutions proposed in Dáil debates on the topic in the 1960s and 1970s. Fine Gale’s approach manifesto promotes a strategy more focused on harm reduction, rehabilitation, and education.

Of the opposition parties, the Labour Party’s and Sinn Féin’s election manifestos were silent on cannabis. The People Before Profit manifesto highlighted the party’s record of pushing legislation on access to medicinal cannabis. The Social Democrat manifesto stated the party’s support for medicinal cannabis.

As mentioned previously, on the international level, the member states to the UN Commission on Narcotic Drugs (CND) voted to recognise the medicinal use of cannabis for the first time while also removing it from their list of dangerous drugs³⁵, the same list which led to the initial prohibition in Ireland 90 years ago. The vote was based on six recommendations transmitted to the CND by the World Health Organisation in January 2019³⁶. This decision opens up political space for new, national level legislation on cannabis in Ireland.

3. Social Considerations

3.1. Public Health and Cannabis

There is a substantial amount of new scientific literature on cannabis use dealing with various populations, varying concerns and focuses of the authors, difference in characteristics of cannabis or cannabinoid exposure, different strengths of potency, different forms and frequencies of use. The

³² Gov (2020), Programme for Government: Our Shared Future p49. Available at: <https://www.gov.ie/en/publication/7e05d-programme-for-government-our-shared-future/>

³³ Ibid.

³⁴ Green Party (2020) Election Manifesto. p.56

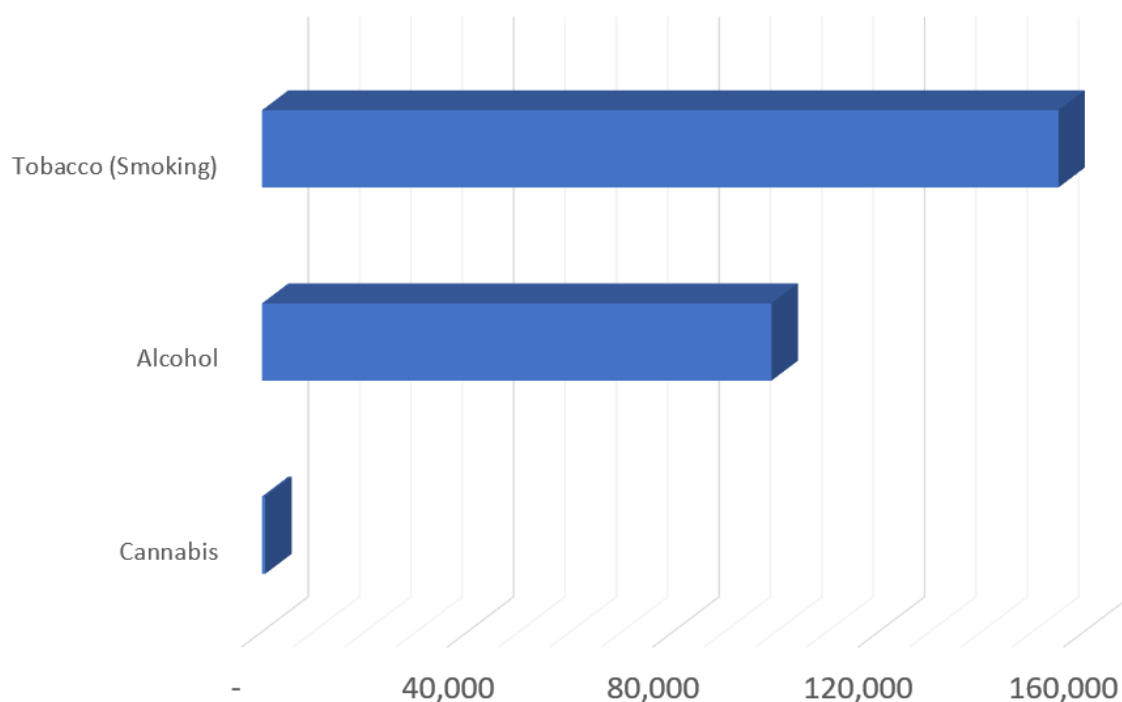
³⁵ <https://news.un.org/en/story/2020/12/1079132>

³⁶ <https://www.who.int/publications/m/item/ecdd-41-cannabis-recommendations>

existing body of research is not pointing towards an obvious common conclusion with regards to public health that can be easily summarised, but rather presents an array of possibilities along with significant gaps in knowledge.

When considering the liberalisation of laws around the use of cannabis, or the legalisation of a commercial cannabis industry, it is necessary to consider the potential benefits to public health alongside the potential harms. However, it is important to note that the prohibition of cannabis has long been considered controversial as, relatively speaking, it is much less harmful than other banned substances such as opioids and stimulants³⁷. In fact, evidence would suggest that cannabis is significantly less dangerous than some legal substances like alcohol and tobacco. The harm caused by abuse of a substance can be measured in Disability-Adjusted Life Years (DALYs) – an expression of the number of years lost due to ill-health, disability or early death from the negative impacts of the substance. In the 2016 Global Burden of Disease Study published in *The Lancet*, alcohol and tobacco are orders of magnitude higher in terms of harm, compared to cannabis.

Graph 1: Comparison of harm caused by tobacco, alcohol and cannabis. DALYs (in thousands) of tobacco smoking, alcohol consumption and cannabis consumption. Source data: Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016



³⁷ Degenhardt L, et al. (2013) Global burden of disease attributable to illicit drug use and dependence: findings from the Global Burden of Disease Study 2010. *Lancet*; 382: 1564–74.

Benefits of medicinal cannabis

Despite a significant and growing body of scientific literature relating to cannabis and its medicinal uses, rigorous and longitudinal scientific study of the plants medicinal properties have been hampered by its illegal status and associated production restrictions³⁸. As a consequence, there is a wealth of anecdotal evidence for the effectiveness of the medicinal properties of cannabis, without the scientific rigour to support all the claims.

The 2017 compendium, *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research*³⁹, offers a robust overview of the current state of the science evidence as it relates to the health benefits of cannabis. The findings of the committee are given below:

- a) There is **conclusive evidence** that cannabis or cannabinoids are effective:
 - i. For the treatment of **chronic pain** in adults
 - ii. In the treatment of **chemotherapy-induced nausea** and vomiting
 - iii. For improving **patient-reported multiple sclerosis spasticity symptoms**.
- b) There is **moderate evidence** that cannabis or cannabinoids are effective for:
 - i. Improving **short-term sleep outcomes** for individuals with sleep disturbance associated with obstructive sleep apnea syndrome, fibromyalgia, chronic pain and multiple sclerosis.
- c) There is **limited evidence** that cannabis or cannabinoids are effective for:
 - i. Increasing appetite and **decreasing weight loss associated with HIV/AIDs**.
 - ii. For improving **clinician-measured multiple sclerosis spasticity symptoms**.
 - iii. Improving **symptoms of Tourette syndrome**.
 - iv. Improving **anxiety symptoms**.
 - v. Improving **symptoms of post-traumatic stress disorder**.

