A COMPARATIVE ANALYSIS OF THE CANNABIS REGULATORY FRAMEWORKS IN SOUTH AFRICA, CANADA AND URUGUAY AND THEIR IMPACT ON THE GROWTH OF THE INDUSTRY

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Science in Medicine (Pharmaceutical Affairs)

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Declaration

I Darren du Plessis declare that this Research Report is my own, unaided work. It is being submitted for the Degree of Master of Science in Medicine (Pharmaceutical Affairs) at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.

(Signature of candidate)

9th day of June 20 25 in Boksburg

Dedication

This study is dedicated to my family, whom without their support and tolerance, none of this would have been possible

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I extend my deepest gratitude to Professor Shabir Banoo for his invaluable assistance, insightful advice, and expertise. His guidance shaped my thoughts, inspired me to challenge my own boundaries, and gave me the confidence to persevere.

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Abstract

The global shift towards decriminalisation and legalising cannabis for medical and non-medical purposes continues to rise, requiring robust regulatory frameworks to ensure safety, quality, and accessibility. South Africa, with its favourable climate and evolving legal landscape, has significant potential to develop a functional local cannabis industry.

This study employed a qualitative, deductive framework analysis to compare South Africa's evolving cannabis regulations with those of Canada and Uruguay, focusing on key areas such as policies, legislative and regulatory systems, public health considerations, quality standards, labelling, possession limits, accessibility, taxation, and penalties.

The findings of this study highlight significant gaps in South Africa's current regulatory framework, including the absence of a structured commercialisation pathway and a centralised regulatory authority. Canada's model balances public health and economic growth through strict controls, while Uruguay's state-controlled approach prioritises social equity. South Africa's recent policy shifts, including the transfer of the National Cannabis Master Plan (NCMP) to the Department of Trade, Industry, and Competition (DTIC), underscore the need for a clear, unified cannabis policy.

This study recommends establishing a dedicated regulatory authority and aligning policies with international best practices to guide industry development. A comprehensive cannabis framework should include tax incentives, quality control measures, home-grower regulations, and public education initiatives to balance economic potential with public health and safety considerations.

By adopting insights from Canada and Uruguay, South Africa can develop a well-regulated cannabis industry that fosters economic growth while ensuring social and health protections. This research underscores the urgent need for a cohesive, evidence-based approach to cannabis regulation.

Key Words: South Africa, Canada, Uruguay**, c**annabis regulation, cannabis legalisation, decriminalisation, policy framework, economic impact, international treaties, medical cannabis framework, recreational cannabis laws, cannabis commercialisation, public health and cannabis, comparative analysis

Table of Contents

List of Figures

List of Tables

List of Abbreviations

ACMPR:	Access to Cannabis for Medicinal Purposes Regulations
CBD:	Cannabidiol
CFU:	Colony Forming Unit
CRA:	Canada Revenue Agency
CSC:	Cannabis Social Club
CUD:	Cannabis Use Disorder
DALRRD:	Department of Agriculture, Land Reform and Rural Development
DOJCD:	Department of Justice and Constitutional Development
DSD:	Department of Social Development
DTIC:	Department of Trade, Industry, and Competition
FAO:	Food and Agriculture Organisation
GMP:	Good Manufacturing Practices
GPP:	Good Production Practices
IRCCA:	Instituto de Regulación y Control del Cannabis (Institute for Regulation and Control of Cannabis)
NCMP**:**	Draft National Cannabis Master Plan
NDoH:	National Department of Health (South Africa)
PAYE:	Pay-As-You-Earn
PIC:	Pharmaceutical Inspection Convention
PIC/S:	Pharmaceutical Inspection Co-operation Scheme
SACENDU:	South African Community Epidemiology Network on Drug Use
SAHPRA:	South African Health Products Regulatory Authority
SAPC:	South African Pharmacy Council
SAPS:	South African Police Service
SDL:	Skills Development Levies
SENACLAFT:	Secretaría Nacional para la Lucha contra el Lavado de Activos (National Secretariat for the Fight against Money Laundering)
SNIS:	Sistema Nacional Integrado de Salud (National Integrated Health System)
THC:	Tetrahydrocannabinol
THCA:	Tetrahydrocannabinolic acid

UCC:	Uruguayan Cannabis Club
UIF:	Unemployment Insurance Fund
UN:	United Nations
UNODC:	United Nations Office on Drugs and Crime
UNODCCP:	United Nations Office on Drugs and Crime and Crime Prevention
VAT:	Value Added Tax
WHO:	World Health Organisation

Chapter 1

1. Introduction

1.1 Background

Cannabis has been used as a medicinal, industrial, and ritualistic agent for thousands of years, with historical records tracing its use in ancient China, Egypt, and India (Russo, 2007). Despite this extensive history, formal regulation and prohibition of cannabis only emerged in the past 200 years, largely influenced by colonial policies, racialised drug laws, and global agreements like the 1961 Single Convention on Narcotic Drugs (Seddon and Floodgate, 2020). In recent decades, a global trend has emerged towards the legalisation and commercialisation of cannabis, driven by increasing recognition of its medicinal benefits, economic potential, and the need to rectify past social injustices associated with prohibition (Hall and Lynskey, 2016). Following the groundbreaking 2018 Constitutional Court ruling that permitted adults to privately cultivate, possess, and use cannabis for personal purposes, South Africa became one of many nations moving towards decriminalisation and broader cannabis access (Parry, Myers and Caulkins, 2019).

Use trends indicate that in South Africa, cannabis is the most widely used illegal substance, with usage prevalence estimated by the United Nations Office on Drugs and Crimes (UNODC) being 3.7 percent among the population and higher amongst the youth (Peltzer and Ramlagan, 2007). Additionally, data indicates that cannabis is the most commonly reported substance among individuals admitted to South African treatment centres (SACENDU, 2021). This trend is also observed worldwide. In 2017, an estimated 4% of the global adult population consumed cannabis (United Nations, 2019).

A major concern with the 2018 Constitutional Court ruling is the possible increase in the illicit cultivation of cannabis, extending beyond the scope of private use, as well as the illegal trading of cannabis that may arise (Parry, Myers and Caulkins, 2019). There

have also been calls for a broader policy framework and regulatory environment to enable commercialisation of non-medical cannabis whilst taking into account public health concerns (Government of South Africa, 2023).

In 2021, the South African Department of Agriculture, Land Reform and Rural Development (DALRRD) introduced a draft National Cannabis Master Plan (DALRRD, 2021). This strategic framework aims to guide the expansion of the domestic cannabi sector by promoting economic development, inclusive participation, job creation, poverty reduction, and rural advancement (DALRRD, 2021). The strategy aims to operate across nine key pillars to develop a regulatory framework, attract investment, enhance enforcement, and expand cultivation and manufacturing capacity. It seeks to incorporate small-scale growers into formal cannabis value chains by grouping them into licensed entities and offering technical and financial assistance (DALRRD, 2021). However, a number of stakeholders have flagged significant problems with the Cannabis Master Plan in its current form, arguing that the implementation thereof will require articulation of a revised national policy and new legislation.

In recent years, many countries have established regulatory frameworks to govern the procurement, use, and distribution of cannabis for both medical and non-medical purposes. By examining these international practices, valuable lessons can be drawn to shape a robust and balanced policy framework for South Africa. For instance, Canada and Uruguay have implemented comprehensive regulations for the commercialisation of cannabis, focusing on public health considerations and the mitigation of potential social risks. Drawing from these international examples, a pathway for implementing a broader policy framework in the South African context that addresses public health, economic opportunity, and regulatory oversight should be explored. The development of a sustainable and effective regulatory environment for non-medical cannabis in South Africa may require guidance from other jurisdictions such as Canada and Uruguay that have evolved workable regulatory and commercialisation practices.

In 2013, Uruguay became the first country in the world to completely legalise the cannabis supply chain since the onset of prohibition (Seddon and Floodgate, 2020). This landmark framework was originally designed for recreational cannabis with

regulations adapted for medicinal use. Uruguay adopted a three-tiered approach to regulation, with full governmental control throughout the entire supply chain and state monopoly over the cannabis retail sector (Obradovic, 2021). This decision to reform cannabis legislation was not driven by a focus on generating tax revenues but instead to counteract the illegal distribution of cannabis and other drugs within Paraguayan networks (Cruz, Boidi and Queirolo, 2018a).

Following Uruguay, Canada became the second country, through the enactment of the Cannabis Act in October 2018, to approve the legalisation of recreational cannabis at the federal level. The motivation for this pioneering stance was to ensure that cannabis was kept out of young hands, ensuring profits were kept out of the pockets of criminals and to support the safeguarding of public health in Canada by ensuring access to safe, regulated cannabis (Government of Canada, 2021).

Canada has opted for a decentralised system of regulation whereby the distribution and sale of cannabis is regulated by each province and territory. This allows each province and territory to establish regulations and laws determining the minimum age of sale, restriction on the supply and personal possession limits, among other aspects (Government of Canada, 2021).

Although second-in-line to legalise cannabis for recreational purposes, Canada was one the first countries to legalise the medical use of cannabis in 1999. This was done similarly to that of South Africa where a special permit is issued by the Ministry of Health (Schlag, 2020).

Attempts at applying a model for regulating the cannabis industry in South Africa may not be as straight-forward as initially envisaged. There is clearly a need to better understand the relevance of measures taken in other jurisdictions globally such as Uruguay and Canada.

Effective regulation may also require additional considerations of other industries such as gambling, alcohol and tobacco. Studies from these industries have highlighted the extent to which companies will oppose effective regulatory measures such as taxes

imposed, pricing structures and marketing restrictions and opt instead to promote self-regulation and individual responsibility (Adams, Rychert and Wilkins, 2021).

South Africa, post the decriminalisation of cannabis for personal consumption, has enacted the Cannabis for Private Purposes Act (Act 7 of 2024) (Government of South Africa, 2024). This Act, however, falls short of offering any guidance to industry in South Africa on the road to commercialisation, instead focusing on the private consumption, possession, offenses relating to the breach of the Act as well as expungement of existing criminal records pertaining to cannabis possession (Government of South Africa, 2024). An integrated policy framework therefore needs to be carefully considered and developed.

1.2 Rationale for the Study

The global use of cannabis, for both medicinal and recreational use, continues to increase each year (Shah et al., 2024). Therefore, the implementation of effective and practical regulatory frameworks is crucial to ensuring the availability of safe, high-quality cannabis. These regulations should cater to individuals who use cannabis for medical conditions under healthcare professional guidance, as well as consenting adults who choose to consume it for non-medical purposes.

A comprehensive regulatory framework is also critical for safeguarding public health, particularly by restricting recreational access to minors. Adolescents are at a higher risk of adverse mental, cognitive, and social outcomes associated with cannabis use (Scott, 2023). Therefore, any regulation should prioritise preventing youth access while ensuring the responsible availability of cannabis to the adult population.

South Africa, with its favorable sub-tropical and temperate climate, has the potential to emerge as a major global contender in the cannabis industry. The development of a robust cannabis regulatory environment would not only ensure product safety and public health protection but also drive economic growth (Matiza and Van Der Merwe, 2023). Given the country's high unemployment rate, especially among young adults,

the cannabis industry could provide new employment opportunities and stimulate economic activity, potentially easing the unemployment burden.

To guide the development of such a regulatory framework, it would be valuable to consider the experiences of countries that have already legalised and regulated cannabis. In this regard, Canada and Uruguay may serve as relevant comparator countries. Both nations have established comprehensive cannabis regulation models but with different approaches, offering important lessons for South Africa.

Canada was the first G7 nation to legalise recreational cannabis nationwide in 2018. Its regulatory model emphasises public health and safety, with a tightly controlled supply chain, strict quality standards, and a strong focus on preventing youth access. Canada's approach, which balances public health concerns with the economic potential of the cannabis industry, offers key insights for South Africa, particularly in terms of quality control, taxation, and the integration of medical and recreational cannabis markets.

Uruguay was the first country globally to fully legalise cannabis in 2013 and provides a contrasting model, prioritising public health and human rights over commercialisation. Its focus has been on regulating the cannabis market to undercut illegal sales and reduce harm, rather than maximising economic gain. Uruguay's approach offers valuable lessons on how to create an accessible and affordable market while minimising social risks and ensuring public safety. It also highlights the importance of a government-controlled supply chain to manage access and distribution effectively.

Canada and Uruguay offer two distinct yet valuable regulatory models that are highly relevant to South Africa's context. Uruguay prioritises public health and social equity through a state-controlled system aimed at reducing harm and illegal trade—challenges also present in South Africa. Canada, meanwhile, combines public health safeguards with economic opportunity in a decentralised, commercially driven model, offering lessons in quality control, licensing, and provincial flexibility. These contrasting approaches provide practical insights for developing a balanced, locally appropriate cannabis framework in South Africa.

1.3 Aim of the study

The aim of this study is to critically assess the existing regulatory and policy landscape for both medical and non-medical cannabis in South Africa. This will involve a comparative analysis with the cannabis regulatory frameworks of Canada and Uruguay, two countries that have implemented comprehensive cannabis policies. The study seeks to identify strengths, challenges, and opportunities in South Africa's current approach, and ultimately to develop well-informed, evidence-based recommendations for the regulation of non-medical cannabis. These recommendations will aim to address both public health concerns and the potential for economic growth, while ensuring that the regulatory system is effective, equitable, and aligned with international best practices.

1.4 Study Objectives

1.4.1 To conduct a review of the existing cannabis regulatory and policy landscape for medical and non-medical cannabis in South Africa.
1.4.2 To compare the South African cannabis regulatory framework and policies with that of Canada and Uruguay.
1.4.3 To develop recommendations for the regulation of non-medical cannabis in South Africa.

1.5 Overview

This report consists of six chapters, outlined as per Figure 1.1 below, with each chapter broken down as follows:

Chapter 1 introduces the report by means of four sections detailing the background of the research, the rationale for the study, objectives, and overview of the research report.

Chapter 2 is the literature review portion of this report. It is made up of five main sections, the first of which is the historical context of South African cannabis regulation. Section 2 reviews the regulatory frameworks for cannabis, which is further divided into

a review of the current framework in South Africa as well as reviews of the Uruguayan and Canadian frameworks. This section also reviews the harmonisation of cannabis regulation, from a global perspective. Section 3 details labelling requirements, followed by section 4 which addresses taxation of cannabis. Section 5 focuses on the economic implications of legalising cannabis in South Africa.

Chapter 3 details the study methodology and is broken down into five sections: study design, data collection, data analysis, trustworthiness and ethical considerations.

Chapter 4 contains the results from the study and has two sections, the first being an examination of current regulations for medical and non-medical cannabis use in South Africa. The second section is a presentation of the results of the comparative analysis of Canada, Uruguay and South Africa.

Chapter 5 contains the discussion of the six themes identified: regulation, quality, limits, labelling requirements, accessibility and penalties. This chapter also discusses a strategy towards a Comprehensive Policy Framework for South Africa.

Chapter 6 includes the conclusion, recommendations as well as the limitations of this research.

References and appendices containing relevant supporting documents follow Chapter 6.

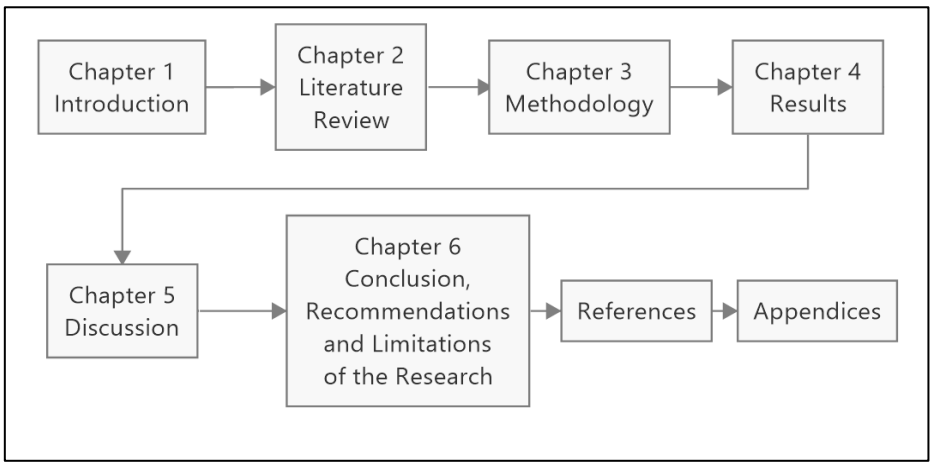

Figure 1.1: Outline of the Research Report

Chapter 2

2. Literature Review

For decades cannabis has been illicitly cultivated, used, sold, trafficked, confiscated, destroyed, and is now decriminalised in many countries globally. Regulatory frameworks of countries that have legalised its use reflect many different approaches, some of which will be discussed in this section. A literature review of cannabis-specific legislation, supporting regulations, policy reports, peer-reviewed journal articles as well as other relevant information make up the sources of the literature review. These sources provide different perspectives and perceptions ranging from legal enactments to public opinion to gauge the historical failures and challenges in regulating cannabis.

2.1 Historical Context of South African Cannabis Regulation

"Dagga is a herb which the Lord gave us and which the white man came and interfered with, and gave it names, and condemned it." – Bergville Ward Councilor David Khumalo, 1977.

South Africa's complex colonial and political past paved the way for many instances of regulatory shortcomings to effectively and, without controversy, control cannabis. The task was not made easier by the similarity, and hence confusion around the botanical taxonomies of psychoactive *Cannabis* and the indigenous, but non-psychoactive *Leonotis* taxa (Waetjen and Ndandu, 2023).

The cultural importance of cannabis in South Africa cannot be understated. In an 1866 Transvaal agricultural report it was stated that the plant called 'dagga' was smoked by the native Africans as an alternative to tobacco (Waetjen and Ndandu, 2023). In 1885, a Cape writer for *The Port Elizabeth Telegraph and Eastern Province Standard* explained that "as with hemp (cannabis), leonotis leaves are smoked by the [Khoekhoe] and it is an extremely powerful smoke". He goes on to say that "they call it 'Duyvel's tabac' and very drunk and silly it makes them." (Waetjen and Ndandu, 2023).

The first regulatory attempt was made in 1870 in the Colony of Natal, which prohibited cannabis. Cannabis was nationally banned in South Africa in 1922 through Regulation 14 of the Union Customs and Excise Act. In 1923, following the fifth session of the League of Nations Advisory Committee on Traffic in Opium and Other Dangerous Drugs, South Africa was significant in ensuring that cannabis was listed as a prohibited narcotic. Cannabis was outlawed at the global level in 1925 and South Africa criminalised cannabis in 1928 under the Medical, Dental and Pharmacy Act, 1928 (Act 13 of 1928) (Khiba and Hutchison, 2023).

The traditional significance of cannabis, coupled with its restriction under colonial and apartheid-era laws, led to significant tensions between local communities and law enforcement. These tensions culminated in a violent confrontation in 1956 during the Ngoba dagga raid in KwaZulu-Natal, where authorities sought to crack down on the cultivation and trade of cannabis, which had long been an integral part of indigenous customs, medicine, and social practices. The raid escalated into a deadly clash, resulting in the deaths of five policemen. In response, the state launched a severe retaliatory campaign, leading to the execution of 22 community members, marking one of the most violent episodes of cannabis-related law enforcement in South African history (Du Toit, 1977; Waetjen and Ndandu, 2023).

The growing concern over the proliferation of cannabis use in South Africa led to the introduction of the Abuse of Dependence-Producing Substances and Rehabilitation Centres Act (Act 41 of 1971) (Government of South Africa, 1971). This notorious Act ensured the most extraordinary punishments, including the sentencing of individuals found in possession of even minor amounts of cannabis to lengthy and often harsh detention in rehabilitation centres, where they could be subjected to forced labour or other severe conditions (Government of South Africa, 1971). The Act was superseded by the Drugs and Drug Trafficking Act (Act 140 of 1992) (Government of South Africa, 1992) which classifies cannabis as a harmful dependence-forming substance, and is illegal. Individuals found in possession of cannabis for recreational purposes or caught trafficking it can face severe penalties, including imprisonment and fines. It is noteworthy that, despite the 2018 Constitutional Court ruling and the recent enactment of the Cannabis for Private Purposes Act (Act 7 of 2024), the Drugs and Drug

Trafficking Act (Act 140 of 1992) continues to criminalise the recreational use of cannabis, highlighting the need to align laws and regulations relating to what constitutes legal and illegal use of cannabis.

2.2 Regulatory Frameworks for Cannabis

2.2.1 The Regulatory Framework in South Africa

South Africa became the first African nation to legalise cannabis for personal consumption in 2018, following a Constitutional Court ruling. In 2020, the Cannabis for Private Purposes Bill was drafted which was subsequently enacted on the 28th of May 2024 as the Cannabis for Private Purposes Act (Act 7 of 2024) (Government of South Africa, 2024).

2.2.1.1 Medical use

In South Africa, the medical use of cannabis is governed by the Medicines and Related Substances Act 101 of 1965 (“Medicines Act”) (Government of South Africa, 1965), which governs the control, scheduling, and use of medicines. Cannabis, including its derivatives, tetrahydrocannabinol (THC) and cannabidiol (CBD), are classified under different schedules based on their intended purpose and the concentration of active compounds. Tetrahydrocannabinol, the psychoactive component, is a Schedule 6 substance, meaning it can only be accessed with a prescription from an authorised healthcare provider, and is subject to stringent controls due to its potential for abuse. Cannabidol, on the other hand, is a Schedule 4 substance when its concentration exceeds a certain limit, but lower concentrations (less than 600 mg per sales pack or less than 0.0075% per volume) are classified as Schedule 0, allowing for over-the-counter sales for therapeutic purposes without a prescription (Department of Health, 2024). Medical cannabis products that contain THC are available only through specific channels, such as when prescribed for severe conditions like chronic pain, epilepsy, or palliative care.

The South African Health Products Regulatory Authority (SAHPRA) oversees the approval of medical cannabis products and the issuance of licenses for cultivating and manufacturing cannabis for medicinal purposes. Research into the effectiveness of

cannabis as a medical treatment continues, with evidence supporting its use for pain management, nausea associated with chemotherapy, and certain neurological disorders. However, concerns remain regarding the potential side effects and long-term risks associated with THC. The review of medical cannabis use in South Africa, under the Medicines Act, reflects a cautious approach, ensuring access is balanced with necessary regulatory oversight to prevent misuse and protect public health (Government of South Africa, 1965).

Section 21 of the Medicines Act plays a pivotal role in providing access to unregistered cannabis products for patients with severe health conditions. This provision is designed to facilitate compassionate use, allowing healthcare practitioners to request approval from SAHPRA when conventional treatments have proven ineffective or inappropriate. The significance of Section 21 lies in its ability to address urgent medical needs, enabling patients suffering from ailments such as chronic pain, epilepsy, and cancer to access potentially beneficial treatments through a structured legal framework (SAHPRA, 2022a).

Despite its crucial function, the implementation of Section 21 has been met with challenges, including bureaucratic delays and a lack of clarity regarding which cannabis products are permissible. Healthcare providers often face obstacles in navigating the application process, which can hinder timely access to necessary treatments for patients. As cannabis regulation continues to develop, so does the need for streamlining these processes and improving transparency to enhance patient access and ensure that their medical needs are met effectively (Van Rensburg et al., 2020). Overall, Section 21 remains an essential component of South Africa's approach to medicinal cannabis, balancing the need for patient access with regulatory oversight.

2.2.1.2 South Africa’s International Drug Control Treaty Obligations

South Africa is a signatory to three key international drug control treaties: the Single Convention on Narcotic Drugs (1961) (United Nations, 1961), the Convention on Psychotropic Substances (1971) (United Nations, 1971), and the Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988) (United Nations,

1988). These conventions form the basis of international drug policy and impose obligations on member states to control and regulate substances like cannabis.

The 1961 Single Convention on Narcotic Drugs classifies cannabis alongside other narcotics and mandates strict controls over its production, distribution, and use. Countries are required to criminalise non-medical use and ensure that any medicinal use is closely monitored and regulated (United Nations, 1961). South Africa's current prohibition in the Drugs and Drug Trafficking Act align with this international obligation to criminalise cannabis for non-medical purposes.

The 1971 Convention on Psychotropic Substances focuses on controlling psychotropic drugs, including synthetic cannabis derivatives, emphasising public health and preventing misuse (United Nations, 1971). South Africa's inclusion of cannabis derivatives and synthetic cannabinoids in its drug scheduling reflects its commitment to this treaty.

The 1988 Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances requires countries to take measures to combat drug trafficking, particularly focusing on transnational organised crime (United Nations, 1988). South Africa's continued criminalisation of cannabis trafficking and strict controls on its movement across borders fulfill its obligations under this treaty.

However, the evolving legal landscape surrounding cannabis use, particularly for medicinal and personal purposes, presents challenges for South Africa in balancing domestic reform with international treaty obligations. Countries like Canada and Uruguay, which have legalised recreational cannabis use, have had to reconcile their domestic policies with international treaty commitments, often by invoking mechanisms within the treaties for temporary exemptions or reservations. South Africa may need to explore similar avenues if it moves towards broader legalisation of cannabis.

In 2002, the United Nations Office for Drug Control and Crime Prevention stated that a quarter of global cannabis seizures occurred in South Africa, with 718 tons intercepted in 2000 - a volume second only to Mexico (UNODCCP, 2002). This statistic

illuminates South Africa's significant role in the international cannabis trade, reflecting complex socio-economic dynamics, law enforcement challenges, and the intricate networks of production and distribution prevalent during that period, which spoke to deeper systemic tensions in the country's illicit drug economy at that time.

2.2.1.3 Non-medical use

The Cannabis for Private Purposes Act (Act 7 of 2024) (Government of South Africa, 2024) discussed below seeks to uphold the privacy rights of adults to cultivate, use, and/or possess cannabis, while regulating these activities, addressing concerns related to the protection of minors, expunging prior cannabis-related convictions, and, importantly, prohibiting the trafficking of cannabis (Government of South Africa, 2024). The Act stipulates that any adult over the age of 18 years may use or possess cannabis in a private setting for a personal purpose. The use and possession may only occur through the sharing of cannabis between two or more consenting adults, explicitly without the exchange of consideration. An adult individual may possess cannabis in public but it may not be consumed in public.

Protection of minors is emphasised within the Act, protecting the child’s best interest at all times. As such, adults may not knowingly permit the use or provide a child with cannabis or a cannabis-containing product. The only exception is if cannabis is prescribed for medical purposes, by a medical practitioner (Government of South Africa, 2024).

As the Act was recently assented to, detailed regulations have yet to be published by the Minister of Justice and Constitutional Development and hence the next section will reference the Cannabis for Private Purposes Bill with regards to proposed possession limits as this information was omitted in the Act.
Currently, an adult may possess in private unlimited cannabis seeds and seedlings and up to four flowering cannabis plants. Eight plants may be allowed if two or more adults occupy the same dwelling. Up to 100 grams of dried cannabis may be possessed whilst in public and up to 600 grams when in a private space. If two or more adults occupy the same dwelling, this increases up to 1200 grams in total (South African Government, 2020).

2.2.1.4 Industrial use

The regulatory framework for hemp cultivation in South Africa is primarily regulated by the Plant Improvement Act 53 of 1976 (Government of South Africa, 1976) and its subsequent amendments, which aim to promote hemp as an agricultural commodity while ensuring clear distinctions from psychoactive cannabis. In addition, the Drugs and Drug Trafficking Act 140 of 1992 (Government of South Africa, 1992) classifies cannabis as an illegal substance, except where specifically permitted under authorised frameworks such as the hemp industry regulations. The Department of Agriculture, Land Reform, and Rural Development (DALRRD) is responsible for overseeing the licensing and regulatory processes for hemp cultivation, ensuring that all activities comply with national and international standards (DALRRD, 2023).

Under this framework, farmers intending to grow hemp must apply for a permit or license through DALRRD, ensuring that all registered producers adhere to the legal THC limit of 0.2% for hemp crops (Government of South Africa, 1976). Regular inspections and laboratory testing are conducted to verify compliance, and any crop exceeding this threshold may be destroyed, with penalties imposed on the license holder (DALRRD, 2023).

A key aspect of the framework is the regulation of hemp seeds, where only certified hemp seed varieties listed in the national variety list are legally permitted for cultivation. The National Seed Certification Scheme, managed by DALRRD, oversees the quality control and certification of seed producers to maintain genetic integrity and prevent the use of high-THC cannabis seeds disguised as hemp (DALRRD, 2023). This ensures compliance with industrial hemp standards while promoting a secure and reliable hemp industry.

Hemp cultivation is also subject to strict production guidelines, which outline sustainable farming practices, including pest control, soil management, and harvesting techniques. Farmers must maintain detailed operational records, such as planting dates, field locations, and the use of fertilisers or pesticides, to ensure transparency and traceability throughout the production chain (Government of South Africa, 1976). These measures support the development of hemp as a raw material for various

industrial applications, including textiles, biofuels, and eco-friendly construction materials (DALRRD, 2023).

The amended framework is also designed to promote economic growth, especially in rural areas. Hemp is considered a high-potential crop for stimulating local economies, creating employment opportunities, and integrating small-scale farmers into the commercial agriculture sector. To support these objectives, the government provides training, financial resources, and technical support to emerging farmers, helping them to navigate the licensing and cultivation processes. Furthermore, public-private partnerships are encouraged to drive research and innovation in hemp-based products and technologies, positioning South Africa as a key competitor in the global hemp industry (DALRRD, 2023).

Enforcement and compliance are central to the regulatory framework, with DALRRD conducting regular inspections and audits to ensure that hemp cultivation remains within legal parameters. The department has the authority to revoke licenses or impose penalties on farmers who violate the regulatory requirements, particularly those related to THC levels and seed certification (Government of South Africa, 1976). This strict oversight is necessary to prevent illegal cannabis production under the guise of hemp farming while ensuring that the industry remains legally compliant and economically viable.

Overall, the amendments to the Plant Improvement Act 53 of 1976 provide a structured regulatory environment for hemp cultivation, balancing economic opportunities with strict compliance measures. By aligning with global best practices, the framework aims to support a sustainable, legally compliant, and economically beneficial hemp industry in South Africa.

A broad overview of the current regulatory framework is summarised in Figure 2.1 below and in order to interpret it, the following is important:

- Green-highlighted shapes reflect the primary regulator for each designated cannabis use, i.e. medical, non-medical or industrial.
- Green arrows depict advisory relationships in the development of the relevant legislature.

- Red arrows depict the drafting department or statutory body responsible for each Act.

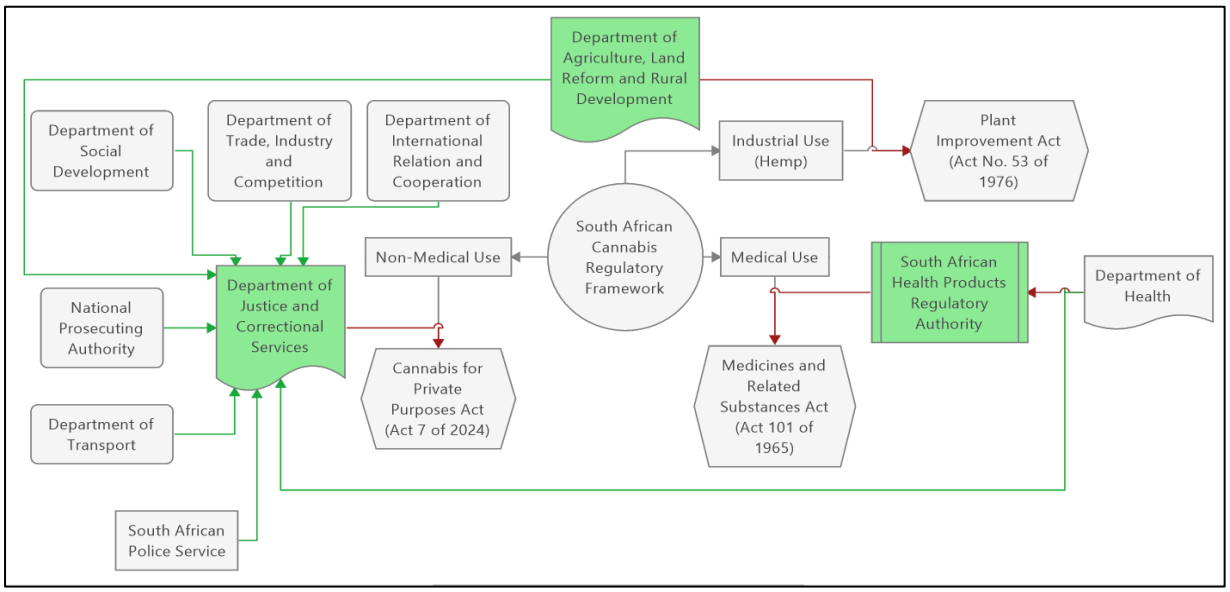

Figure 2.1: South African Cannabis Regulatory Framework

2.2.1.5 Draft National Cannabis Master Plan

The Draft National Cannabis Master Plan (NCMP) of South Africa, introduced in 2021 by the Department of Agriculture, Land Reform, and Rural Development (DALRRD), is discussed below (DALRRD, 2021). The plan aims to establish a regulated cannabis industry that can drive economic growth, create jobs, and attract investment while benefiting local communities. It focuses on rural development by empowering small-scale farmers to access the market, while also ensuring public health and safety through regulated medical and recreational cannabis use. The NCMP encourages positioning South Africa as a major contender in the international cannabis industry, with a focus on exporting both hemp and cannabis products. It also calls for a regulatory framework that aligns with South African laws and international obligations. Promoting research and innovation, particularly around medical applications, sustainable cultivation, and industrial hemp uses, is a central element of the plan.