Anecdotally, there is an array of other conditions which advocates of medicinal cannabis believe it can treat, including cancers, cancer-associated anorexia, irritable bowel syndrome, epilepsy, motor system symptoms associated with Parkinson's disease, and mental health outcomes. However, the weight of evidence, at present, is insufficient to support or refute these claims⁴⁰.

Harms related to cannabis use.

³⁸ Release the strains. Nat Med 21, 963 (2015). <https://doi.org/10.1038/nm.3946>

³⁹ National Academies of Sciences, Engineering, and Medicine. (2017). The health effects of cannabis and cannabinoids: the current state of evidence and recommendations for research.

⁴⁰ Ibid.

A 2019 paper by Hall et al. provides a systematic review of identified adverse effects of cannabis use. These are summarised in table 1 below. While negative effects are apparent, they are modest in nature and insufficient, advocates and critics of prohibition have argued, to justify prohibition on adults using cannabis for relaxation and pleasure⁴¹. Some, like the moderate to large risk of dependency, may seem stark in isolation, but it is important to note that surveys conducted in the US indicate only 9% of those who ever tried cannabis developed dependence, compared with 32% for nicotine and 15% for alcohol.

There certainly seem to be risks for young people and adolescents who abuse cannabis. Evidence suggests that use in young adulthood increases the likelihood of dependency⁴² and use in adolescence increases the likelihood of cognitive impairment⁴³, early school leaving⁴⁴, and development of schizophrenia⁴⁵ and affective disorders. However, it is important to note that there remains much uncertainty as to whether cannabis is the cause of these outcomes or whether there are shared causal factors stemming from personal or environmental characteristics⁴⁶. Regardless, there is a strong argument that the negative health impacts could be better addressed through regulation than prohibition.

Table 1: Summary of Hall et. al (2019) on the harms associated with associated with non-medicinal cannabis use. Evidence levels: B=findings in cohorts or representative population-based studies. D=findings in cross-sectional studies, representative population-based studies, or case-control studies. Full details of the studies can be found in the appendix to the Hall et. al study.

Size of effect (95% CI)		Level of evidence
Motor vehicle injuries		
Use 1–3 h before driving	Small risk	B
Low birthweight		
Maternal use in pregnancy	Small increase in risk	B
Dependence syndrome		
Lifetime use	Small to moderate risk	B
Daily use	Large risk	B

⁴¹ Rolles S. After the war on drugs: blueprint for regulation. Bristol: Transform Drug Policy Foundation, 2009.

⁴² Anthony JC, Warner LA, Kessler RC. Comparative epidemiology of dependence on tobacco, alcohol, controlled substances, and inhalants: basic findings from the National Comorbidity Survey. *Exp Clin Psychopharm* 1994; 2: 244–68.

⁴³ Scott JC, Slomiak ST, Jones JD, Rosen AFG, Moore TM, Gur RC. Association of cannabis with cognitive functioning in adolescents and young adults: a systematic review and meta-analysis. *JAMA Psychiatry* 2018; 75: 585–95

⁴⁴ Stiby AI, Hickman M, Munafo MR, Heron J, Yip VL, Macleod J. Adolescent cannabis and tobacco use and educational outcomes at age 16: birth cohort study. *Addiction* 2015; 110: 658–68.

⁴⁵ Gage SH, Hickman M, Heron J, et al. Associations of cannabis and cigarette use with depression and anxiety at age 18: findings from the Avon Longitudinal Study of Parents and Children. *PLoS One* 2015; 10: e0122896

⁴⁶ Hall WD, Renström M, Poznyak V. The health and social effects of nonmedical cannabis use. Geneva: World Health Organization, 2016. http://www.who.int/substance_abuse/publications/msb_cannabis_report.pdf

Psychosis or schizophrenia*		
Ever used	Small Increase	B
Daily use	Doubling	B
Depression		
Ever used	Very small increase	B
Daily use	Small increase	B
Bronchitis		
Cannabis smoking	Large increase	D
Regular cannabis smoking	Large increase	B
Lung cancer		
Regular cannabis smoking	No significant increase	B

Psychosis and the perception of risk

The cult classic film from the late 1930s, “Reefer Madness,” dramatized and encouraged public fear about the connection between cannabis use and psychosis. This fear may have played a role initially in increasing efforts to restrict access to cannabis⁴⁷. That said, there is a complex relationship between psychosis and cannabis that remains a contested issue between those who study it. There are two central questions: does cannabis use increase psychosis spectrum disorders and use of cannabis lead to an earlier age at onset of psychosis?

It is beyond the scope of this study to go into these questions in the detail necessary to anything like a robust conclusion – the comprehensive body of existing work is summarised in the 2018 book *The Complex Connection Between Cannabis and Schizophrenia* by Manseau and Compton. While many studies have found a consistent and robust association between cannabis use and the development of psychotic disorders, the exact nature of this relationship has been controversial. As correlation is not causation, there exist competing arguments for direct causation, reverse causation, and confounding⁴⁸. Moving beyond the conversation of causation, what is clear is that cannabis among individuals with schizophrenia is associated with worsening psychotic symptoms, illness relapse, and decreased functioning over time^{49,50}.

Clear too is that the medical community is split in Ireland when it comes to the perception of risks posed by legalising cannabis. An attitudinal survey of Irish GPs found that 56.8% opposed the

⁴⁷ Barcott, B. (2015). Weed the people: The future of legal marijuana in America. Time Home Entertainment.

⁴⁸ Manseau, M.W., Goff, D.C. Cannabinoids and Schizophrenia: Risks and Therapeutic Potential. *Neurotherapeutics* 12, 816–824 (2015). <https://doi.org/10.1007/s13311-015-0382-6>

⁴⁹ Clausen, L., Hjorthøj, C. R., Thorup, A., Jeppesen, P., Petersen, L., Bertelsen, M., & Nordentoft, M. (2014). Change in cannabis use, clinical symptoms and social functioning among patients with first-episode psychosis: a 5-year follow-up study of patients in the OPUS trial. *Psychol Med*, 44(1), 117-126.

⁵⁰ Radhakrishnan, R., Wilkinson, S. T., & D’Souza, D. C. (2014). Gone to pot—a review of the association between cannabis and psychosis. *Frontiers in psychiatry*, 5, 54.

decriminalisation of cannabis with 77.3% believing that that cannabis use has a significant effect on patients' mental health and increases the risk of schizophrenia⁵¹. That said, a majority of respondents supported legalisation for use in palliative care, pain management and treatment of multiple sclerosis (MS)⁵². This differs significantly from the attitudes of patients with chronic pain. A survey of patients found that 88.54% agreed that cannabis should be legalised for chronic pain medicinal purposes and 80.21% believed it would have health benefits for them, while 73.96% agreed it would be socially acceptable to use cannabis for this purpose⁵³.

The “Gateway” Effect

An enduring belief about cannabis use is that it is a “gateway drug” – that the use of cannabis leads to harder drugs. According to this theory, users of cannabis move through a series of more severe and illicit substances as they crave more intense stimulation. The term “gateway drug” was popularized in 1984, during US President Ronald Reagan’s war on drugs. It was coined by Dr. Robert L. DuPont, Jr. in *Getting Tough on Gateway Drugs: A Guide for the Family*⁵⁴. It is interesting to note that DuPont suggested that if young people do not use cannabis, then it is relatively unlikely that they will use other illegal drugs. However, he did not make the claim that cannabis use causes young people to use other drugs⁵⁵.

The gateway belief has held sway in Ireland. In 1999, then Minister for Justice, John O' Donoghue told an Oireachtas Committee that decriminalising cannabis would be a “betrayal of parents trying to keep their families free from the scourge of drugs”, citing Garda research that cannabis was “the initial drug of choice for just over half of drug users.”⁵⁶

However, findings such as that in the Garda study cited by Minister O’ Donoghue, though common to many studies and an accurate description of the findings, do not demonstrate causal evidence necessary for the gateway theory to hold true. This “gateway” framing of such research findings is reductive and applied selectively.

⁵¹ Crowley, D., Collins, C., Delargy, I. et al. Irish general practitioner attitudes toward decriminalisation and medical use of cannabis: results from a national survey. *Harm Reduct J* 14, 4 (2017). <https://doi.org/10.1186/s12954-016-0129-7>

⁵² Ibid.

⁵³ Rochford, C., Edgeworth, D., Hashim, M. et al. Attitudes of Irish patients with chronic pain towards medicinal cannabis. *Ir J Med Sci* 188, 267–272 (2019).

⁵⁴ John Kleinig, “Ready for Retirement: The Gateway Drug Hypothesis,” *Substance Use & Misuse*, Vol. 50, Issue 8-9, March 16, 2015.

⁵⁵ Janet E. Joy, Stanley J. Watson, Jr., and John A Benson, Jr., “Marijuana and Medicine: Assessing the Science Base,” Division of Neuroscience and Behavioral Research, Institute of Medicine (Washington, DC: National Academy Press, 1999).

⁵⁶ <https://www.irishtimes.com/news/cannabis-is-a-gateway-drug-o-donoghue-1.254265>

Consider, for instance, that nearly all cocaine users are also tobacco smokers⁵⁷ yet tobacco is seldom viewed as a gateway to cocaine use. Similarly, a significant amount of research has also been conducted into the risks of alcohol acting as a gateway to hard drugs in adolescents. A US survey of almost 3,000 seventeen- and eighteen-year-olds found that the majority of polysubstance using respondents consumed alcohol prior to tobacco or cannabis initiation⁵⁸. Alcohol and tobacco are tolerated and decision makers seek to ensure the wellbeing of younger members of our society through regulation and holistic measures that address the drivers of alcohol or tobacco use. Arnold and Slade (2020) argue that similar should be done with cannabis⁵⁹.

Medical Cannabis Access Programme

The Government's Medicinal Cannabis Access Programme has been added to the HSE Service Plan for 2021. The purpose of this Programme is to facilitate compassionate access to cannabis for medical reasons, where conventional treatment has failed.

Legislation underpinning the Medicinal Cannabis Access Programme was enacted in June 2019. The first stage of the Programme was to have potential suppliers apply to the HPRA (Health Products Regulatory Authority) to have their cannabis-based products assessed for suitability for medical use.

The Access Programme will make it possible for a medical consultant to prescribe a listed cannabis-based treatment for a patient under his or her care for the following medical conditions, where the patient has failed to respond to standard treatments:

- >> spasticity associated with multiple sclerosis
- >> intractable nausea and vomiting associated with chemotherapy
- >> severe, refractory (treatment-resistant) epilepsy

The programme has been widely welcomed, though there have been calls to expand the medical conditions covered, in particular to include people suffering chronic pain⁶⁰. Pending the commencement of the Access Programme clinicians and their patients have been availing of a licence under the Misuse of Drugs Acts 1977-2016 in order to prescribe and administer cannabis-based products. The commencement of the Access Programme will not affect these patients.

⁵⁷ Kandel, E. R., & Kandel, D. B. (2014). A molecular basis for nicotine as a gateway drug. *New England Journal of Medicine*, 371(10), 932-943.

⁵⁸ Barry, A. E., King, J., Sears, C., Harville, C., Bondoc, I., & Joseph, K. (2016). Prioritizing alcohol prevention: Establishing alcohol as the gateway drug and linking age of first drink with illicit drug use. *Journal of school health*, 86(1), 31-38.

⁵⁹ Arnold, J. F., & Sade, R. M. (2020). Regulating Marijuana Use in the United States: Moving Past the Gateway Hypothesis of Drug Use. *The Journal of Law, Medicine & Ethics*, 48(2), 275-278.

⁶⁰ [Gino Kelly]

3.2 The social cost of criminalisation

Criminalising cannabis can have the effect of perpetuate existing socioeconomic disadvantage, as well as discriminating and marginalising users. A criminal record alone with its associated stigma, can lead to vicious cycles of unemployment, poverty and homelessness.

A criminal record curtails future employment - some jobs and medical or pharmaceutical courses will exclude any applicant with a criminal or drug-related record. It was also found that people who have received a criminal record often had limited skills, poor qualifications and employment gaps that further exacerbates the issue of taking up employment⁶¹. When getting caught already falls on lower income communities and the people living in homelessness⁶², the obstacles enforced can only worsen their situations.

Stigmatisation is a deliberate intention of criminalisation, often perpetuated by the media and public opinion⁶³. The common narrative that the media portrays is that drug users are 'criminals' whose use of illicit substances can have negative consequences. While creating social disapproval is believed to have the effect of deterring people from ever taking illegal drugs, as evidenced from multiple sources and literature, that criminalisation does not achieve decreased consumption⁶⁴. Furthermore, a criminalisation approach infringes on the right to health, the right to non-discrimination and the right to privacy; rights that should be guaranteed to all citizens⁶⁵.

The World Drug Perception Problem (2017) report highlights how the language used towards drug users is degrading - the idea of 'getting clean' for instance, implies existing in a soiled or unwashed state. The report points to a language that diminishes self-worth and self-image and exacerbates social exclusion among people who use drugs⁶⁶. Furthermore, people who use drugs are often scapegoated and targeted in 'moral panics' - where the behaviour of a group is falsely portrayed as dangerous⁶⁷.

⁶¹ Council of Europe (2017) Costs and Unintended Consequences of Drug Control Policies. Strasbourg: Pompidou Council of Europe.

⁶² Joint Committee on Justice, Defence and Equality (2015) Report of the Committee on a Harm Reducing and Rehabilitative approach to possession of small amounts of illegal drugs. Available at: https://data.oireachtas.ie/ie/oireachtas/committee/dail/31/joint_committee_on_justice_defence_and_equality/reports/2015/2015-11-05_report-on-a-harm-reducing-and-rehabilitative-approach-to-possession-of-small-amounts-of-illegal-drugs_en.pdf

⁶³ Scharwey, M., Keane, M. and Duffin T. (2019) Ireland and the Human Rights of People Who Use Drugs. Dublin: Ana Liffey Drug Project.