Key focus areas include updating the legal framework in line with existing legislation, expanding medicinal cannabis provisions under the South African Health Products Regulatory Authority (SAHPRA), and prioritising industrial hemp for products like

textiles and biofuels. Although the Constitutional Court's 2018 ruling decriminalised personal cannabis use, the complete legalisation and market integration of recreational cannabis still face challenges. The plan stresses inclusivity and seeks to empower previously disadvantaged communities, providing opportunities for them to enter the cannabis value chain.

The economic and social benefits of the NCMP include significant job creation, especially in rural areas, and the formalisation of the informal cannabis market to benefit local farmers. By promoting research, South Africa aims to develop high-value cannabis-based products, particularly in the pharmaceutical sector. However, the NCMP faces challenges, such as harmonising the legal framework with international obligations, ensuring market access for small-scale farmers, building capacity through training, and managing potential public health risks associated with recreational cannabis consumption.

In terms of implementation, the NCMP outlines forming multi-stakeholder task teams, establishing a clear licensing system, providing support to small-scale farmers through financial and technical assistance, and fostering international partnerships to enhance South Africa’s standing in the global cannabis market. Ultimately, the plan seeks to transform the country’s cannabis sector into a well-regulated, inclusive industry that contributes to socio-economic development, though its success will depend on navigating regulatory challenges and ensuring equitable access to the market (DALRRD, 2021).

2.2.2 The Regulatory Framework in Uruguay and Canada

2.2.2.1 Uruguay

Uruguay was the first nation to legalise the recreational and medical use of cannabis in 2013. Following a State-Monopoly model, Law N° 19.172 provided for the establishment of the Instituto de Regulación y Control del Cannabis (Institute for Regulation and Control of Cannabis; hereafter IRCCA) as well as the necessary provisions for the creation of a comprehensive regulatory framework for the production, distribution and consumption of cannabis (Government of Uruguay, 2013).

This allowed qualifying Uruguayans and permanent residents only, who are over the age of 18, to access cannabis for recreational use by the means of three legal mechanisms namely: home cultivation, through membership to a collective or cannabis social club (CSC) known as the Uruguayan Cannabis Club (UCC) and lastly, by purchasing it directly from pharmacies (Alvarez, Queirolo and Sotto, 2023; Kilmer, 2017).

The tripartite system implemented in Uruguay aims to strike a balance between personal liberties and the well-being of public health and safety considerations, providing regulated access to cannabis while mitigating potential risks associated with unregulated markets. The system provides citizens with three regulated ways to access cannabis. Firstly, individuals aged 18 or older may legally cultivate up to six plants per household for personal use, yielding a maximum of 480 grams per year. Additionally, cannabis clubs offer a communal option, allowing groups of 15 to 45 registered members to form non-profit associations that collectively cultivate up to 99 plants, with each member entitled to receive up to 480 grams per year from the club's harvest. The third and most publicly accessible option is through pharmacy sales, where registered users may purchase up to 40 grams per month, capped at 480 grams annually. Each tier in this system is designed to maintain regulated access to cannabis, balancing personal freedom with public health and safety (Boidi et al., 2015).

In order to maintain the mutual exclusivity of this scheme, and to ensure that multiple methods for access are not exploited, active users are placed on a register which is monitored and controlled by the IRCCA. As of June 2023, there are currently 86207 registered Uruguayan residents allowed to obtain cannabis legally. This correlates to 14592 home growers, 10486 as members of 306 collectives and 61129 who obtain their cannabis through 39 pharmacies across Uruguay. This equates to approximately 2.5 per cent of the general population however approximately only one quarter of the population have registered as active cannabis users. It is still unclear why some users have opted to not register (IRCCA, 2023).

The IRCCA has licensed three private companies to grow and provide recreational cannabis, available for sale in pharmacies, and thirteen suppliers to cultivate medicinal cannabis (IRCCA, 2023). The cannabis produced by these licensed companies is

tightly controlled by the Uruguayan state. The state dictates the specific varieties and brands that can be distributed. Currently, only two brands are available, each offering a limited selection of five varieties. These varieties have tetrahydrocannabinol (THC) levels strictly capped at a maximum concentration of 9 per cent, ensuring a controlled potency. The production output by each of the companies is also capped at maximum of two tons of cannabis each year. This limit on output was put in place in order to prevent over-supply as well as to encourage a cautious attitude to the handling of cannabis (Ramsey, 2016).

Law N° 19.172 provides the legal framework for the industrialisation and commercialisation of psychoactive cannabis under the direct control of the IRCCA as well as non-psychoactive cannabis (hemp) under the direct control of the Ministry of Livestock, Agriculture and Fishing. For the creation of therapeutic products for medicinal use, the control and authorisation resides with the Ministry of Public Health.

The promotion of public health and strategies to prevent the development of cannabis use disorders (CUD's) are driven by the National Integrated Health System (SNIS) and will monitor usage as well as other parameters such as:

- Demographic data: Information such as age, gender, socioeconomic background of cannabis users.
- Incidence of CUD's: Rates of cases of individuals developing problematic or dependency-related issues.
- Frequency of cannabis use: How often users are consuming cannabis as well as how much they are consuming.
- Health outcomes: The physical and mental effects of cannabis use, including mental health issues and respiratory problems.
- Public awareness: How well the general population understands the potential risks linked to cannabis use, including the safe practices associated with its use.

All of these parameters are necessary to ensure the required mechanisms are available to those members of the public whom require it.

Any and all kinds of advertising and promotion of cannabis is prohibited (Government of Uruguay, 2013).

Uruguay's approach to the legalisation of cannabis has been recognised for its public health focus as well as its commitment to human rights but has faced several challenges which are summarised in Table 2.1 below:

Table 2.1: Key Successes and Challenges of the Uruguayan Cannabis Regulatory Model

Key Successes	**Challenges and Criticisms**
1. Reduction in criminal activity: One of the primary objectives of the law was to undermine the illegal drug trade by providing a safer, regulated market. Studies suggest that legalisation has reduced the role of drug cartels in the cannabis trade, diminishing the criminal networks associated with drug trafficking (Pardo, 2014).	**1. Slow initial rollout**: The system experienced a slow and bureaucratic implementation phase. Pharmacies were hesitant to participate, fearing reputational damage or losing clients who opposed cannabis legalisation. As a result, access to licensed cannabis was limited in the early years, leaving many users to rely on the black market (Alvarez, Queirolo and Sotto, 2023).
2. Safeguard public health: By regulating cannabis through the IRCCA, Uruguay has been able to set safety standards for products sold in pharmacies, ensuring that users consume cannabis that meets government-sanctioned quality and potency requirements. This helps mitigate the risks linked to unregulated black-market cannabis, including contamination and inconsistent potency (Cruz, Boidi and Queirolo, 2018b).	**2. Limited availability and registration requirements**: While cannabis can legally be purchased through pharmacies, consumers must first register with the government. This registration process has deterred some users, particularly those concerned about privacy or potential stigmatisation. Moreover, the limited number of participating pharmacies has restricted access, particularly in rural areas.

Table *2*.1: Key Successes and Challenges of the Uruguayan Cannabis Regulatory Model (continued)

Key Successes	Challenges and Criticisms
3. Socioeconomic benefits: The law has opened up opportunities for job creation within the legal cannabis industry, from cultivation to retail. Additionally, the revenues generated by the regulated market have contributed to public health and drug prevention programs.	**3. Black market persistence**: While the legal market has gained ground, the illicit cannabis market persists in Uruguay, partly due to limitations on legal purchases and access issues. Price competition from the black market, which can sometimes offer cheaper products, also poses a challenge (Queirolo et al., 2023).
4. Innovative drug policy: Uruguay's pioneering stance has encouraged other countries and regions to reconsider their drug policies. By implementing a system focused on harm reduction rather than punitive measures, Uruguay has positioned itself as a leader in progressive drug reform (Room, 2014).	**4. International pressure and banking issues**: Uruguay has faced external pressure, particularly from the United States, which has complicated its financial dealings. Some banks, wary of violating international drug laws, have refused to process transactions linked to the cannabis industry, creating difficulties for pharmacies involved in the program.

The Government controls the entire cannabis supply chain and in so doing controls the price, quality and supply volumes. Private companies may apply for a cultivation license if they fulfil all of the requirements stipulated in the regulations (Khiba and Hutchison, 2023).

2.2.2.2 Canada

Canada became the second nation, as well as the first of the G7 nations to legalise recreational cannabis use in 2018. Its legal model can be described as a hybrid system consisting of both state monopoly as well as private commercial facets (Khiba and Hutchison, 2023).

The Cannabis Act (S.C. 2018, c. 16) (Government of Canada, 2018a) provides clear objectives relating to:

1. Protecting public health and safety: The Act aims to reduce the health risks associated with cannabis by regulating its production, distribution, and sale. The focus is on ensuring that cannabis products meet strict quality standards to prevent contamination and regulate THC/CBD levels, thus minimising harm to users. This includes guidelines for product safety, packaging, and labelling.
2. Protection of minors: A key priority of the Cannabis Act is to restrict access to cannabis for minors. The law sets a national minimum legal age of 18, though provinces can raise the age. The Act also includes provisions to prevent cannabis marketing, packaging, or products that could appeal to youth, and imposes strict penalties for providing cannabis to minors.
3. Eliminating the illicit market: By creating a legal, regulated market, the Cannabis Act aims to reduce the black market for cannabis. This includes the establishment of a legal supply chain from licensed producers to retailers and consumers, with oversight to ensure compliance with federal and provincial regulations. By undermining illegal dealers, the law seeks to reduce criminal activity associated with the unregulated cannabis trade.
4. Supporting public education and awareness: The Act promotes public education and awareness initiatives to inform Canadians about the risks of cannabis use, particularly regarding impaired driving, substance misuse, and the health impacts on youth. These efforts are designed to foster responsible use of cannabis and reduce public harm.
5. Respect of provincial and territorial autonomy: The Cannabis Act provides provinces and territories with the authority to establish their own systems for regulating cannabis distribution and sale. This decentralised approach allows local governments to set their own rules regarding retail models, minimum purchase age, and restrictions on where cannabis can be consumed.
6. Supporting research and post-marketing monitoring: The law encourages ongoing research into the impacy of cannabis on health, along with the impacts of legalisation on society, health systems, and criminal activity. This supports the evidence-based refinement of cannabis regulations over time.

7. Prevention of drug-impaired driving: The Act introduces new criminal penalties and tools for law enforcement to identify and prevent drug-impaired driving. This is part of broader efforts to protect public safety on the roads.
8. Restricting access to cannabis, discouraging members of the public to use cannabis, and to deter the illegal cannabis market by creating a legitimate market. This in turn would have the added benefit of alleviating the strain on the criminal justice system.
9. Enhance public awareness through education on the health risks linked with the use of cannabis.

The market is open to any and all adults over the age of 18 years to possess up to 30 grams of dried cannabis in public. Individuals may possess up to four cannabis plants in private whereas organisations are prohibited from possessing cannabis without authorisation (Government of Canada, 2018a) by means of:

1. Licensing requirements: Organisations that wish to cultivate, distribute, sell, or research cannabis must first obtain the necessary licenses from relevant regulatory bodies. Organisations must apply to Health Canada for licenses related to cultivation, processing, sales, or research under the Cannabis Act. Without these licenses, possessing cannabis would be illegal.
2. Strict compliance standards: Once authorised, organisations must adhere to strict compliance standards regarding security, record-keeping, and quality assurance. These standards are in place to prevent diversion of cannabis to the black market, ensure product safety, and maintain regulatory oversight.
3. Penalties for unauthorised possession: Organisations found in possession of cannabis without authorisation face significant penalties. This can include fines, revocation of licenses, and even criminal charges. The intention behind such penalties is to safeguard the regulated cannabis supply chain and ensure that cannabis is only possessed by those who are licensed to do so.
4. Controlled Supply Chain: Authorised organisations are integrated into a tightly regulated supply chain, from seed to sale. This ensures that cannabis is produced, processed, and sold in accordance with national or regional laws and public health standards.

Interestingly, a minor who is below the age of 18 years may possess up to five grams of dried cannabis. This provision seems to be in contrast to the Act's objective of protecting minors but it is seen as a harm reduction approach as complete prohibition may drive minors towards illicit channels. The progressive approach in allowing minors to possess small amounts of cannabis also stands in contrast with other substances, like alcohol and tobacco, which has a zero-tolerance stance.

The individual provinces and territories are responsible for regulations pertaining to the minimum age limit and for mandating places and mechanisms for the purchase of cannabis from authorised retailers (Khiba and Hutchison, 2023).
Licensing has been delegated to Health Canada, who is responsible for licensing all cannabis-related activities such as cultivation, distribution and retail for medicinal purposes. Those wishing to involve themselves in the recreational cannabis sector however, will have to hold a Health Canada license prior to application for a Canada Revenue Agency (CRA) license, which allows the sale of non-medical cannabis (Government of Canada, 2022).

Cultivation of cannabis is rigorously policed by the federal government and requires all growers to have a valid license issued by Health Canada. This license may be one of three subclasses, each subjected to varying levels of restrictions and requirements. The three subclasses are: Standard cultivation license, micro-cultivation license and nursery license (Government of Canada, 2023).

Canada's approach emphasises public health and safety precautions which include:

- Strict quality control measures: Cannabis products must meet quality and potency standards as stipulated and regulated by Health Canada to ensure good manufacturing practices, prevent cross-contamination and ensure consistent THC and CBD levels of products on the market.
- Clear packaging and labelling: All cannabis products marketed are required to display health warnings and THC content. The plain packaging also aims to minimise the appeal of the product, especially to minors.
- Age restriction: Nationally, the minimum age for possession of cannabis is 18 years but individual provinces and territories may raise it. Most provinces and territories have set the legal age at 19 years old.

Table 2.2: Key Successes and Challenges of the Canadian Cannabis Regulatory Model

Key Successes	Challenges and Criticisms
1. Economic Growth Legalisation created new jobs in production, distribution, and retail sectors. It also generated significant tax revenues, contributing to public health and safety programs.	**1. Persistent Black Market** Despite efforts to curb illegal sales, the black market continues to thrive, driven by lower prices and accessibility. In some regions, the availability of legal outlets is limited, especially in rural areas.
2. Regulated Supply Legal cannabis production has reduced the market share of illegal dealers. Legal products are safer due to strict regulations, which minimise health risks associated with unregulated cannabis.	**2. Slow Retail Expansion** Initial rollout of retail stores was slow in some provinces, such as Ontario, leading to frustration among consumers and limited access to legal cannabis.
3. Public Health Initiatives Canada has implemented educational campaigns to reduce cannabis misuse, especially among young people.	**3. Banking and Financial Restrictions** Due to the international legal status of cannabis, Canadian cannabis companies face hurdles in accessing traditional banking services, complicating business operations.