⁶⁴ Ibid.

⁶⁵ Scharwey, M., Keane, M. and Duffin T. (2019) Ireland and the Human Rights of People Who Use Drugs. Dublin: Ana Liffey Drug Project.

⁶⁶ Global Commission on Drug Policy (2017) The World Drug PERCEPTION Problem: Countering Prejudices about People who Use Drugs. Geneva: GCDP.

⁶⁷ Ibid.

There is a gender dimension to the social cost as well. While 88% of people within the criminal justice system for drug possession or trafficking are men, the long term consequences from incarceration that women face is severe⁶⁸. Women charged with drug-related offences often suffer from substance use disorders, psychiatric disorders and a history of physical and sexual abuse. They lack the same access to work and training programmes within prison that men have and are faced with gender-based stigma on release⁶⁹.

Within disenfranchised groups, drug debts can accrue through recreational or problematic drug use and potentially lead to people engaging in criminal activity to repay their debts. Without any legitimate channels of recourse or access to substance abuse treatment, users could see engaging in criminal activity as their only option. Connolly and Buckley (2016) describe how communities where drug markets are located can often live-in fear and become impacted by illicit drug dealing. The wider effects on communities are largely undocumented and remain lacking in official reports. This is largely due to the fear associated with reporting acts of intimidation. Therefore, a vicious cycle can occur within communities affected by drug-related violence⁷⁰. Furthermore, the criminalisation of cannabis leads to an elevated drug price meaning less disposable income for users and greater risk of poverty⁷¹.

Decriminalisation of cannabis could help to break cycles of poverty and marginalisation

Leonard and Windle (2020) conducted interviews with people who had formerly used drugs problematically to explore alternative policies in Ireland. Drug users are rarely included, or actively sought out, in discussions surrounding drug policy⁷². This marginalises their voice on a sensitive issue that directly impacts them. The study gives a voice to this group by recruiting former drug users, who were criminalised due to their drug use, as well as service providers from an economically deprived area in Co. Cork, Ireland. The study explained that drug policy and wider economic issues are inseparable.

“The reality is that these well-meaning projects do not tackle the underlying structural conditions driving problematic drug use. Indeed, such measures cannot mitigate the harms caused by decades of neoliberal policies.”

⁶⁸ UNODC (2020) World Drug Report 2020. Vienna: UNODC.

⁶⁹ Ibid.

⁷⁰ Connolly J and Buckley L (2016) Demanding Money with Menace: Drug-Related Intimidation and Community Violence in Ireland. Dublin: Citywide Drugs Crisis Campaign.

⁷¹ Council of Europe (2017) Costs and Unintended Consequences of Drug Control Policies. Strasbourg: Pompidou Council of Europe.

⁷² Leonard, J. and Windle, J. (2020) ‘I Could have Went Down a Different Path’: Talking to People who Used Drugs Problematically and Service Providers about Irish Drug Policy Alternatives. International Journal of Drug Policy, 84, 102891.

Participants stressed the link between problematic drug use with economic deprivation and social exclusion. Many participants reported that their drug use was to ‘cope’ with the ‘harsh realities of living on the margins’⁷³. Respondents also expressed the need to improve services for drug-related treatment⁷⁴. They felt that the government should have a long-term objective to increase treatment provision as well as reduce economic deprivation and social exclusion to help deter problematic drug use. Several participants critiqued and were frustrated with the current Irish drug treatment service and labelled it as ‘insufficient’⁷⁵.

Participants agreed that criminalising for simple possession failed to deter problematic drug use and in fact exacerbates the issue. For instance, some respondents explained how imprisonment exposed them to more serious drug use. This included the use of heroin, which quickly became normalised. Consequently, the nature of short sentences means people can ‘slip through the net’ whilst they are incarcerated⁷⁶.

The testimonies captured by Leonard and Windle (2020) resonate with the points put forward by the Ana Liffey Drug Project and IDPU. Decriminalising drug use has not been associated with increased consumption or prevalence and there is little evidence that criminalisation of minor drug offences acts as a deterrent.⁷⁷ Given this, Ireland’s current criminalisation of cannabis can be understood to reinforce cycles of poverty and marginalisation without any tangible benefit.

3.3 Costs to the criminal justice system and the state

The EU’s European Drug Report 2016 found that cannabis products accounted for 78% of drug seizures by European law enforcement, comprising over 744,000 operations. In Ireland, CSO data tells us that the lion’s share of drug arrests in recent years have been for possession for personal use, with arrests for personal use consistently between 2.5 and 4.5 times higher than those for sale or supply, as can be seen in Graph 2 below. Furthermore, between 2002 and 2018 (the most recent data available), seizures of cannabis have consistently amounted to at least 50% of all drug seizures made (Graph 3). Combining these two data series, we can estimate that somewhere between 35% and 40% of drug arrests between 2002 and 2018 were for cannabis for personal use.

The Department of Justice and Equity released a costing of an alternative approach to personal drug possession in 2019. This costing, based on 2017 figures, estimated that 72% of all drug arrests for personal use were for cannabis. The report estimated that the total cost for personal possession

⁷³ Ibid.

⁷⁴ Ibid.

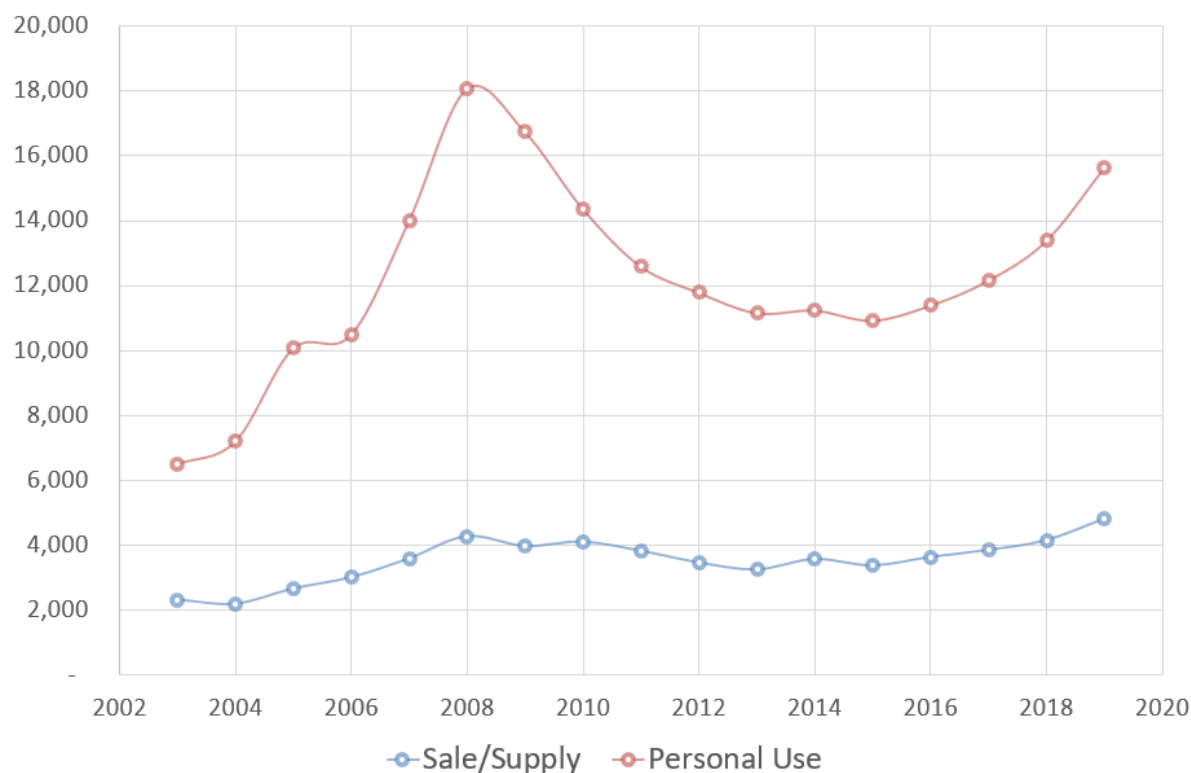
⁷⁵ Ibid.