Cannabis for medicinal use has been legal in Canada since 1999. However, with the implementation of the Cannabis Act in 2018, the Access to Cannabis for Medicinal Purposes Regulations (ACMPR) were replaced by new regulations aimed at enhancing patient access. After obtaining authorisation from their health care provider, patients may obtain cannabis for medical use by means of three sources. Patients can obtain cannabis by purchasing it from a federally licensed distributor, registering with Health Canada to cultivate a limited amount for personal medical use, or appointing an individual to grow it on their behalf. In addition to the 30 gram recreational use allowance, medical users are able to have in their public possession the smaller amount between 150 grams or a 30-day supply of dried cannabis, or its equivalent (Government of Canada, 2018b).

2.2.3 Harmonisation of Regulation

As of January 2024, Canada, Uruguay and 27 jurisdictions in the United States of America have provided legal avenues for the manufacturing and distribution of recreational cannabis. An estimated 228 million people used cannabis in 2022 alone, equating to approximately 4% of the global population (United Nations, 2024).

Each of the countries under review in this research report are adopting different approaches to the regulation of their cannabis policies; the state-controlled monopoly in Uruguay, the hybrid state and private model of Canada and the current private-use-only approach of South Africa.

Public health concerns related to the regulation of recreational cannabis are critical considerations in jurisdictions where cannabis has been legalised. As highlighted by Baltes-Flueckiger et al. (Baltes-Flueckiger et al., 2023), the regulatory approaches vary widely among states, making it difficult to reach consistent conclusions about the public health impact of recreational cannabis laws. These variations contribute to the inconclusive nature of existing evidence, primarily because much of the research relies on observational studies with inherent limitations.

A significant public health issue is the potential for increased cannabis use following legalisation, particularly among younger populations and vulnerable groups. Increased social acceptance and availability can lead to higher consumption, raising concerns about cannabis use disorder and dependency. Cannabis use is also associated with a range of mental health issues such as anxiety, depression, and psychosis, particularly among individuals with pre-existing conditions. Another concern is drug-impaired driving, as studies in legalised states indicate higher incidences of cannabis-related traffic accidents. However, these findings are often confounded by the presence of other substances, complicating enforcement and safety assessments.

Public health authorities worry about the impact of legalisation on adolescents, who are more vulnerable to cognitive and behavioural effects, including impaired memory and lower academic achievement. Chronic cannabis smoking has been linked to respiratory problems and an increased risk of cardiovascular events, while the

availability of high-potency products raises the risk of acute intoxication and accidental overdoses, particularly with edibles (Subramaniam et al., 2019).

The regulatory framework significantly influences public health outcomes. Some jurisdictions impose strict controls on product potency, packaging, and marketing, while others adopt more liberal approaches, which can heighten public health risks. For example, states that restrict advertising mitigate negative effects, such as youth exposure and the normalisation of cannabis use. However, many impacts remain difficult to quantify due to the reliance on observational studies. These studies often face limitations like self-reporting bias and confounding variables, leading to mixed findings. Consequently, more longitudinal research and controlled trials are needed to draw definitive conclusions about the long-term public health effects of recreational cannabis legalisation.

In the pursuit of broadening adult-use cannabis regulatory models, it must be noted that South Africa, as well as other signatory countries, must still honour their commitment to two relevant UN treaties on Narcotic drugs, namely the 1961 Single Convention and the 1988 Convention.

Article 4(c) of the 1961 Single Convention states under the general obligations of the signatories to "…limit exclusively to medical and scientific purposes the production, manufacture, export, import, distribution of, trade in, use and possession of drugs." (United Nations, 1961). This article may lead to a conflict between states attempting to open up a recreational sector and their international law obligations.

Khiba and Hutchison argue that article 3(2) of the 1988 Convention which correlates the penalties imposed by the breach of agreement to the party's "constitutional principles, and the basic concepts of its legal system", as the key to mitigating the conflict. They go on further to argue that South Africa's stance does not effectively legalise the use of cannabis, but rather creates a delineated defense for adult cannabis use as it is strictly for 'personal consumption' (Khiba and Hutchison, 2023).

Cannabis occupies multiple spheres of being both a medicine and a plant, both of which have stringent global guidelines of standardisation from a production, quality

and safety perspective. The challenge arises in categorising cannabis as either a medicine or a crop, and by which guideline to harmonise it against.

As a crop, hemp is regulated by the Department of Agriculture, Land Reform and Rural Development (DALRRD), which would regulate certain agricultural products according to the Agricultural Products Standards Act (Act 119 of 1990) to ensure products that are cultivated in South Africa are harmonised with certain International Standards. South Africa is a member of the Food and Agriculture Organisation (FAO) of the United Nations (FAO, 2023).

As a medicine, cannabis is regulated by SAHPRA in South Africa. In 2006 SAHPRA adopted the Pharmaceutical Inspection Co-operation Scheme (PIC/S) Guide to Good Manufacturing Practice (GMP) and it still forms the basis of their 'Guideline on Good Manufacturing Practice for Medicines' reference material (SAHPRA, 2022b). It is through this guideline that the quality of all medicines, including cannabis, is cultivated, processed and manufactured at an international level of acceptability.

In October 2022, SAHPRA is also rated as a World Health Organisation (WHO) ML3 (Maturity Level-3) Regulatory Authority for vaccines, the second highest level possible. This reflects a high global standard of pharmaceutical operations in South Africa, from a regulatory perspective (WHO, 2024).

PIC/S was established in 1995 as an extension to the Pharmaceutical Inspection Convention (PIC) in 1970. It is comprised of 56 participating authorities, including both Canada and South Africa, and seeks to lead the global development, implementation, and maintenance of harmonised GMP standards and quality systems for inspectorates in the medicinal products sector (PIC/S, 2023).

The legal cannabis industry is still in its infancy, and as jurisdictions navigate the complexities of cannabis regulation, a structured approach can provide clarity and consistency. One proposed framework is the 'eight P's', which can guide policymakers in designing effective regulations that address the multifaceted challenges associated with legal cannabis (Kilmer, 2014). These eight elements—production, profit motive,

promotion, prevention, potency, purity, price, and permanency—serve as foundational pillars to aid in harmonising regulations across different regions.

Regulating production involves establishing guidelines for cultivation, processing, and distribution, determining who is allowed to grow cannabis and ensuring compliance with safety and environmental standards. By establishing clear regulations regarding production, jurisdictions can promote responsible farming practices and prevent illegal cultivation. The profit motive of the cannabis industry can drive both innovation and exploitation; therefore, policymakers must balance the need for a profitable industry with safeguards to prevent negative social outcomes, such as increased substance abuse or market monopolisation. This can include measures to limit ownership concentration and allocate tax revenues to community health initiatives.

The promotion of cannabis products is another critical regulatory area, where jurisdictions must decide how cannabis can be marketed while preventing misleading information and protecting vulnerable populations, particularly youth. Clear guidelines around advertising practices can help ensure that marketing strategies do not encourage excessive consumption or glamorise cannabis use. Prevention strategies are essential to mitigating potential negative health impacts associated with cannabis use, including comprehensive public health campaigns that educate consumers about responsible use and resources for substance abuse treatment.

Potency regulations are crucial for ensuring consumer safety and informed choices, necessitating clear labelling of cannabis products with accurate potency information, particularly THC and CBD levels. This transparency allows consumers to understand what they are purchasing and helps prevent risks associated with high-potency products. Ensuring the purity of cannabis products is vital for consumer safety, and stringent quality control measures should be implemented to test for contaminants, such as pesticides and heavy metals. By establishing rigorous testing protocols, regulators can protect consumers and ensure that only safe, high-quality products reach the market.

The price of cannabis can significantly influence consumption patterns; therefore, policymakers should consider taxation strategies that balance revenue generation for

public health initiatives with avoiding excessively high prices that might encourage a black market. By setting competitive pricing, jurisdictions can deter illegal sales and encourage consumers to choose legal, regulated products. Finally, the concept of permanency involves creating a stable regulatory environment that allows for long-term planning and investment in the cannabis industry. Policymakers should aim for regulations that are adaptable yet consistent, providing clarity for businesses while allowing for adjustments based on emerging information and research.

By adopting the ‘eight P’s’, jurisdictions can develop comprehensive and harmonised regulatory frameworks that address the multifaceted challenges of the legal cannabis industry. This structured approach can facilitate collaboration among stakeholders such as government bodies, industry participants, and public health advocates, ultimately promoting a responsible and safe cannabis market. As the cannabis landscape continues to evolve, revisiting these principles will be essential to adapt regulations based on emerging evidence and changing societal attitudes towards cannabis use (Kilmer, 2014).

2.3 Labelling and packaging requirements for non-medical cannabis

Appropriate labelling of cannabis flower and equivalent processed products for safe and effective consumption is an integral component of a potentially well-regulated medical and non-medical cannabis sector.

States that have legalised cannabis have reported a rise in adverse events, particularly from the misuse of high-potency processed products such as concentrates and edibles. Studies conducted in Canada have indicated that the current regulatory measures surrounding labelling may be inappropriately implemented due to consumer limitations in understanding the THC dose expressed (e.g. % vs. mg) on the product label. With the objective of promoting lower-risk cannabis use, effective labelling and packaging standards, will provide a basis for the consumer to manage their intake more accurately and safely. As of 2021, no state has unequivocally set a standardised dose of THC. The capability of the consumer to quickly recognise and responsibly use their required dose is a fundamental part of a tightly controlled drug market. The risk to first-time or occasional users is particularly high due to the unfamiliarity with

cannabis use and as such, more effective labelling measures would ensure safe and effective use.

Hammond has identified five basic principles to guide cannabis packaging and labelling regulations:

1. THC content should be clearly labelled and only require basic numerical ability to effectively understand.
2. Standard doses should be lower than the average intoxication level.
3. Labels should provide guidance on THC dose expression.
4. As far as reasonably practical, labels should provide a common basis for product comparison.
5. THC labelling should be reinforced by other packaging regulations, such as unit-dose packaging (Hammond, 2021).

This notion is reiterated by Leos-Toro et al., who found that the majority of cannabis consumers can accurately interpret and use quantitative THC labelling. They suggest that labels that utilise ‘interpretive’ information such as symbols and descriptors have a greater effect (Leos-Toro et al., 2020).

2.4 Taxation

A key argument for the legalisation and subsequent commercialisation of cannabis is tax revenue generation. The common perception is that legalisation will result in substantial excise and sales taxes generated by bringing in a previously illicit sector into the licit sphere.

The possible effect of legalising and commercialising cannabis in South Africa, particularly with respect to tax revenue generation, could be significant. Similar to other jurisdictions that have legalised cannabis, South Africa could expect to see substantial tax revenue from both excise and sales taxes. This could provide a new source of funding for public services, infrastructure development, and social programmes, particularly in sectors such as education, healthcare, and drug addiction treatment.

In South Africa, the Draft National Cannabis Master Plan (NCMP) highlights the economic potential of the cannabis industry, including job creation and business opportunities in cultivation, processing, distribution, and retail. The legalisation of cannabis could stimulate the economy by encouraging local entrepreneurship and attracting foreign investment in the cannabis sector. Additionally, tax revenue could help fund critical public initiatives aimed at addressing historical inequalities, such as providing support for populations most impacted by the War on Drugs.

Moreover, the formalisation of the cannabis industry through legalisation would also facilitate improved quality control and regulatory measures, safeguarding consumer safety and reducing the risks associated with illicit cannabis products. This can lead to a healthier market overall, alleviating the strain on law enforcement and the justice system caused by cannabis-related offences (DALRRD, 2021).

While the potential for tax revenue generation is promising, careful consideration must be given to the regulatory framework to ensure that the benefits are maximised while minimising any adverse social impacts, particularly concerning vulnerable populations.

From a Canadian perspective, the high-sin-tax economy of Canada has raised concerns of taxation-cannibalism by the recreational cannabis sector on other sin-tax industries, such as alcohol and tobacco, which may result in less favourable outcomes. Income taxes, on the other hand, mainly generated through personal and corporate income streams related to the cannabis market tend to be enough to counterbalance the losses that accumulate from the indirect excise and sales tax streams in Canada, however the total net tax revenue generated will be constrained (Irvine and Light, 2020).

This sentiment is not only region-locked to Canada, in the state of Washington in the US, a study conducted concluded that cannabis legalisation results in a decrease in both alcohol and tobacco sales, along with a corresponding decrease in the tax revenue generated from those industries. Up to 40 percent of the revenues generated from the legal cannabis industry was diverted from the tobacco and alcohol industry (Miller and Seo, 2021).

Uruguay's approach has been to put the needs of public health first, and initially sell cannabis tax-free. This was done to undermine the illegal market and ensure the quality and safety of the cannabis in circulation (Barry, 2021).

2.5 Economic implications of legalising cannabis in South Africa

Legalising cannabis is likely to have a significant impact on both the demand and supply of cannabis in South Africa.

The consumption of cannabis is significantly affected by price due to its inelastic demand, meaning that changes in price do not lead to proportional changes in the quantity demanded (Riley, Vellios and van Walbeek, 2020). Several factors contribute to this inelasticity: the addictive nature of cannabis means that habitual users may continue to purchase it even if prices rise; the lack of direct substitutes makes it difficult for consumers to switch to alternative products; cultural and social acceptance can make cannabis consumption a deeply ingrained practice; and many individuals view cannabis as a therapeutic option for various health conditions, prioritising its use despite price fluctuations. Additionally, the regulated nature of a legal market can instill a sense of safety and quality, further entrenching inelastic demand. Overall, these dynamics create a scenario in which demand for cannabis remains relatively stable, even in the face of price changes.

Riley et al. goes on to note two possible price effects if South Africa were to fully legalise cannabis:

1. If the government imposes excise tax on cannabis, its price will increase along with revenues generated.
2. This increase will be counteracted by a decrease in price due to the elimination of the risk in buying and selling cannabis (Riley, Vellios and van Walbeek, 2020).

During the joint sitting of parliament in February 2022, the President of the Republic of South Africa addressed the nation and committed to review policy and regulatory frameworks regarding cannabis to realise the potential for investment and job creation.

He stated that government is “streamlining the regulatory processes so that the hemp and cannabis sector can thrive like it does in other countries.” (Ramaphosa, 2022).

A year later, in February 2023 during the State of Nation Address, the President remained “committed to unlocking investment in the hemp and cannabis sector” and that government is “moving to create the enabling conditions for the sector to grow”. He went on to commit that the DALRRD and the NDoH will “address existing conditions for the cultivation of hemp and cannabis to allow outdoor cultivation and collection of harvests from traditional farmers.” He reiterated that “urgent work is being finalised by government to create an enabling regulatory framework for whole plant, all-legitimate purposes approach for complementary medicines…” (Ramaphosa, 2023).

According to the widely accepted standard for measuring income inequality, South Africa has the highest income inequality globally, as indicated by the Gini Index (Seabela, Ogujiuba and Eggink, 2024). There is then an obvious need to implement policies in order to combat this, many of them being focused around job creation. Job creation in terms of poverty reduction is paramount, however it alone will do little to reduce overall inequality (Van Der Berg, 2011). An effective combination strategy whereby the narrowing of the skills premium through education, and its effect on wage differentials, the root cause of income inequality, along with job creation may be the best approach for the conceptualised cannabis sector (Ferreira, 2016).

Chapter 3

3. Methodology

3.1 Study Design

This study is a qualitative study utilising a cross-sectional, comparative content analysis to compare proposed South African cannabis regulations to that of Canada and Uruguay.

3.2 Data Collection

The primary sources of data used in this comparative analysis included applicable legislation and regulations pertaining to South Africa, Canada and Uruguay and was accessed from their respective official websites which are readily available for public perusal. The primary data sources used are depicted in Table 3.1.

Secondary sources of data such as peer-reviewed journals, government reports, policy reports, parliamentary proceedings and academic theses were accessed through the internet by means of Google Scholar, Science Direct and Pubmed.

A purposive sampling method was employed to identify documents directly aligned with the research objectives. The selection focused exclusively on national-level legislation, regulatory instruments, and official policy documents governing the medical and non-medical use of cannabis in South Africa, Canada, and Uruguay. Inclusion criteria were as follows: documents had to be (i) publicly accessible, (ii) legally binding or officially policy-guiding, and (iii) applicable at the national level. Documents were excluded if they were outdated, sub-national in scope (e.g., provincial or territorial laws), or lacked formal regulatory or legislative authority, such as media commentaries or advocacy materials.

3.3 Data Analysis

Qualitative data analysis was performed using a Framework Analysis approach, appropriate for the policy-comparative nature of the study. While the analysis was deductive in nature, open coding techniques drawn from Grounded Theory by means of Inductive Reasoning were used during the early stages of data familiarisation to allow for the emergence of unexpected themes (Khan, 2014). However, no attempt was made to generate new theoretical constructs. The reference to Grounded Theory reflects the initial coding strategy, rather than a full methodological commitment to theory development.

Analysis was assisted by qualitative data analysis software, namely ATLAS.ti following a flexible yet structured framework involving:

1. Initial reading and reflection on legislation, policy documents, academic literature, and regulatory sources to allow full engagement with the data.
2. Exploration of data sources to identify and confirm broad themes such as “Regulation”, “Quality”, “Limits”, “Labelling Requirements”, “Accessibility” and “Penalties”.
3. Systematic coding where content was assigned to the pre-established thematic categories and refined through repeated review for relevance, significance, and frequency.
4. Framework application, where coded data were organised into a matrix aligned with the coding framework as contained in Table 3.2, to allow for cross-jurisdictional comparison of key cannabis regulatory elements.
5. Interpretive synthesis, drawing conclusions and generating recommendations for the regulation of non-medical cannabis in South Africa.

Where new insights emerged during analysis, inductive sub-themes were incorporated iteratively and reviewed across all documents to maintain analytical rigour. This approach enabled both structured thematic comparison and responsiveness to context-specific findings across jurisdictions.

Table 3.1: Primary Data Sources

Country	Title of Document	Source
South Africa	Medicines and Related Substances Act (Act 101 of 1965)	https://www.gov.za/sites/default/files/gcis_document/201505/act-101-1965.pdf
	Cannabis for Private Purposes Act (Act 7 of 2024)	https://www.gov.za/sites/default/files/gcis_document/202406/50744-03-06-cannabisforprivatepurposesact-72024.pdf
	Cannabis for Private Purposes Bill (B19-2020)	https://www.gov.za/sites/default/files/gcis_document/202311/bill-b19b-2020.pdf
Canada	Cannabis Act (S.C. 2018, c. 16)	https://laws-lois.justice.gc.ca/PDF/C-24.5.pdf
	Cannabis Regulations (SOR/2018-144)	https://laws-lois.justice.gc.ca/PDF/SOR-2018-144.pdf
Uruguay	Law N° 19.172	https://www.gub.uy/junta-nacional-drogas/sites/junta-nacional-drogas/files/documentos/publicaciones/Ley_19.172_Cannabis_WEB_vfinal.pdf

Table 3.2: Coding Framework

Themes	Codes	Code Description
Regulation	Regulatory Body/ies	Statutory entities mandated in controlling the cannabis industry
	Primary Legislation	Main legislation enacted by the head of state
	Supporting Legislation	Supporting legislation that has ties with or an effect on the Primary legislation
	Legal Status	Current legal status in terms of medical and non-medical use
	Taxation	Any special provisions that exist in terms of taxation on cannabis
Quality	GMP/GPP	Good Manufacturing Practices/Good Production Practices, Standard Adherence

Table 3.2: Coding Framework (continued)

Themes	Codes	Code Description
Limits	Limitations on Active Substances/Scheduling	Limitations on THC and/or CBD and associated impact on its scheduling
	Prescribed Quantities/Possession Limits	The maximum quantity of cannabis (or its equivalent) that an individual is permitted to possess which varies between public and private settings
Labelling Requirements	Labelling Requirements	Specific labelling and packaging measures required, Batch Traceability indicators, Health warnings
Accessibility	Medical Use Provisions	Prescriber-initiated therapies
	Non-Medical Use Provisions	Non-medical uses of cannabis, both in public and private (if applicable)
	Private Use/Home-Grower Provisions	Non-medical or medical use limited to private dwellings and areas
	Commercial Provisions	Industry-specific provisions aimed at supporting the cannabis industry
Penalties	Criminal Infringements and Penalties	Penalties and punishments for breaching regulations

3.4 Trustworthiness

In order for this qualitative analysis to be trustworthy and rigorous, the application of Four-Dimension Criteria (Forero et al., 2018) were applied as per Table 3.3 below.

Table 3.3: Four Dimension Criteria strategy for Trustworthiness and Rigour

Rigour Criteria	**Purpose**	**Envisioned Methods**
Credibility	Ensured consistency, accuracy, and confidence that the findings were in fact true.	Ensured thorough readings and multiple perspectives on the topic to allow reader engagement.
Dependability	Ensured repeatability of findings contained in this research and consistency of theme coding.	Maintained an audit trail with a thorough description of study methods.
Confirmability	Authenticated that the research would have been confirmed or corroborated by other researchers.	Continual updates were sent to supervising researchers for appraisal and critique.
Transferability	The degree to which the findings of this research could be applied to other contexts or industries.	Ensured data saturation was reached prior to submission, and methodology as well as audit trail accompany the data.

To enhance the credibility and trustworthiness of the findings, several strategies were employed. Thematic saturation was achieved through comprehensive analysis of national-level cannabis legislation and policy documents from South Africa, Canada, and Uruguay. As coding progressed, no new themes emerged beyond those already captured within the predefined framework, indicating thematic completeness.

Coding consistency was ensured by maintaining a detailed audit trail within ATLAS.ti, including memos, code descriptions, and reflective notes. Codes were revisited multiple times across all documents to ensure internal coherence.

Although traditional methodological triangulation was limited due to the exclusive use of documentary sources, data triangulation was applied by incorporating multiple types of documents (legislation, policy frameworks, regulatory guidance) from three distinct

jurisdictions. This allowed for a robust cross-contextual comparison and supported the validity of the thematic analysis.

As the researcher, I acknowledge that my role as the Responsible Pharmacist of a complementary medicines company shaped my perspective, particularly in interpreting regulatory frameworks related to product safety and quality. While this background offered useful insights, it may have introduced a bias toward structured, commercially oriented systems. To address this, I remained mindful of broader public health, social equity, and accessibility issues throughout the analysis. I followed a consistent coding framework and cross-validated findings to ensure balanced and objective interpretation, maintaining rigour and transparency in the research process.

3.5 Ethical Considerations

No human participants were required for this study and a waiver of ethics was obtained from the Wits Human Research Ethics Committee (Medical) with reference: W-PR-240830-01.

Chapter 4

4. Results

4.1 Examination of current regulations for medical and non-medical cannabis use in South Africa

4.1.1 Draft National Cannabis Master Plan

The Draft National Cannabis Master Plan (NCMP) aims to formalise South Africa's cannabis industry, encompassing both medical and non-medical uses, while also tapping into its economic potential (DALRRD, 2021).

The plan positions cannabis as a key driver for rural development, job creation, and export opportunities, particularly due to South Africa's favourable climate for cultivation. This is expected to create pathways for entering international markets, especially in Europe and North America. Additionally, the NCMP differentiates between low-THC industrial hemp and high-THC cannabis, with hemp being promoted for its agricultural uses such as fibre and food production.

A central goal of the plan is to establish a regulated cannabis market, which would cover both medical and non-medical sectors. This involves developing a legal framework for the taxation and regulation of licensed retail sales, cultivation, and processing of cannabis for recreational use.

As of September 2024, the responsibility for implementing the NCMP was transferred from the Department of Agriculture, Land Reform, and Rural Development (DALRRD) to the Department of Trade, Industry, and Competition (DTIC) (DTIC, 2024).

4.1.2 Medical use

The medical use of cannabis is regulated by the Medicines Act. Section 22 of the Medicines Act categorises various substances into different schedules based on their potential safety, toxicity and dependence-producing risks. These schedules help to

regulate the availability and control of substances, ensuring that more dangerous or addictive substances are subject to stricter regulations. There are nine schedules published ranging from Schedule 0 to Schedule 8.

In the Schedules of the Medicines Act, cannabis for medical use is classified by separating its two primary active components: the non-psychoactive cannabidiol (CBD) and the psychoactive transdelta-9-tetrahydrocannabinol (THC). This distinction is aimed at ensuring safe regulation and determining appropriate levels of public access, balancing therapeutic benefits with the potential risks associated with each compound.

Cannabidiol is classified as a Schedule 4 substance, meaning it requires a prescription from an authorised prescriber, except if it meets the following criteria, whereby it is considered a Schedule 0 substance and therefore does not require a prescription:

1. Contains no more than 600mg per sales pack, which equates to a maximum daily dose of 20mg.
2. Contains no more than 0.0075 percent in processed products made from cannabis raw plant material and is intended for ingestion.

Synthetic cannabinoids are artificially created substances that replicate the effects of natural cannabinoids, particularly THC. Due to their unpredictable potency and associated health risks—including severe mental health issues—these substances are classified as Schedule 7 under the Medicines Act in South Africa. This classification prohibits their sale, distribution, or use, except for specific medical or scientific purposes with government approval. The aim is to protect public health by preventing misuse and curbing illegal distribution, given that synthetic cannabinoids often evade traditional regulatory controls and can pose significant dangers to users.

Tetrahydrocannabinol is classified as a Schedule 6 substance, meaning it has more stringent controls in place to prevent its over-use or over-prescribing. It, however, may also be unscheduled under specific conditions such as:

1. When found in raw cannabis plant material cultivated and possessed under a permit issued in accordance with the Plant Improvement Act (Act 11 of 2018), as well as processed products derived from such material, intended for

agricultural or industrial uses, including the production of consumer goods or items that do not have pharmacological effects or medicinal purposes.

2. When the raw plant material is grown, possessed, and consumed by an adult in a private setting for personal use.

Patients in South Africa therefore have legal access to both THC and CBD containing registered medicines, however at the time of this report there are still no registered medicines available to fulfill the demand and patients therefore will need to import medicines from foreign markets where they are available, through a Section 21 authorisation from SAHPRA, which is inefficient and expensive.

Section 21 of the Medicines Act plays a crucial role in facilitating access to unregistered cannabis products for patients with serious medical conditions. It allows healthcare professionals to apply to SAHPRA for permission to use an unregistered cannabis product when conventional treatments are inadequate. This provision is particularly significant for patients suffering from chronic pain, epilepsy, or other debilitating illnesses where cannabis may offer therapeutic benefits. By enabling compassionate access, Section 21 acknowledges the urgent medical needs of patients and provides a temporary solution while awaiting the registration of cannabis products.

However, the application process under Section 21 can be cumbersome and slow, often leading to delays in access for patients who urgently require treatment. Healthcare providers must navigate stringent regulatory requirements, ensuring compliance with SAHPRA's guidelines to prevent misuse and safeguard patient welfare. Additionally, the lack of clarity regarding which specific cannabis products are permissible can create confusion for both healthcare providers and patients. As the regulatory landscape evolves, efforts to streamline the Section 21 application process and enhance clarity could improve patient access to necessary cannabis treatments, ultimately benefiting public health

4.1.3 Non-Medical Use

On the 28th of May 2024, the Cannabis for Private Purposes Act (Act 7 of 2024) was assented into law by the President of the Republic of South Africa. It is currently the only legislation in South Africa for the non-medical use of cannabis.

The Act is arranged into eight sections, of which six of these are examined further below.

4.1.3.1 Section 1: Definitions and interpretation

The Act details relevant definitions and interpretations and provides descriptions of key stakeholders, actions and places. It however fails to address the variants in taxonomy of cannabis, e.g. *indica* and *sativa* and this could lead to ambiguity in future regulations. The lack of definitions of 'dried cannabis' or 'cannabis equivalents/equivalency' may also lead to confusion as the regulations get published. A further shortfall in this section is the lack of a definition for 'possession' or 'to possess'. It clearly defines the minimum applicable age for the Act and specifies the locations where the Act is enforced.

4.1.3.2 Section 2: Cannabis for private purpose by adult person

In this section, the use and possession of cannabis by an adult person is outlined. It stipulates that cannabis may only be used by an adult in a private place for a private purpose. It makes clear provision to prevent the sale or "exchange of consideration" of cannabis and hence cannabis may only be shared amongst consenting adults. In addition to Section 3 of the Act, it protects minors and non-consenting adults from being subjected to cannabis exposure by prohibiting its use in their presence. Importantly, this section indicates that cannabis may be possessed in public but may not be used in such spaces.

4.1.3.3 Section 3: Protection of child

Section 3 places emphasis on the best interest of minor children in ensuring that children caught using, possessing or dealing in cannabis are handled through

measures stipulated in the Children's Act (Act 38 of 2005), the Prevention of and Treatment from Substance Abuse Act (Act 70 of 2008) (Government of South Africa, 2008) and/or the Child Justice Act (Act 75 of 2008). No adult may knowingly permit a child to use or possess cannabis or supply a child with cannabis or cannabis-containing products, unless it has been prescribed by an authorised medical practitioner.

4.1.3.4 Section 4: Offences and penalties

In this section, violations and repercussions are outlined. Offences include:

- The dealing of cannabis
- Permitting the use or possession of cannabis in children
- Exceeding amounts of cannabis or number of plants determined to be appropriate for private purposes
- Engaging children to deal in cannabis
- Transporting trafficable or commercial quantities of cannabis
- Use of cannabis in a vehicle on a public road (including being a passenger in such a vehicle)
- Using cannabis in a public space
- Using cannabis in a private space but in the immediate presence of a non-consenting adult or minor

4.1.3.5 Section 5: Expungement of criminal records of persons convicted of possession or use of cannabis or dealing in cannabis on the basis of a presumption

Section 5 mandates the procedure for the expungement of cannabis-related convictions for the both the usage and possession aspects of historic penalties. It specifically references convictions in respect of the Abuse of Dependence-producing Substances and Rehabilitation Centres Act (Act 41 of 1971) and the Self-governing Territories Constitution Act (Act 21 of 1971) and stipulates that the criminal record and conviction be expunged automatically by the South African Police Service (SAPS). It also guides the perspective applicants on the procedure of how to apply for a certificate of expungement from the Director-General: Justice and Constitutional Development.

4.1.3.6 Section 6: Regulations

The regulations pertaining to this Act have yet to be published at the time of writing, but provisions in this section allow the Minister to determine:

- The maximum quantities allowed in respect of possession
- The details pertaining to the transportation of cannabis
- The application form for the expungement of criminal records pertaining to cannabis-related offenses
- Any future regulations deemed necessary to achieve the objectives of the Act

The preceding Bill contained more particulars surrounding some of the expected regulations, and for context, we will examine a few:
Schedule 1, for Section 1, stipulates the cannabis plant equivalent. This is deemed that two immature cannabis plants are equivalent to one flowering cannabis plant.
Schedule 2, for Section 1, stipulates the cannabis equivalent:

- One gram of dried cannabis is equivalent to:
    - Five grams of fresh cannabis
    - 0.25 grams of cannabis solid concentrates
    - 0.25 grams of cannabis liquid concentrates

Further details regarding the expected possession limits are contained in Table 4.1 in Section 4.2, which follows.

4.2 Comparative analysis of South Africa, Canada and Uruguay

The comparative analysis is condensed into the framework depicted in Table 4.1 below in which the six themes identified as well as the fourteen codes are summarised in terms of their key elements. The coding framework for this analysis is as per Table 3.2.