⁷⁶ Ibid.

⁷⁷ Ana Liffey Drug Project and IDPU (2018) Not Criminals: Underpinning a Health Approach to Drug Use. Dublin: LSE and Ana Liffey Drug Project.

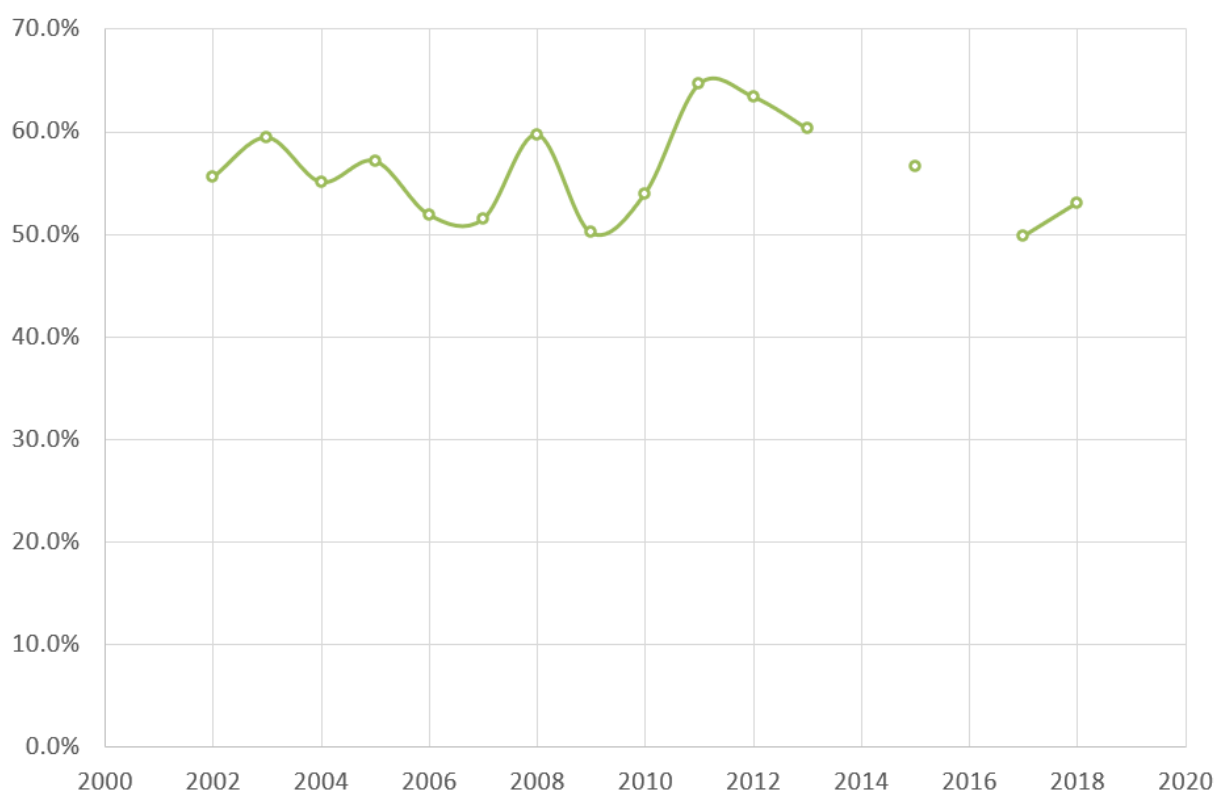
across the whole justice system to be €7 million annually, whereas an adult cautioning system⁷⁸ applied to personal possession would potentially save the justice system €2.7 million, though the costs incurred by the Gardaí would increase.

Graph 2: Timeseries of number of arrests for drug offences in Ireland parsed by volume of illicit substance. Source: CSO. Recorded Crime Offences Under Reservation. Last Updated: 12/21/2020.



Graph 3: Cannabis seizures annually in Ireland as a percentage of all drug seizures (2002 - 2018). Source: European Monitoring Centre for Drugs and Drug Addiction.

⁷⁸ An Adult Cautioning Scheme approved by the Director of Public Prosecutions. It is an alternative to the prosecution of certain persons against whom there is evidence of the commission of a scheduled criminal offence, where the prosecution of such offence is not required in the public interest.



Based on this research, and the National Drug Strategy in 2017, ‘Reducing Harm, Supporting Recovery (RHSR): A Health-led Response to Drug and Alcohol Misuse in Ireland 2017-2025’, as of December 2020, a possession can be dealt with through the Adult Cautioning Scheme⁷⁹. If matters are prosecuted, court convictions vary from fines to imprisonment of up to three years, based on factors like whether the possession was for personal use or sale, and whether the defendant has prior convictions.

Decriminalisation Case Study: Portugal

When considering the effects of decriminalising cannabis in Ireland, Portugal’s drug policies offer a useful case study—a model that the participants in the ex-offenders interview believed that if implemented in Ireland, it would provide focus on adequate treatment and support to people with drug use disorders.

Possession and drug use has been decriminalised in Portugal since 2001. Individuals who are found to be in possession of more than 10 days’ worth for personal use are referred to a meeting with a ‘dissuasion commission’, known as Comissões para a Dissuasão da Toxicodependência (CDT). The CDT includes a panel of three people that typically comprises of a medical expert, a social worker and a legal professional. Approximately, 82% of referrals to CDT in 2013 were for cannabis possession⁸⁰. In

⁷⁹ https://www.citizensinformation.ie/en/justice/criminal_law/criminal_offences/drug_offences.html

⁸⁰ Release (2016) A Quiet Revolution: Drug Decriminalisation across the Globe. London: Release.

promising findings, there has been a reduction in drug-related harm, particularly amongst vulnerable users. Although there has been a small increase in lifetime drug use, Portugal remains below the EU average⁸¹.

EU countries have been increasingly moving away from viewing people who use drugs as criminals, and health-based approaches are being implemented. A report by Greenwald (2009) shows that the decriminalisation of drugs in Portugal has been a significant success. Almost all metrics that were analysed have shown a reduction in problematic drug use⁸². The general consensus is that criminalisation was exacerbating the drug problem in Portugal - rather than helping or deterring people from using drugs⁸³. Noticeably, more people are being offered treatment for drug use as the fear of being prosecuted has now been alleviated. Harm reduction programmes are benefiting from the extra resources that have been made available due to the decriminalisation framework.

A study by Gonçalves et al. (2015) found that the social cost of drugs in Portugal decreased by 18% between 2000-2010. This was not only through indirect health costs but also decreased costs to the legal system and social rehabilitation. It was estimated that in 1999 the per capita social cost of drugs was €34.02. This decreased to €24.53 in 2010⁸⁴.

Portuguese model in Ireland?⁸⁵

In 2015, the Joint Committee on Justice, Defence and Equality visited Portugal to assess the decriminalisation approach and how it could be used in an Irish context. Each district in Portugal has a 'Dissuasion Committee', whose informal and local nature was deemed to be potentially successful and suitable for the Irish context. The Committee established that the success of the Portuguese approach includes economic benefits, such as reduction in costs to the criminal justice sector and reductions in police and court time. It was also noted that the Portuguese model uses positive discrimination to employ former drug users.

The social cost savings of the absence of a criminal record and harm reduction were also found to be successful. This approach would reduce criminal justice costs as well as free up time and resources. Additionally, individuals can now benefit from education, counselling and treatment rather than

⁸¹ Ibid.

⁸² Greenwald, G. (2009) Drug Decriminalisation in Portugal: Lessons for Creating Fair and Successful Drug Policies.

⁸³ Ibid.

⁸⁴ Gonçalves, R., Lourenço, A. and Nogueira da Silva, S. (2015) A Social Cost Perspective in the Wake of the Portuguese Strategy for the Fight against Drugs. *International Journal of Drug Policy*, 26(2), pp. 199-209.

⁸⁵ Joint Committee on Justice, Defence and Equality (2015) Report of the Committee on a Harm Reducing and Rehabilitative approach to possession of small amounts of illegal drugs. Available at: https://data.oireachtas.ie/ie/oireachtas/committee/dail/31/joint_committee_on_justice_defence_and_equality/reports/2015/2015-11-05_report-on-a-harm-reducing-and-rehabilitative-approach-to-possession-of-small-amounts-of-illegal-drugs_en.pdf

receiving a criminal record. Even though the group acknowledged the success of the model, they decided that there would be legislative difficulties in adopting a 'Portuguese style' model in Ireland. Regardless of the legislative difficulties, if Ireland adopts a similar policy, Portugal's model offers a glimpse at what social, economic and health improvements could be made possible.

4. Environmental Considerations

The hemp crop has been proven to thrive in Irish soil and grows well in low temperatures (Crowley, 2001). Up to the 1900's it was a significant crop worldwide as 75% of paper was made from hemp fibre. It was also widely used in twine, rope, nets etc. and hemp oil was the most used oil for lighting. However, the cultivation of hemp has declined to almost non-existence - thought to be attributed to criminalisation⁸⁶.

4.1 The Role of Hemp in Sequestering Carbon

One hectare of industrial hemp can absorb 15 tonnes of CO₂ per hectare per year. Hemp's rapid growth makes it one of the fastest CO₂-to-biomass conversion tools available, making it more efficient than many agro-forestry models⁸⁷.

In 2019, Minister of State for Natural Resources, Community Affairs and Digital Development Sean Canney suggested that Bord Na Móna could take up responsibility for growing Ireland's medicinal cannabis supply and it is not a bad idea – hemp can grow in peaty marshlands. However, studies show hemp grown on peat will yield lower amounts and quality of fibre⁸⁸.

Further research would be required here in Ireland, however, the copper deficiency common to both peat and hemp could lead to weak plant stems⁸⁹. A study conducted in Russia on peat-humus soils have shown that the yield and quality of fibre could be enhanced through supplemental application of boric acid, copper sulphate and manganese sulphate⁹⁰. If this level of supplemental inputs was necessary on Irish peatlands, it is unclear whether bog grown hemp could be economical. There are also questions to be answered as to whether growing hemp on peatlands would provide any additional benefit in terms of sequestration as opposed to simply letting bogland recover. In the near term, it would appear that there will be no efforts to pursue such projects as in late 2020 it was

⁸⁶ Crowley, J.G. (2001) The Performance of Cannabis Sativa (Hemp) as a Fibre Source for Medium Density Fibre Board (MDF). Carlow: Teagasc.

⁸⁷ Wilson, C. (2020). The Future for Hemp. Available at: [https://ec.europa.eu/environment/forests/pdf/respondents-additional-inputs/European%20Industrial%20Hemp%20Association%20\(EIHA\).pdf](https://ec.europa.eu/environment/forests/pdf/respondents-additional-inputs/European%20Industrial%20Hemp%20Association%20(EIHA).pdf)

⁸⁸ Dewey, L. A purple-leaved mutation in hemp. USDA. Plant Ind. Circ. 1913, 113, 23–24.

⁸⁹ Adesina, I., et. al. (2020) A Review on the Current State of Knowledge of Growing Conditions, Agronomic Soil Health Practices and Utilities of Hemp in the United States.

⁹⁰ Getmanov, P.I. Effect of trace fertilizers during hemp cultivation of peat-humus soils. Khim. Sel. Khoz. 1967, 5, 412–413.

announced Bord Na Móna had shelved plans for growing cannabis on their bogs due to concerns about the time required to address regulation deficits⁹¹.

Perhaps more viable would be for the farming of hemp to provide alternatives for land use to help diversify farm income and promote on farm sequestration. Research by Teagasc has shown that that hemp can be grown successfully in Ireland, that high stem yields of adequate quality material can be attained, and that difficulties in the harvesting of the crop can be overcome⁹². As the cultivation of hemp becomes more enticing the CBD market develops, it is possible for several other, hemp-based industries to develop and expand. Though not yet achieved, the growing of hemp could provide for new environmentally-friendly rural enterprises⁹³.

Hemp fibres can be used in the manufacture of bioplastics and can be used in the construction industry for insulation. Hempcrete, a composite material made from wet-mixing hemp shiv with a lime binder, provides a natural, vapour-permeable, airtight insulation material which also has great thermal mass, giving it a uniquely effective thermal performance. Currently, France is leading the way in hemp construction, as they have been using it for decades⁹⁴.

Farmers can also grow hemp as a feedstock for their animals. Hemp has gained prominence in the food and beverage sector as hemp seeds are nutritional powerhouses. It can be used in the feed of farm animals, pets, birds and fish. By using hemp as a feedstock, Ireland can reduce the carbon footprint of imports of soy-based animal feed while also sequestering carbon as the hemp grows. Hemp shiv can be used as bedding for animals and provides insulation, is comfortable, odour retaining and has high absorbency.