Table 4.1: Thematic Framework

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Regulation – Regulatory Body/ies	1. South African Health Products Regulatory Authority (SAHPRA) 2. Department of Health 3. Department of Agriculture, Land Reform and Rural Development (DALRRD) 4. Department of Justice and Correctional Services 5. Department of Social Development	1. Health Canada 2. Canada Revenue Agency (CRA) 3. Alberta Gaming, Liquor and Cannabis Commission 4. British Columbia Liquor and Cannabis Regulation Branch 5. New Brunswick Liquor Corporation 6. Newfoundland and Labrador Liquor Corporation 7. Northwest Territories Liquor Commission 8. Nova Scotia Liquor Corporation 9. Nunavut Liquor and Cannabis Commission 10. Alcohol and Gaming Commission of Ontario 11. Saskatchewan Liquor and Gaming Authority	1. Instituto de Regulación y Control del Cannabis / Cannabis Regulatory Institute (IRCCA) 2. Secretaría Nacional para la Lucha contra el Lavado de Activos y el Financiamiento del Terrorismo / National Secretariat for the Fight against Money Laundering and Financing of Terrorism (SENACLAFT) 3. Ministry of Health 4. Ministry of Livestock, Agriculture and Fishery

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Regulation – Primary Legislation	Cannabis for Private Purposes Act (Act 7 of 2024)	Cannabis Act (SC 2018, c. 16)	Law N° 19.172 - Marijuana and its Derivatives
Regulation – Supporting Legislation	1. Medicines and Related Substances Act (Act 101 of 1965) 2. Drugs and Drug Trafficking Act (Act 140 of 1992) 3. National Road Traffic Act (Act 93 of 1996) 4. Child Justice Act (Act 75 of 2008) 5. Children's Act (Act 38 of 2005) 6. Prevention of and Treatment of Substance Abuse Act (Act 70 of 2008) 7. Communal Land Rights Act (Act 11 of 2004)	1. Controlled Drugs and Substances Act (SC 1996, c.19) 2. Tobacco and Vaping Products Act (SC 1997, c. 13) 3. Food and Drug Act (RSC, 1985, c. F-27)	1. Law N° 14.294 – "Estupefacientes Se regula su comerciallzacion y uso y se establecen medidas contra el comercio ilicito de las drogas" (Narcotic drugs, its marketing and use are regulated and measures are established against illegal drug trade) 2. Law N° 17.016 – "Normas referentes a estupefacientes y sustancias que determinen dependencia física o psíquica" (Regulations regarding narcotics and substances that cause physical or psychological dependence) 3. Law N° 19.847 – "Declaracion de interes publico las acciones tendientes a proteger, promover y mejorar la salud publica mediante productos de calidad controlada y accesibles, en base a cannabis o cannabinoides, asi como el asesoramiento medico e informacion sobre beneficios y riesgos de su uso" (Declaration of public interest actions tending to protect, promote and improve public health through quality controlled and accessible products, based on cannabis or cannabinoids, as well as medical advice and information on benefits and risks of their use)
Regulation – Legal Status	Decriminalised but not legalised for non-medical use, i.e. Private use only. Legalised for medical use.	Legalised for both medicinal and recreational (non-medical) use	Legalised for both medicinal and recreational use for residents of Uruguay only.

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Regulation – Taxation	1. Corporate Income Tax: Companies in the medical cannabis industry are subject to the standard corporate income tax rate of 27% (as of 2024). This applies to any profits generated from the sale or production of cannabis for medicinal purposes. 2. VAT (Value Added Tax): Medical cannabis products, like other pharmaceutical products, are generally subject to VAT at the standard rate of 15%. 3. Customs Duties: For companies involved in the import or export of medical cannabis, customs duties may apply depending on the trade agreements and tariffs in place with partner countries. 4. Employment Taxes: Employers in the medical cannabis industry must comply with payroll tax obligations, (continued on next page)	<u>Responsibilities of CRA License Holders under the Cannabis Duties Framework</u> Holders of a CRA (Cannabis Regulatory Authority) license are required to comply with the following obligations related to cannabis duties: 1. Registering for the Cannabis Stamping Regime: All licensees must enroll in the regime to ensure compliance with regulatory standards. 2. Determining Excise Duty on Cannabis: Licensees are required to precisely assess the excise duty applicable to their cannabis products 3. Reporting and Remitting Cannabis Duty: Regular reporting and timely remittance of the calculated duties are mandatory. 4. Completing a Cannabis Duty Return: Licensees must submit a comprehensive return documenting cannabis duties. (continued on next page)	The rate of tax on the sale of agricultural goods foe the generating events linked to psychoactive and non-psychoactive cannabis is set to 0% (zero percent) - Decree 246/021

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Regulation – Taxation (continued)	including Pay-As-You-Earn (PAYE) tax, Unemployment Insurance Fund (UIF) contributions, and Skills Development Levies (SDL). 5. Cannabis-Specific Regulations: Since the industry is heavily regulated by SAHPRA, licensing fees, compliance costs, and possible future cannabis-specific levies could influence the overall tax burden on businesses.	<u>Cannabis Duty Assessment for Licensees</u> Cannabis licensees involved in the packaging and stamping of dried or fresh cannabis, cannabis plants, and cannabis plant seeds are obligated to pay the higher of the following duties: 1. Flat-Rate Duty: - Applied upon packaging of cannabis products. - Determined by the quantity of flowering and non-flowering material, viable seeds, or vegetative cannabis plants present in dried/fresh cannabis, cannabis plants, or cannabis plant seed products. OR 2. Ad valorem duty - Levied when packaged cannabis products are sold. - Calculated based on the dutiable amount, reflecting the product's value. - If the calculated ad valorem duty equals the flat-rate duty, the flat-rate duty takes precedence. (continued on next page)	(See previous page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Regulation – Taxation (continued)	(See previous page)	<u>Adjustment Rates for Additional Cannabis Duty</u> When packaged and stamped cannabis products are delivered to a purchaser in a listed specified province, the following adjustment rates for the additional cannabis duty apply: Alberta: 16.8% Nunavut: 19.3% Ontario: 3.9% Saskatchewan: 6.45% License holders must ensure compliance with these provincial adjustment rates by incorporating them into their duty calculations and returns, as applicable.	(See previous page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Quality – GMP/GPP	GMP certificates for cannabis cultivated under a section 22C(1)(b) license (License to cultivate cannabis for the purposes of producing scheduled substances) are available to existing license holders upon application and subsequent GMP certification inspection. The inspection is conducted according to the requirements of the South African guideline "Guideline for Cultivation of Cannabis and Manufacture of Cannabis-Related Pharmaceutical Products for Medicinal and Research Purposes". This guideline refers to: 1. PIC/S Guide to Good Manufacturing Practice for Medicinal Products - Part I for pharmaceutical products. 2. PIC/S Guide to Good Manufacturing Practice for Medicinal Products - Part II for manufacturing of API's	Part 5 of the Cannabis Regulations requires license holders to comply with Good Production Practices (GPP), ensuring consistent cannabis production and adherence to relevant quality standards in all operational activities. <u>Section 5.1: General Requirements</u> - Establishes the essential requirements for the sale, distribution, or export of cannabis. - Focuses on maintaining product quality, safety, and regulatory compliance during all stages of production and handling. <u>Section 5.2: Additional Requirements</u> - Specifies supplementary conditions for certain cannabis products or production methods. - May include requirements related to environmental controls, record-keeping, and personnel training to ensure high standards across operations. (continued on next page)	GMP/GPP not mandated or enforced at cultivation or packaging level, however GMP certification may be required for exportation purposes, depending on the final destination of the product.

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Quality – GMP/GPP (continued)	(See previous page)	<u>Section 5.3: Testing Requirements</u> - Details the mandatory testing protocols for cannabis and cannabis products to verify quality and safety. - Includes procedures for testing cannabinoid content, contaminants, and other quality-related parameters to ensure compliance with regulatory standards.	(See previous page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Limits – Limitations on Active Substances/Scheduling	<u>Cannabidiol (Complimentary medicines):</u> If > 600mg/pack / > 20mg daily Schedule 4 If < 600mg/pack / < 20mg daily Schedule 0 <u>Cannabidiol (Processed raw plant):</u> If > 0,0075% (ingestion) Schedule 4 If < 0,0075% (ingestion) Schedule 0 <u>Tetrahydrocannabinol (THC)</u> Medicines containing THC and claiming to treat, prevent or cure a disease - Schedule 6 Excluded from regulation when: 1. Cultivated or consumed by an adult for private use within the confines of his or her property Raw plant material 2. Intended for industrial purposes 3. Contains not more than 0.2% THC (continued on next page)	<u>Maximum Quantity of THC per Discrete Unit</u> - Each discrete unit of a cannabis product intended for ingestion, or nasal, rectal, or vaginal use must not contain more than 10 mg of THC. - This limit includes the potential conversion of tetrahydrocannabinolic acid (THCA) into THC. - Exception: This regulation does not apply to edible cannabis products. <u>Prohibited Cannabis Products</u> Cannabis products must not be sold or distributed if they: - Are intended for use in the area around the human eye. - Are intended for use on damaged or broken skin. - Are intended to penetrate the skin barrier by methods other than absorption. (continued on next page)	<u>Psychoactive cannabis</u> Fertilised or unfertilised buds of the female cannabis plant, excluding seeds and leaves detached from the stem, including its oils, extracts, and compounds with potential pharmaceutical applications, syrups, or similar substances, that contain a natural THC content of 1% or higher by volume. A THC limit has been implemented for pharmacy sales, with registered users only allowed to purchase cannabis flower containing no more than 9% THC. <u>Non-psychoactive cannabis (Hemp)</u> Plants or plant parts from the cannabis genus, including their leaves and buds, that contain no more than 1% THC, along with derivatives of these plants and plant parts.

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Limits – Limitations on Active Substances/Scheduling (continued)	Processed products 4. If <0.001% THC and does not make any general health claim or therapeutic claim - Schedule 0	Sale and Distribution of Products Containing Multiple Units - The sale or distribution of cannabis extracts, topicals, or edible products is prohibited if the immediate container contains multiple discrete units, unless: The properties of each unit, including size and flavor, are consistent. **Dried and fresh cannabis** Addition of THC or THCA It is prohibited to add THC or THCA to dried or fresh cannabis intended to be sold as a cannabis product. Net Weight of Dried Cannabis for Inhalation For cannabis intended for inhalation, the net weight of dried cannabis per individual unit must not exceed 1.0 gram. (continued on next page)	(See previous page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Limits – Limitations on Active Substances/Scheduling (continued)	(See previous page)	<u>Maximum Quantity of THC in Cannabis Extracts and Topicals</u> - A cannabis extract or topical classified as a cannabis product, or contained within a cannabis accessory classified as a cannabis product, must not exceed 1000 mg of THC per immediate container. - This limit includes the potential conversion of THCA into THC.	(See previous page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Limits – Prescribed Quantities/Possession limits	1. Seeds and Seedlings - Unlimited 2.1 Flowering cannabis plants or cannabis plant equivalent per adult person - Four 2.2 If two or more adults occupy the same dwelling - Eight 3. Dried cannabis or cannabis equivalent whilst in a public space - 100 grams 4.1 Dried cannabis or cannabis equivalent whilst in a private space - 600 grams 4.2 If two or more adults occupy the same dwelling - 1200 grams 5. Flowering cannabis plants or cannabis plant equivalent per adult person in public - One 6. An adult may provide/obtain from any adult person, for personal use: 6.1 30 seeds or seedlings or any combination thereof 6.2 1 Flowering cannabis plants or cannabis plant equivalent 6.3 100 grams of dried cannabis or cannabis equivalent	<u>Legal Cannabis Activities for Adults (18 Years or Older)</u> Subject to provincial or territorial restrictions, adults who are 18 years or older are legally permitted to: 1. Possess up to 30 grams of legal cannabis in dried form or its equivalent in non-dried form while in public. 2. Share up to 30 grams of legal cannabis with other adults. 3. Purchase dried or fresh cannabis and cannabis oil from: - Provincially licensed retailers. - Federally licensed producers through online platforms. 4. Grow up to four cannabis plants per residence for personal use, provided they are grown from licensed seeds or seedlings. 5. Produce cannabis products such as food and beverages at home, provided no organic solvents are used to create concentrated cannabis products. (continued on next page)	Uruguayans and legal residents over the age of 18 years old may: 1. Home-grow up to six female (psychoactive) plants but cannot harvest more than 480 grams of marijuana per year. 2. Purchase up to 10 grams per week (up to 40 grams per month) from an authorised pharmacy or as a member of a Cannabis Social Club (CSC), after registering as a user with the IRCCA 3. Marijuana membership clubs will have between 15-45 members and may plant a maximum of 99 plants

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Limits – Prescribed Quantities/Possession limits (continued)	(See previous page)	<u>Cannabis Equivalence</u> To standardise possession limits, equivalency rates for different forms of cannabis are defined as follows: - 1 gram of dried cannabis is equivalent to: - 5 grams of fresh cannabis. - 15 grams of edible product. - 70 grams of liquid product. - 0.25 grams of cannabis concentrates (solid or liquid). - 1 cannabis plant seed.	(See previous page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Labelling Requirements – Labelling Requirements	All medicines intended for human consumption must be labelled in accordance with Regulation 10 of the Medicines and Related Substances Act (Act 101 of 1965) which includes: 1. The Schedule of the medicine 2. The proprietary name of the medicine 3. The registration or application number 4. The dosage form 5. The approved name of each active ingredient and the quantity thereof contained in a dosage unit, or per suitable mass or volume or unit 6. The name and percentage of any preservative added to the medicine 7. The name of any antioxidant contained in the medicine 8. The content of the medicine package expressed in the appropriate unit or volume of the medicine 9. Approved indication where practical 10. The recommended dosage where practical (continued on next page)	<u>General Packaging Measures for Cannabis Products</u> The packaging of cannabis products is subject to specific measures aimed at: 1. Reducing Attractiveness: Minimising the appeal of cannabis products, particularly to young persons, by using plain and restrictive packaging. 2. Highlighting Health and Safety Information: Ensuring the standardised cannabis symbol and health warning messages are prominently displayed and noticeable. 3. Providing Accurate Consumer Information: Offering clear and accurate details about the content and appropriate use of the cannabis product. <u>Labelling Requirements for Cannabis Products</u> Each cannabis product container must include a Principal Display Panel (PDP), which is located on the principal display surface of the container. The PDP must feature the following elements: (continued on next page)	Plain type packaging and labelling with packs only available in blue and white packs with display warnings to reduce the appeal to minors and users alike. Purchasers will be advised not to consume cannabis if nursing or pregnant. The packaging will make it clear that the resale of the pack is illegal. There will also be a recommendation to use vaporisers as opposed to smoking it due to the health risks associated with combustion.

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Labelling Requirements – Labelling Requirements (continued)	11. The lot number of the medicine 12. The expiry date of the medicine 13. A barcode suitable for the identification and tracking of the medication 14. The name of the holder of the certificate of registration of the said medicine 15. Storage requirements 16. The warning "Keep out of reach of children"	1. Standardised Cannabis Symbol: To indicate the presence of cannabis and ensure immediate recognition. 2. Health Warning Messages: Clear and prominent warnings about potential risks associated with cannabis use. 3. THC and CBD Content: Accurate details on the levels of tetrahydrocannabinol (THC) and cannabidiol (CBD) in the product. 4. Brand Name: The name of the product or producer. 5. Additional Brand Element (Optional): One extra brand element may be included, such as a logo, provided it complies with regulatory restrictions. 6. International Radiation Symbol (If Applicable): Required if the product has been irradiated as part of its processing. (continued on next page)	(See previous page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Labelling Requirements – Labelling Requirements (continued)	(See previous page)	The label must also include the following information about the cannabis product: 1. Contact information of the license holder 2. Class of cannabis 3. Lot number 4. Recommended storage conditions 5. Packaging date 6. Expiry date 7. Net weight of cannabis 8. Net volume of edible cannabis 9. Number of discrete units, if applicable 10. Net weight per discrete unit, if applicable 11. Cannabis possession statement 12. The warning statement: "keep out of reach of children" 13. Identity of product or its function by its common name 14. Intended use of cannabis product 15. Durable life date 16. List of ingredients (and constituents) 17. Sources of food allergens, gluten, and added sulphites 18. Nutrition facts table	(See previous page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Accessibility – Medical Use Provisions	Medical Use - Scheduled substances Available through pharmacies provided a valid prescription from a registered and authorised medical practitioner, although to date there are no registered plant-derived CBD or THC products available in South Africa. Section 21 application and permits apply.	Patients authorised by their healthcare provider can access cannabis for medical purposes through the following options: 1. Purchasing from a Federally Licensed Seller: Buying cannabis directly from an authorised seller regulated at the federal level. 2. Personal Production: Registering with Health Canada to produce a limited quantity of cannabis for their own medical use. 3. Designating a Producer: Authorising someone to produce cannabis on their behalf.	Any physician can prescribe cannabis via an authorised medical prescription which can be filled at authorised pharmacies or through importation with the appropriate permit and authorisation. Quantities are limited as per "Prescribed Quantities/Possession limits" above. Accessibility to registered pharmaceutical cannabis products is limited, expensive and as of July 2023, limited to three products authorised, namely: Epifractan, Xannadiol and Xalex. These products are also mainly prescribed for children.