In Ireland, growers currently need to obtain a license from the HPRA. There were 77 applications in 2019, with Finola (high CBD variety) being the most common seed type among the applications. Despite its profitability, there are strict regulations surrounding the cultivation of hemp⁹⁵. There are also strict restrictions on where the hemp is grown. Applicants have to provide an ordinance survey map to prove that the hemp will be grown away from schools, public rights of way and vehicular access.

⁹¹

<https://www.irishtimes.com/news/social-affairs/cannabis-plan-for-state-owned-bogs-goes-up-in-smoke-1.4391787>

⁹² Finnan, J (2013) Producing Biomass from Hemp (*Cannabis sativa*). Teagasc. Available at:

https://www.teagasc.ie/media/website/publications/2010/5788_ProducingBiomassFromHemp.pdf

⁹³ Ibid.

⁹⁴ <https://www.nytimes.com/2018/01/29/science/hemp-homes-cannabis.html>

⁹⁵ Teagasc (2019) Premier Irish Industrial Hemp Conference. Available at:

<https://www.teagasc.ie/news--events/news/2019/premier-irish-industrial-.php>

4.2 Barriers to farmers growing hemp

Even with the current restrictions, the growth of the industry and expansion into different markets makes the plant attractive to farmers. The cultivation of hemp is desirable from a cost perspective as production costs are relatively low due to the crop's resistance to pests and diseases. However, it is important to note that there is limited technology and a lack of awareness regarding agricultural practices in hemp growing - it can also be difficult to harvest. Advancements in the technology sectors, such as utilising modern equipment and machinery, as raised by Gegax (2020), can reduce production costs further and increase yields per acre⁹⁶.

In Ireland, growers interviewed as part of the research lamented the lack of a decortication plant, indicating that these plants are necessary to fully unlock the potential of hemp. These are the processing facilities which will be required to process hemp straw each year. An industrial hemp decortication plant would be needed to separate the crop into its two main components - shivs or hurds and fibre; the remainder consists of fines and dust from the process and is also marketable as a biofuel.

Some further barriers identified by interviewees for the hemp industry in Ireland include the legislation regarding the previously mentioned THC content limits, as there are differences across state bodies. For example, an Garda Síochána have a limit of 0% in testing and the Department of Agriculture use the EU limit (0.2%). Therefore, legislation needs to ensure that the same THC content is used by all bodies. Additionally, the same methodology for testing THC content needs to be standardised across testing labs.

The decriminalisation of cannabis could have a positive impact in the fight against climate change by allow the hemp industry to flourish. This would help to remove existing the taboos about the plant held by potential growers. It would also serve to drive reforms of restrictions on THC limits. Currently Enterprise Ireland will not support businesses that sell cannabis-based products not intended for the medicines market due to possible 'reputational damage'⁹⁷. Therefore, the decriminalisation of cannabis would mean fewer grey areas for farmers and would allow the farming industry to grow an economically viable and environmentally friendly crop.

⁹⁶ Gegax, K. (2020) Hemp Financial Research

⁹⁷ HFI (2020) Ireland's hemp industry is excluded from state Covid-19 enterprise support but pharma companies are welcome to apply. Press Release. Available at: https://static1.squarespace.com/static/5c726fecebf7fc0696ed92d/t/5ecbd0f9d6d7ad4f6c43142b/1590415610689/25_05_2020+Press+Release.pdf

5. Economic Considerations

Perhaps the most compelling argument for many in the debate about legalising cannabis is the increased tax revenue that it would bring to the Irish economy. However, this is not the only economic argument for legalisation. As discussed briefly in the previous section, innovative ownership models could provide valuable economic diversification opportunities and new community business, which could be particularly advantageous for communities in rural Ireland. Indeed, it is this recognition that has the Irish Farmers Association pushing the Irish Government to introduce legislation that would allow farmers to produce medicinal cannabis⁹⁸. In this section we explore the potential economic benefits from cannabis legalisation.

5.1. Cannabis Tax

Legalizing cannabis provides an important advantage over prohibition because it allows for the Government to collect taxes from the legalised drug. Estimates for the global market range anywhere from USD 50 billion to USD 166 billion by the end of the next decade⁹⁹. Prohibition Partners, estimate that, by 2028, the market for medicinal cannabis in Ireland could be €1 billion¹⁰⁰.

This would make the Irish cannabis market akin to that in Colorado, a state of 5.7 million people, where cannabis has been legalised since 2014. With recreational and medicinal sales reaching almost \$1 billion in 2015, Colorado collected more than \$135 million in taxation revenue and fees¹⁰¹. The tax in Colorado is relatively low – 15% - significantly below the VAT rate in Ireland and minimal compared to Irish tax on tobacco which stands close to 80%¹⁰² (the tax rate on tobacco in Colorado is 42.9%¹⁰³).

The design of any carbon tax can serve multiple ends. Not only can it generate revenue, but it can also be designed so that it diminishes the illicit market, prevents or limits an increase in cannabis dependency and abuse; minimises the use of risky and unhealthy products. It should be noted however, that while legalisation may increase the use, it is likely that the market value of cannabis is

⁹⁸

<https://www.irishpost.com/news/irish-farmers-association-ask-government-to-legalise-medical-cannabis-195694>

⁹⁹

<https://www.irishtimes.com/business/agribusiness-and-food/roll-up-roll-up-capitalism-will-drive-cannabis-legalisation-in-ireland-1.3994192>

¹⁰⁰ Prohibition Partners (2020) The European Cannabis Report.

¹⁰¹ Hajizadeh M. (2016). Legalizing and Regulating Marijuana in Canada: Review of Potential Economic, Social, and Health Impacts. International journal of health policy and management, 5(8), 453–456.

<https://doi.org/10.15171/ijhpm.2016.63>

¹⁰²

<https://www.irishtimes.com/news/ireland/irish-news/almost-80-of-price-of-packet-of-cigarettes-is-tax-and-excise-duty-donnelly-1.4380161>

¹⁰³

<https://leg.colorado.gov/agencies/legislative-council-staff/tobacco-products-tax#:~:text=The%20tax%20rate%20on%20tobacco,and%20special%20district%20sales%20taxes.>

likely to fall as more suppliers enter the market. In Colorado, for example, the average wholesale price of marijuana dropped over 50 percent from July 2016 to July 2018, while marijuana prices in Colorado as of January 2019 were down 61 percent from 2015¹⁰⁴.

Here, it should also be noted that there is a potentially other sources of economic benefit by way of new companies locating their operations in Ireland and the subsequent creation of jobs. This process has already begun. In the summer of 2020, the Central Bank of Ireland approved an Irish domiciled investment fund, Óskare Fun, that is seeking to raise up to €150m to back companies in the legal medicinal cannabis industry.¹⁰⁵ Ireland is seen as an attractive location for corporate cannabis – towards the end of the last decade, with cannabis stocks soaring, two large north American companies Aurora Cannabis and Tilray declared their intentions to enter the Irish market - with Tilray going so far as to set up an Irish division, Tilray Ventures¹⁰⁶.