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Accessibility – Non-Medical Use Provisions	<u>Private use - Adults only, on private property</u> Adult individuals may cultivate, use and share (without consideration) cannabis according to the Cannabis for Private Purposes Act (Act 7 of 2024) provided they protect minors and respect the rights of non-consenting adults. They would also need to adhere to all limitations stipulated as per "Prescribed Quantities/Possession limits" above.	Subject to provincial or territorial restrictions and regulations, adults who are 18 years or older are legally able to consume cannabis in public or private with strict control on the prescribed quantities permitted as per "Prescribed Quantities/Possession limits" above. Individuals may also purchase cannabis for recreational purposes from: 1. Authorised Retail Outlets: Provincial or territorial government-approved physical stores. 2. Authorised Online Sales Platforms: Provincial or territorial government-approved e-commerce platforms.	Adults over the age of 18 years are legally able to obtain up to 10 grams of cannabis per week from their local pharmacist. In order to legally purchase cannabis, they must conform to the following regulations: 1. Register with the IRCCA via their local post office. 2. The cannabis must be packaged in a way that warns of potential health risks 3. Cannabis cannot be consumed in a public space 4. Individuals may not operate a vehicle whilst impaired by cannabis use Adults have the option to join or establish a non-profit cannabis club, which is permitted to cultivate cannabis exclusively for its members. These clubs are required to have a membership of between 15 and 45 individuals. Cultivation is restricted to a maximum of 99 plants, and each member may obtain up to 480 grams per year..

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Accessibility – Private Use/Home Grower Provisions	Private use - Adults only, on private property Adult individuals may cultivate, use and share (without consideration) cannabis according to the Cannabis for Private Purposes Act (Act 7 of 2024) provided they protect minors and respect the rights of non-consenting adults. They would also need to adhere to all limitations stipulated as per "Prescribed Quantities/Possession limits" above.	Subject to provincial or territorial restrictions and regulations, adults who are 18 years or older are legally able to consume cannabis in public or private with strict control on the prescribed quantities permitted as per "Prescribed Quantities/Possession limits" above.	Uruguayans and legal residents are permitted to cultivate up to six female cannabis plants at home, with an annual harvest limit of 480 grams of marijuana.
Accessibility – Commercial Provisions	Hemp - For agricultural and/or industrial use controlled through the Plant Improvement Act (Act 11 of 2018). As of October 2021, the Minister of Agriculture, Land Reform and Rural Development began issuing permits for the commercial cultivation of hemp. (continued on next page)	Prospective companies/individuals that wish to enter the cannabis industry in Canada will require a license from Health Canada, as well as a license from the Canada Revenue Agency (CRA) should they wish to sell cannabis. (continued on next page)	Licenses related to the commercial planting, cultivation, harvesting and distribution of Psychoactive cannabis. The license must indicate, among others, the following aspects: 1. Identification of the natural or legal person holding the license. 2. Term and/or conditions to which the license is subject. (continued on next page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Accessibility – Commercial Provisions (continued)	Cannabis - For medicinal, research or export purposes controlled through the Medicines and Related Substances Act (Act 101 of 1965). Manufacturers require Section 22C(1)(b) license. Section 22A(9) permits are required for possessing THC during the cultivation/manufacturing processes. Section 22A(11) permits are required for exporting THC containing product.	A Health Canada licence is necessary for the following activities: 1. Commercial cannabis cultivation (both large and small scale) 2. Processing cannabis into finished products, including packaging and labelling 3. Selling cannabis for medical purposes 4. Conducting tests on cannabis 5. Conducting research involving cannabis A CRA licence requires companies selling cannabis to: 1. Purchase and apply cannabis excise stamps to their products (if they package cannabis products) 2. Calculate the excise duty on their sales 3. File their return and remit the excise duty to the CRA (continued on next page)	3. Site where planting, cultivation, harvesting and, industrialisation. 4. Origin of the seeds or plants to be used in the plantation. 5. Varietal characteristics of the crops to be used. 6. Authorised production volumes. 7. Safety procedures to be applied. 8. Guarantees of compliance with obligations. 9. Conditions of distribution and dispensing to pharmacies authorised. 10. Prohibition of marketing products to third parties authorised. 11. Appointment of a Technical Manager for the production process. 12. Destination of surplus production and by-products. 13. Packaging and labeling conditions of the product. 14. Conditions required for owners, partners, directors and dependent personnel. In the case of legal entities, any modification in the corporate structure, as well as the transfer of shares, stocks, change of owners, must previously be subject to the control established by article 7 of the Decree No.120/014. To do so, the licensee must inform the IRCCA of the modification in question, which will… (continued on next page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Accessibility – Commercial Provisions (continued)	(See previous page)	An excise stamp must be attached to all legally produced cannabis products intended for sale, except those with a THC content below 0.3%.	request the report of the National Anti-Money Laundering Secretariat, prior to granting the express authorisation. Failure to inform will lead to the immediate suspension of the license granted without any liability for the IRCCA. Those who wish to obtain authorisation from the Ministry of Livestock, Agriculture and Fisheries must submit a request to said Ministry that must contain, at least, the following information: 1. Identification of the requesting natural or legal person. 2. Site where planting, cultivation, harvesting will take place, marketing, indicating the area to be sown and georeferencing. 3. Origin of the seeds or plants to be used. 4. Varietal characteristics of the crops to be used. 5. THC content in plant and seed. 6. Safety procedures to be applied. 7. Destination of production and crop residues. 8. Characteristics of the final product. Exportation of psychoactive cannabis for medicinal use is possible through prior export authorisation issued by the Ministry of Public Health, but the interested party must comply with the following documentation: (continued on next page)

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Accessibility – Commercial Provisions (continued)	(See previous page)	(See previous page)	1. Current production and marketing license issued by the IRCCA 2. Import authorisation certificate issued by the health authority of the importing country 3. Name of psychoactive cannabis variety of each batch 4. Proforma invoice issued by the interested party 5. Description of the part of the plant to be commercialised, characteristics and conditions, including the percentage humidity, microbiological analysis carried out by a laboratory indicating the content of yeast and fungi of each lot measured in colony-forming units (CFU), as well as presence or absence of E. coli and salmonella, in accordance with the provisions of Decree No. 403/016. 6. Laboratory results indicating the assay in terms of percentage of THC and CBD. 7. Proof of authorisation of the plant and current deposit, issued by the Ministry of Public Health through the Department of Medicines.

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Penalties – Criminal Infringements and Penalties	1. Dealing or engaging a child to deal in Cannabis - A fine / 10 years imprisonment or both. 2. Possessing, cultivating or transporting more than the maximum prescribed quantities of cannabis - A fine / 5 years imprisonment or both. 3. Allowing a child to possess or use cannabis or providing or administering cannabis to a child (that has not been prescribed to that child by a medical practitioner) - A fine / 1 year imprisonment or both. 4. Failing to store your cannabis out of reach of children - R2000 fine 5. Failing to comply with any standard, restriction, condition, prohibition, obligation or requirement, as may be prescribed while transporting cannabis (or being a passenger in a vehicle transporting cannabis) on a public road - R2000 fine (continued on next page)	1. Possessing More Than the Legal Limit: - Minor offences may result in a fine. - Serious offences could lead to imprisonment for up to 5 years. 2. Unlawful Distribution or Sale: - Minor offences may result in a fine. - Serious offences could result in a prison sentence of up to 14 years. 3. Exceeding Personal Cultivation Limits: - Minor offences may result in a fine. - Serious offences could result in a prison sentence of up to 14 years. 4. Using Organic Solvents in Production: - Penalty of up to 14 years in prison. 5. Transporting Cannabis Across Canada's Borders: - Penalty of up to 14 years in prison. (continued on next page)	Violations of current regulations that imply a violation of the current legal and regulatory provisions on licenses will be sanctioned with: 1. A warning 2. A fine from 20 UR (twenty readjustable units) to 2,000 UR (two thousand readjustable units). 3. Confiscation of the merchandise or elements used to commit the infringement. 4. Destruction of merchandise. 5. Suspension of the offender from the corresponding registry. 6. Temporary or permanent disqualification. 7. Partial or total closure, temporary or permanent, of the establishments and premises of the licensees. The sanctions outlined above may be applied cumulatively, considering the severity of the offense and the offender's history.

Table 4.1: Thematic Framework (continued)

***Theme* - Code**	**South Africa**	**Canada**	**Uruguay**
Penalties – Criminal Infringements and Penalties (continued)	6. Using cannabis in a vehicle on a public road, or public place, or in a private place in the presence of a child or non-consenting adult - R2000 fine 7. Smoking cannabis in a private place near a window or ventilation inlet of another place, or a doorway or entrance to another place, or in a private place that forms part of a public space where people gather closely together or where smoke is likely to bother another person at that place - R2000 fine	6. Providing or Selling Cannabis to a Minor (Under 18): - Penalty of up to 14 years in prison. 7. Involving a Minor in Committing a Cannabis-Related Offence: - Penalty of up to 14 years in prison.	(See previous page)

4.3 Brief comparison overview of country-level policies of South Africa, Canada and Uruguay

The global move towards cannabis legalisation has seen countries adopt varied approaches to regulation, each addressing local public health, criminal justice, and economic priorities. This comparison of Uruguay, Canada, and South Africa illustrates how these nations have crafted unique frameworks. Uruguay, the first country to fully legalise cannabis, implemented a state-controlled system with a focus on public health and harm reduction. Canada adopted a federal model that enforces strict quality standards while allowing provinces flexibility in how cannabis is retailed. In contrast, South Africa decriminalised cannabis for private use following a court ruling, but has not yet established a regulated commercial market.

Table 4.2 below outlines the key differences and challenges across these three countries' cannabis regulations.

Table 4.2: Overview of country-level cannabis policies

Aspect	South Africa	Canada	Uruguay
Legalisation	Decriminalisation for private use only.	Full legalisation under federal law.	Full legalisation with state control.
Retail	No legal retail market; commercial sales are prohibited.	Provinces regulate their own retail models (private, government-run, or mixed).	Only sold in pharmacies under state control.
Focus	Individual privacy rights and reducing the criminal burden on users.	Public health, economic benefits, and social justice.	Public health, harm reduction, and reducing illegal drug trade.
Challenges	No commercial framework yet, resulting in continued black-market dominance and regulatory uncertainty.	Persistent black market due to price competition, and delays in retail rollout in some provinces.	Slow rollout, limited access in rural areas, and a persistent black market.

Chapter 5

5. Discussion

The results obtained in Chapter Four were comparatively analysed and are discussed below in accordance with their themes. This chapter also critically evaluates the lessons South Africa can draw from Uruguay and Canada, emphasising the need for a comprehensive policy framework and clear action plan. Additionally, the analysis identifies responsible entities for driving the necessary changes and acknowledges the recent transfer of the National Cannabis Master Plan (NCMP) from the Department of Agriculture, Land Reform and Rural Development (DALRRD) to the Department of Trade, Industry, and Competition (DTIC) as of September 2024 (DTIC, 2024).

5.1 Regulation

The analysis identified that all three jurisdictions have at least one body that is primarily responsible for the regulation of cannabis.

Uruguay has adopted a state-monopoly model whereby the government controls the entire cannabis supply chain (Obradovic, 2021). This approach prioritises public health over commercial gains by improving access, ensuring quality, and undercutting the illicit market. However, while this model has seen success in reducing illegal trade, it is heavily reliant on government subsidies, which raises questions about long-term sustainability and scalability (Cruz, Boidi and Queirolo, 2018a).

Canada employs a hybrid model, where the federal government oversees licensing, packaging, labelling, potencies, and advertising through Health Canada, while provincial and territorial governments regulate aspects like possession limits and minimum age requirements (Khiba and Hutchison, 2023). Canada’s model is commercially driven but also prioritises public health and protection of minors. Despite its intent, the high taxation on legal cannabis has allowed the illicit market to retain a significant foothold, raising concerns about the efficacy of the hybrid approach (Shim, Nguyen and Grootendorst, 2023).

In terms of statutory bodies, only Uruguay has a dedicated regulatory body, the IRCCA, specifically established to govern the cannabis industry, providing centralised oversight and clear accountability. Canada's approach consolidates cannabis regulation within Health Canada, which manages diverse public health and safety responsibilities, balancing them with the commercialisation of cannabis. South Africa, in contrast, lacks a dedicated regulatory body and currently relies on the Department of Justice and Constitutional Development (DOJCD), reflecting its limited focus on decriminalisation and the expungement of prior convictions.

Taxation of cannabis has been touted as a key incentive for the legalisation of the industry, from the perceived increase in taxable revenues generated from income and excise taxes (Baldavoo and Hassen, 2024). South Africa bears no special tax provisions for cannabis at this stage, whereas Canada taxes cannabis quite severely, inflating the cost of legal cannabis to a point where the illegal market still retains a significant market share. Uruguay's approach of tax-free cannabis has ensured it undercuts the illicit market and shows positive signs of effectiveness.

South Africa's Cannabis for Private Purposes Act (Act 7 of 2024) focuses on private use, lacking provisions for the commercialisation of cannabis. This limited approach not only stifles potential economic growth but also misses the opportunity to formalise and regulate the broader cannabis industry effectively. The absence of a dedicated regulatory body for cannabis governance creates a fragmented system that fails to leverage cannabis's economic and medicinal potential. The transfer of the NCMP to the DTIC could provide an opportunity to centralise commercialisation efforts, but this move raises concerns (DTIC, 2024). Entrusting cannabis regulation solely to the DTIC may pose public health risks, as economic priorities could overshadow critical health and safety considerations. To mitigate this, a collaborative framework involving the Department of Health and SAHPRA is essential to ensure public health remains a core focus.

5.1.1 Regulation recommendations:

- **Dedicated Regulatory Body:** South Africa should establish an autonomous cannabis regulatory authority, similar to Uruguay's IRCCA or Canada's Health Canada arm. This authority should be housed under the DTIC to align with economic objectives.
- **Integrated Commercialisation Strategy:** A comprehensive framework should be developed to transition from decriminalisation to legalisation, addressing cultivation, sales, and taxation, with the DTIC driving this process in collaboration with SAHPRA, the Department of Health and the South African Pharmacy Council (SAPC).

5.2 Quality

Throughout the analysis, the term 'Quality' has appeared as a key motivator for the legalisation or decriminalisation of cannabis, as only in a licit industry, and through inspection, can quality ultimately be assured. South African regulators, in terms of the Cannabis for Private Purposes Act, will be challenged in assuring the quality of 'legal' cannabis, as it will primarily be cultivated, harvested and consumed all within private boundaries. To date no supportive or educational guidelines on the safe and standardised cultivation practices of private cannabis has been disseminated to the public, thus entrusting the public to determine their own standard of quality and safety of their cannabis.

Quality, in the South African context, only applies to licensed cultivators, who are primarily exporting their cannabis abroad, and only servicing a small minority of the population through the medical cannabis channel (SAHPRA, 2022b).

Good Manufacturing Practices in compliance with PIC/S guidelines is also an accurate indication of a highly developed quality system. Both Canada and South Africa are members of PIC/S and hence adhere to internationally accepted quality standards, in the case of professionally-produced supply streams (PIC/S, 2023). Uruguay is not a PIC/S member and no information of the IRCCA mandating GMP requirements could be sourced.

5.2.1 Quality recommendations:

- **Educational Outreach:** The DTIC, in partnership with SAHPRA and the Department of Health, should develop and disseminate guidelines for safe and standardised private cultivation practices.

5.3 Limits

All three jurisdictions have clearly defined possession and usage limitations set, although South Africa's limits as described in this report are provisional and subject to change once the official regulations pertaining to the Cannabis for Private Purposes Act (Act 7 of 2024) are published. South Africa has the highest allowable bulk quantities of cannabis permissible, provided that it is kept in private, and yet has the strictest limitations on THC of all three states (Government of South Africa, 2024).

Both Canada and South Africa (in draft) have clearly defined conversion methods for determining cannabis equivalency in terms of fresh vs. dry cannabis as well as differentiating between cannabis extracts in both liquid and solid form (South African Government, 2020). Uruguayans may possess six psychoactive cannabis plants at home, which is higher than both South Africa and Canada with four plants respectively, however their annual consumption is capped at 480 grams (Government of Uruguay, 2013). Interestingly, even though use in public is prohibited, South African cannabis users are permitted to possess more than three times the amount of dried cannabis in public than Canadian users are allowed.

5.3.1 Limits recommendations:

- **Harmonised Limits:** Define clear equivalency methods for various cannabis forms to ensure consistency, with SAHPRA taking the lead in this process.
- **Public Education:** Launch awareness campaigns to educate consumers about safe usage and possession limits, driven by the Department of Justice and Constitutional Development.

5.4 Labelling Requirements

Canada's labelling approach, integrating cannabis-specific information and food industry standards, exemplifies a comprehensive strategy (Government of Canada, 2021). Uruguay's plain packaging policy prioritises public health, ensuring clarity without commercial influence (Pardo, 2014). South Africa's medical cannabis labelling aligns with pharmaceutical standards but excludes private-use cannabis, leaving a regulatory vacuum that undermines public safety.

5.4.1 Labelling requirements recommendations:

- **Comprehensive Labelling Framework:** The DTIC, in collaboration with SAHPRA, should mandate labelling requirements for all cannabis forms, including private-use, focusing on safety warnings and THC content.
- **Streamlined Policies**: Align medical and non-medical labelling standards to ensure uniformity and consumer protection.

5.5 Accessibility

Cannabis is available in all three jurisdictions, through both medical and non-medical avenues. Medical cannabis, due to the decriminalisation of recreational use, may no longer be the most popular route to access due to the extra barriers to entry involved such as undergoing medical consultation, paying premiums on pharmaceutical grade cannabis and poor availability of registered cannabis-containing products. Currently there are no registered cannabis-containing or cannabis-derived medicines in South Africa and hence a lengthy Section 21 permit process would need to be initiated, which may not be viable in many instances. However, many patients rely on this route of access for the treatment, care decision-making and oversight of their physicians regarding a number of serious clinical indications. South Africa's limited access framework fails to address local demand and leaves potential patients underserved.

All three countries have a non-medical/private use mechanism and that is by far a more attractive path for access to cannabis. Canada and Uruguay have legalised recreational use completely and South Africa allows for private use, on private property

and all of the countries provide measures for residents to cultivate their own cannabis at home, with certain restrictions on numbers of plants and harvest yields.

All three states have a minimum age of use and possession of 18 years old. In Canada specifically, this is the case in Alberta, although most provinces and territories have increased the age to 19, with the exception being Quebec at 21 years of age.

From a commercial perspective, Uruguay's non-profit approach prioritises access, while Canada's profit-driven model has led to market saturation and profitability challenges. South Africa's exclusive focus on exports limits domestic benefits, leaving local entrepreneurs and consumers in a regulatory limbo. The transfer of the NCMP to the DTIC should facilitate the development of local markets, but this will require cohesive strategies and investments.

5.5.1 Accessibility recommendations:

- **Streamlined Medical Access:** Simplify the Section 21 process or develop alternative mechanisms for local availability of medical cannabis, driven by SAHPRA.
- **Balanced Commercialisation:** Encourage local market development while maintaining export opportunities, with the DTIC leading this initiative.

5.6 Penalties

South Africa and Canada enforce stringent penalties for cannabis-related offenses, with an emphasis on protecting minors (Government of Canada, 2018a; Government of South Africa, 2024). Uruguay's milder stance, focusing on fines and permit revocations, reflects its public health-oriented approach (Government of Uruguay, 2013). South Africa's focus on expungement is commendable but insufficient without comprehensive enforcement and rehabilitation strategies. The lack of clarity on proportional penalties for minor infractions undermines public trust and compliance.

5.6.1 Penalties recommendations:

- **Proportional Penalties:** Develop a tiered penalty system that differentiates between minor infractions and serious offenses, led by the Department of Justice and Constitutional Development.
- **Rehabilitation Programmes:** Introduce community-based rehabilitation initiatives to support offenders and reduce recidivism, driven by the Department of Social Development.

5.7 Towards a Comprehensive Policy Framework for South Africa

Drawing lessons from Uruguay and Canada, South Africa must adopt a holistic policy framework that balances decriminalisation, commercialisation, and public health. Key elements include:

- **Clear Governance Structure:** Establish a dedicated regulatory authority under the DTIC to oversee the cannabis industry.
- **Integrated Action Plan:** Define roles and responsibilities across government departments, ensuring accountability and collaboration.
- **Public Consultation:** Engage stakeholders, including civil society, healthcare professionals, and industry players, to inform policy development.
- **Sustainable Taxation Model:** Avoid excessive taxation that could undermine market competitiveness.

By adopting these measures, South Africa can transition from a fragmented regulatory approach to a cohesive framework that maximises socio-economic benefits while safeguarding public health and safety.

Chapter 6

6.1 Conclusion, Recommendations and Limitations of the Research

6.1.1 Conclusion

Safety, efficacy, and quality are paramount in terms of any medicine. Effective regulation must also ensure controlled accessibility to cannabis while respecting the Constitutional Rights of its citizens.

Cannabis has a storied past, with significant cultural, traditional, and religious importance in many populations throughout the world, including South Africa. This requires a nuanced or adapted approach to regulation. Natural products, in general, are challenging to regulate due to the complexities of active ingredients, variations in composition, and multiple applications.

This report examined South Africa's cannabis regulatory framework and compared it with those of Canada and Uruguay, the first and largest legal cannabis jurisdictions globally.

Key Similarities:

- Central governmental statutory bodies control cannabis, both medically and non-medically.
- Cannabis use is permitted only by adults.
- Emphasis on the safety and quality of circulating cannabis.
- Medical cannabis use requires a medical practitioner's authorisation by prescription.
- Possession of illicit cannabis is a punishable offense.

Key Differences:

- South Africa does not allow, by means of consideration, the sale of cannabis, unlike in Canada and Uruguay.
- GMP is not enforced in Uruguay as it is in Canada and South Africa.

- A dichotomy exists between Canada and Uruguay in their approach to the taxation of cannabis.
- Uruguay lacks possession limitations adjusted by equivalency scales.
- South Africa and Canada impose harsher penalties for cannabis-related offenses compared to Uruguay.
- South Africa has the most lenient maximum possession quantities, whilst exhibiting the strictest measures on THC limits of all three jurisdictions.

South Africa's current approach—focused on private use and medical cannabis for export—is insufficient to address the socio-economic and public health opportunities or challenges posed by cannabis regulation. The recent transfer of the National Cannabis Master Plan (NCMP) to the Department of Trade, Industry, and Competition (DTIC) signifies an economic focus. However, sole reliance on the DTIC risks sidelining critical public health and safety priorities, including the protection of minors.

6.1.2 Recommendations

It is not the purpose of this report to advocate for or against the full commercialisation of the non-medical cannabis sector in South Africa. However, should this approach be considered, and building on the critical insights from Chapter 5, the following recommendations are proposed to create a well-regulated, economically viable, and socially responsible cannabis industry.

- **Policy Framework: Aligning with Kilmer's 'Eight P's'**
  Policy decisions should be guided by Kilmer's eight P's—Production, profit motive, promotion, prevention, potency, purity, price, and permanency—to ensure a balanced approach that mitigates risks while maximising potential benefits (Kilmer, 2014). These factors provide a foundation for structuring regulations that prioritise public health, consumer safety, and economic sustainability while addressing the unintended consequences of commercialisation.

- **Establishing a Dedicated Regulatory Body**

  Ideally, a specialised, autonomous cannabis regulatory authority should be established under the Department of Trade, Industry and Competition (DTIC), similar to Uruguay's Institute for the Regulation and Control of Cannabis (IRCCA) or Canada's Health Canada cannabis division. This entity would:

  - Oversee licensing, compliance, and enforcement to maintain regulatory consistency.
  - Collaborate with SAHPRA and the Department of Health to ensure public health safeguards are integrated into the commercial landscape.
  - Strengthen safety and quality surveillance by implementing robust monitoring systems to track supply chains and prevent regulatory loopholes.

  However, recognising that the creation of a standalone authority may not be immediately viable in the South African context due to fiscal and institutional constraints, a practical alternative would be to establish an interdepartmental cannabis regulatory unit. This unit could be coordinated under the DTIC but draw on the mandates and resources of existing bodies such as SAHPRA, DALRRD, the Department of Health, the SAPC, and law enforcement agencies. A formalised structure for cross-departmental collaboration—supported by clear roles, data-sharing protocols, and a unified regulatory framework—could achieve many of the benefits of a dedicated authority while remaining feasible within current capacities.

- **Developing an Integrated Commercialisation Strategy**

  A phased transition from decriminalisation to legalisation is crucial to prevent market instability. This strategy should:

  - Establish clear regulatory guidelines for cultivation, retail sales, taxation, and equitable market access.
  - Reduce dependence on exports by stimulating domestic market growth, ensuring local producers benefit from legalisation.
  - Include small-scale farmers and traditional growers in the formal economy through capacity-building programmes to promote industry inclusivity.

    - Be driven by the DTIC, working in collaboration with SAHPRA, the Department of Health, and the South African Pharmacy Council (SAPC) to balance economic, public health, and compliance objectives.

- **Educational Outreach for Safe and Informed Use**

  Given the public health concerns associated with unregulated cannabis use, a national educational campaign should be launched to provide:

    - Home-grower guidelines that educate consumers on safe cultivation practices, dosage control, and quality assurance.
    - Health and safety information on responsible consumption, risk mitigation, and harm reduction, tailored to different demographics, including youth and vulnerable populations.
    - Collaboration between DTIC, SAHPRA, and public health authorities to ensure that standardised cultivation and consumption practices are widely disseminated.

- **Strengthening Quality Standards Enforcement**

  Ensuring strict product quality standards is critical to both consumer safety and international trade viability. To achieve this:

    - Good Manufacturing Practice (GMP) compliance should be mandatory for all licensed cultivators, ensuring standardised quality control.
    - Regular safety inspections and third-party laboratory testing should be conducted to prevent contamination and monitor THC/CBD levels.
    - SAHPRA should enhance its oversight in collaboration with DTIC, leveraging technology for traceability, batch tracking, and rapid recalls of substandard products.
    - A centralised cannabis testing framework should be established to streamline compliance and reduce the risk of unregulated or adulterated products entering the market.

- **Implementing a Targeted Taxation Model**

  Tax policies should be designed to:

    - Undercut the illicit market by ensuring legal cannabis remains competitively priced.
    - Offer tax incentives or reductions for licensed businesses that adhere to quality and safety standards.

- Generate sustainable revenue while preventing excessive taxation that could drive consumers back to illegal sources.
- Provide dedicated funding for cannabis-related law enforcement, research, and community reinvestment programmes.

- **Enhancing Public Awareness and Law Enforcement Efforts**

  A robust public awareness campaign should:

  - Educate the public on possession limits, legal purchase points, and safe usage.
  - Address misconceptions about cannabis risks and benefits, ensuring scientifically accurate information is accessible.
  - Be led by the Department of Justice and Constitutional Development, with support from public health and law enforcement agencies.

  In parallel, monitoring and enforcement mechanisms should be strengthened to:

  - Prevent illicit cannabis sales and trafficking, particularly among unregulated online platforms.
  - Establish dedicated cannabis enforcement units to target black-market activities while avoiding disproportionate criminalisation of minor infractions.
  - Introduce advanced surveillance technologies to track cannabis production, distribution, and retail compliance.

- **Proportional Penalties and Rehabilitation Programmes**

  A tiered penalty system should be introduced to:

  - Differentiate between minor infractions and serious offences to ensure proportional law enforcement responses.
  - Offer rehabilitation and harm-reduction interventions for offenders, rather than relying solely on punitive measures.
  - Be led by the Department of Social Development, working alongside justice and public health stakeholders.

- **Collaborative Governance for Long-Term Industry Stability**

  The success of cannabis legalisation depends on a coordinated, multi-agency approach. A Cannabis Policy Task Force should be formed to:

  - Ensure cross-departmental collaboration between DTIC, the Department of Health, SAHPRA, SAPC, and the Department of Justice.

- Promote evidence-based policymaking, informed by ongoing research, market trends, and international case studies.
- Regularly review and adapt regulations to ensure South Africa remains competitive in the global cannabis industry.

Transferable features from the Uruguayan and Canadian models include:

- From Uruguay:
  - The tiered access system—home cultivation, cannabis social clubs (CSCs), and pharmacy-based sales—could inform a phased roll-out in South Africa. Of these, home cultivation and community co-operatives are the most realistic starting points, particularly for rural development and legacy growers.
  - State-regulated product limits and pricing mechanisms could be adopted to reduce illicit trade while ensuring affordability and quality.
- From Canada:
  - The implementation of plain packaging, mandatory labelling, and THC content disclosure is well-aligned with SAHPRA's regulatory capabilities and the country's existing experience in medicines and complementary medicines regulation.
  - Canada's decentralised licensing model, which allows provinces and territories to tailor cannabis sales and distribution, offers a viable model for South Africa's own decentralised government system. Provincial health departments or local municipalities could play a role in licensing and oversight.
  - The micro-cultivation licensing system used in Canada to support small-scale and marginalised growers could be adapted by South Africa to include historically disadvantaged farmers within a formal cannabis economy.

Structural, legal, and institutional considerations for South Africa:

- Opportunities:
    - South Africa already has a network of existing regulatory bodies—including SAHPRA, DALRRD, DTIC, and the SAPC—that could serve as a foundation for cannabis oversight through interdepartmental collaboration, rather than requiring a new standalone authority.
    - The Cannabis for Private Purposes Act (2024) provides a legal basis for adult personal use, and the Draft National Cannabis Master Plan (NCMP) articulates a long-term vision for economic integration, which creates institutional momentum.
    - South Africa's experience in regulating controlled substances and complementary medicines offers a technical advantage in ensuring product safety, quality, and consistency.
- Barriers:
    - South Africa's obligations under the Single Convention on Narcotic Drugs of 1961 and the United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 may complicate broader commercial legalisation efforts unless these treaties are formally addressed, renegotiated, or reinterpreted within the domestic legal framework.
    - Institutional fragmentation, especially between national and provincial authorities, may slow down or complicate implementation unless coordination is explicitly built into legislation or policy frameworks.
    - Budgetary and human resource limitations may make the creation of a dedicated cannabis authority unrealistic in the short term.
    - Persistent stigma, particularly among policymakers and segments of the public, may hinder support for commercialisation or slow uptake of harm-reduction-based models like CSCs.
    - The current lack of infrastructure to support small-scale growers, such as access to finance, training, and market access, could prevent equitable participation in the formal cannabis economy without dedicated support mechanisms.

Implications for the Industry

The successful implementation of these recommendations would:

- Strengthen regulatory clarity, ensuring compliance and market stability.
- Increase consumer safety by improving quality surveillance and enforcement.
- Support economic growth, particularly for local producers, small-scale farmers, and investors.
- Undercut the illicit market, making legal cannabis a viable and attractive alternative.
- Foster international trade opportunities, positioning South Africa as a key exporter.
- Improve public health outcomes by ensuring education, safe usage, and harm reduction strategies.

By implementing a well-structured, evidence-based regulatory framework, South Africa can establish a sustainable, inclusive, and legally compliant cannabis industry that balances economic potential with public health and safety priorities.

6.1.3 Limitations of the Research

While this research provides a comprehensive comparative analysis, it is limited by:

- A lack of publicly available data on private cultivation quality in South Africa.
- Insufficient longitudinal studies to assess the socio-economic impact of cannabis regulation in jurisdictions like Uruguay and Canada.
- Limited stakeholder engagement data within South Africa’s emerging cannabis industry.

Future research should explore these areas to provide a more nuanced understanding of implications for South Africa.

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Appendices

Appendix A – Ethics Waiver

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG	HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

Office of the Deputy Vice-Chancellor (Research & Innovation)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
ETHICS WAIVER

30/08/2024

Ref: W-PR-240830-01

TO WHOM IT MAY CONCERN

Waiver: This certifies that the following research does not require clearance from the Human Research Ethics Committee (Medical)

Investigator: Mr D Du Plessis
Student No. (if appropriate): 671452
Staff No. (if appropriate):

Supervisor: Professor S Banoo

School: Therapeutic Sciences
Department: Pharmacy and Pharmacology
Division:
Faculty of Health Sciences

Project title: *A comparative analysis of the canabis regulatory frameworks in South Africa, Canada and Uruguay and their impact on the growth of the industry*

Degree: MSc (Med)

Reason: Review of information in the public domain
No human participants will be involved in the study

Professor P Ruff
Chairperson: Human Research Ethics Committee (Medical)

Research Office Secretariat:
Third Floor, Phillip Tobias Building, corner of St Andrews and York Roads, Parktown, Johannesburg 2193
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https://www.wits.ac.za/research/researcher-support/research-ethics/ethics-committees/

Appendix B – Turnitin Receipt

Research Report_D du Plessis_671452

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15%	14%	8%	7%
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