However, since then, falling cannabis prices caused the Aurora share price to collapse as the company lost USD 2.5 billion while Tilray's market valuation collapsed to a fraction of its 2018 heyday before a recently merger with another large corporate, Aphria¹⁰⁷ spurred something of a recovery. Given the uncertainty for international players, and the opportunities presented by cannabis for diversification of farmers income, it may be preferable to consider the potential of cannabis as a tool of local development in Ireland and set up a network of local cooperatives rather than wait for large multi-national corporations to take over the market.

5.1. Cannabis and Community Wealth Building

Should the government enable the development of a medical cannabis industry in Ireland, or indeed legalise for recreational use, there are alternatives to corporate cannabis that could potentially offer new and innovative development options for communities in rural Ireland.

One possibility would be to consider a publicly-owned cannabis industry in Ireland such that the growth and development of the industry could target revival of communities suffering from deprivation or a lack of opportunities while creating a comprehensive revenue stream for the government. As discussed previously, it seems Irish semi-state Bord na Mona, will not be pursuing plans to grow cannabis, so we may be some time away from state owned production.

¹⁰⁴ Carl Davis, et al., (2019) Taxing Cannabis, INSTITUTE ON TAXATION & ECONOMIC POLICY at 8.

¹⁰⁵

<https://www.independent.ie/business/irish/central-bank-signs-off-on-150m-legal-cannabis-fund-39280054.html>

¹⁰⁶

<https://www.irishtimes.com/business/agribusiness-and-food/roll-up-roll-up-capitalism-will-drive-cannabis-legislation-in-ireland-1.3994192>

¹⁰⁷ <https://www.fool.com/investing/2021/01/07/the-aphria-tilray-merger-shows-just-how-overpriced/>

However, state-owned retail might be an option. There is evidence that a publicly-owned retail system provides for greater opportunity to regulate distribution and ensure, in so far as possible, that risks of negative social and health outcomes are minimised¹⁰⁸. A privatized cannabis retail system would facilitate commercialization and would pose the greatest risk to public health¹⁰⁹. Publicly owned retail outlets exist across Canada and in certain US states.

Not only could publicly owned retail provide for better outcomes on the consumer side, but such a model might also allow for a fairer market for producers. Publicly owned retail of cannabis in Ireland could allow for a community wealth building approach to be adopted in response to the demand. Community wealth building (CWB) is a flexible, site-specific economic model. Coined by The Democracy Collaborative in 2005¹¹⁰, CWB is a place-based, practical systems approach to economic development, built on local roots and plurality of ownership.¹¹¹

CWB is a partnership between anchor institutions, communities and businesses which aims to create strong, sustainable local economies that support fair work, encourage local spending and use public land and property for the common good. Crucially, social and environmental gains are included as an intentional function of the economy in a CWB model which ensures environmental and economic stability.¹¹²

In a system of retail where dispensaries were publicly owned, the dispensaries themselves could act as anchor institutions. Anchor institutions are stable organisations with real purchasing power in a community, such as local authorities, hospitals, universities, colleges, trade unions, and large private employers. The jobs and supply chains connected to anchor institutions carry economic, social and environmental potential to generate and retain wealth in the locality.

In the case of cannabis, a model of publicly owned local dispensaries which encouraged the development of community owned cannabis cooperatives to respond to demand, could ensure that farmers maximise their income, local jobs are created in the processing system and the wealth building potential of ancillary industries – like textiles, building products or foodstuffs – is maximised. There already exists a few hemp cooperatives in Ireland, including the Irish Hemp Co-operative Society.

¹⁰⁸ McEachern, J. (2017) Cannabis distribution in Canada: A literature review of policy options and potential implications for public health. Available at: <https://www.nsgeu.ca/filemanager/pdf/NSGEUCannabisReport.pdf>

¹⁰⁹ Ibid.

¹¹⁰ Guinan, J., and M. O'Neill, (2019). 'From Community Wealth Building to System Change', IPPR Progressive Review, 25 (4), 387

¹¹¹ McInroy, N., et al., (2017). 'Lessons From Preston', RSA Journal, 163 (2), 44-47

¹¹² McCabe, S. (2020) The People's Transition: Community-led development for climate justice. TASC, Dublin.

Cooperatives have played a central role in the development of communities and culture in rural Ireland. In his book, *Civilizing Rural Ireland. The cooperative movement, development and the nation-state 1889 – 1939*, Patrick Doyle highlights how, before and following independence, critical ideas about the nation emanated from the sphere of economic and social organisation, where the cooperative movement held sway¹¹³. Interestingly, in the 1800s in Britain and Ireland, farmers relied on cooperative processing to make a living from hemp and flax¹¹⁴. Perhaps there is something to learn from the past in order to plan for the future.

6. Conclusion

There are compelling social, environmental and economic arguments for ending the criminalisation of cannabis in Ireland. In Ireland, the health benefits have been recognised by way of creation of the Medical Cannabis Access Programme which has been welcomed by anti-prohibition advocates. One immediate, positive step that could be taken by the government would be to expand the conditions eligible for the programme by including chronic pain sufferers.

Consideration must be given to the impact that criminalisation is having on people and communities living in vulnerable situations. The social cost of prohibition extends beyond the criminality it breeds to the stigmatisation and accumulation of criminal records for users that results in further ostracization and the erection of barriers that diminish and damage lives.

There can be no doubt that the abuse of cannabis does present significant concerns regarding long term health outcomes, particularly in terms of long term mental health outcomes from excessive use and the consequences of use in adolescence, however the same could be said for alcohol and tobacco. It stands to reason that health risks would be better managed by a system of regulation and holistic, people-centred support for the population most at risk, rather than prohibition that pushes the substance underground, drives criminality, binds users through stigma and criminal records and ultimately does little to prevent vulnerable groups gaining access to the substance.

An approach which ends the prohibition of cannabis and develops a system of taxation and regulation could have very positive economic and environmental benefits. It is likely to the potential for profit and the sequestration of carbon, rather than the protection of vulnerable communities, that will ultimately lead to changes in national regulation and the decriminalisation or legalisation of cannabis.

¹¹³ Doyle, P., (2019). *Civilising rural Ireland The co-operative movement, development and the nationstate, 1889–1939*. ISBN: 9781526124579

¹¹⁴ Duvall, C., (2014) *Cannabis*. Reaktion Books

After almost 100 years of prohibition, the winds of change seem to be bearing down on Ireland. With countries in North America and Europe having relaxed, or currently actively considering relaxing, the prohibition of cannabis, and the United Nations taking the unprecedented step of removing the plant from its dangerous drugs list, it seems like only a matter of time until the laws which criminalise cannabis in Ireland are done away with. The question then becomes, what replaces them.

A system aiming to rectify injustice and support reparations for communities most badly impacted by prohibition might consider the public ownership of the cannabis market in Ireland such that cooperative and community wealth building approaches could be adopted to the production and distribution of the substance and its derivatives. Such a model could facilitate local sustainable development, enhance the capacity of government to ensure safe usage and potentially prevent market volatility or the type of losses experienced by large cannabis companies in the US and Canada.