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Uruguay's cannabis law: Pioneering a new paradigm

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INTRODUCTION

Uruguay is the first country to legalize and regulate its domestic non-medical cannabis market. In light of this pioneering role, the choices and experiences of Uruguayan authorities hold important lessons for other jurisdictions that may consider whether and how to regulate cannabis. Uruguay's breakthroughs and challenges related to banking, international treaties, access to the product, enforcement, medical cannabis, tourism, and research and evaluation in particular hold immense value to policymakers and analysts elsewhere. To this end, this report examines the conditions that led Uruguay's government to pass its cannabis law in 2013, studies its progress so far, and identifies areas that policymakers should consider addressing in order to maximize the law's potential benefits. Key findings include:

- Uruguay should consider long-term measures to ensure that cannabis business entities have access to financial institutions, including outreach to other jurisdictions shifting toward cannabis regulation, such as Canada.

- The medical and law enforcement sectors require substantial education and training, particularly regarding the aims and expected benefits of cannabis regulation, how to broaden access to medical cannabis, and the new enforcement rules under the law.

- Implementation of commercial sales so far has been marked by shortcomings in distribution. Uruguay can overcome these obstacles by widening legal points of sale to include not only pharmacies, but a new form of dispensary, which authorities are already planning.

- In order for the regulated cannabis market to displace the black market more effectively, authorities may need to reconsider rules that require users to choose only one of the three legal forms of cannabis supply: homegrowing, clubs, or commercial purchase.

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- Uruguayan authorities may also need to address a growing informal market by allowing legal sales to non-citizen tourists.

- In order to better position themselves to assess these adjustments, authorities should work closer with independent researchers and civil society to ensure that they have access to key information and institutional support for their work.

BACKGROUND

In important ways, Uruguay's cannabis law is in line with its historical approach to drug policy. Even during the 1973-85 dictatorship, the country was out of step with the highly punitive "drug war" approaches being implemented in many other countries. Though the dictatorship maintained strict sentences for drug trafficking, it decriminalized possession of "a minimum quantity [of illicit substances], intended solely for personal use," in 1974. Exactly what constituted a "minimum quantity" was never clarified, giving judges broad discretion in its interpretation. Over the years, the fact that Uruguayans could possess cannabis under the law, but could not legally acquire it, was consistently highlighted by civil society groups pressing for legal forms of access to the drug.

Eventually, legislators addressed this issue. In early 2012, the governing Broad Front (FA) majority in Uruguay looked set to pass a bill that would legalize the home cultivation of up to eight plants and the possession of up to 25 grams of cannabis. In the face of this momentum, then-President José Mujica saw an opportunity. In June 2012, his administration released a 15-point document titled the "Strategy for Life and Coexistence,"[1] which proposed to "legalize and control cannabis sales." Unlike the home-grow bill in the legislature, however, President Mujica proposed the creation of a state monopoly over cannabis production and distribution.

Mujica's proposal and the bill already under debate were merged into a bill that allowed for home cultivation as well as commercial sales, in addition to "cannabis clubs" that allowed users to grow in state-authorized collectives. This bill was passed in the legislature's lower house in July 2013, cleared the Senate in December, and was signed into law on December 20, 2013.

Uruguayan officials have publicly provided a wide range of justifications for the law since its passage. At various times authorities have said the law could reduce crime, or lower the demand for more harmful drugs such as a crack cocaine-like substance known locally as "pasta base." However, the text of the law expresses its goals through three main objectives:

1. Reducing drug trafficking-related violence by taking cannabis off the black market.[2]

2. Promoting public health through education and prevention campaigns.[3]

3. Eliminating the existing legal paradox that allowed for possession but effectively blocked users from accessing cannabis.[4]

When Mujica proposed that Uruguay legalize and regulate cannabis, he proclaimed that "someone has to be first."[5] In opting to regulate cannabis from cultivation through sale, Uruguay was the first country to leave behind the global ban on non-medical cannabis that began with the United Nations' 1961 Single Convention on Narcotic Drugs. The

UN drug control treaty regime, to which nearly every country on the planet is a signatory, expressly limits cannabis use to medical and scientific purposes.[6] Cannabis, moreover, has been placed under the strictest of the drug conventions' control schedules.[7]

In taking such an audacious step, Uruguay's authorities knew that they would need to contend with criticisms from other countries and from the monitors of the UN drug treaties, in particular the International Narcotics Control Board (INCB, the Board). Mindful of the international dimensions of their decision to move forward with cannabis regulation, Uruguayan lawmakers designed a tightly controlled regulatory system and fashioned arguments that justified their reform as upholding Uruguay's fundamental obligation to protect the human rights of its citizens. Thus, Uruguay's reform was at once bold and cautious; concerned that their policy would come under intense scrutiny from their neighbors and from the broader international community, Uruguayan authorities deliberately opted for a strict approach to regulation, such as a user registry and monthly sales limits.

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As passed, Uruguay's cannabis law forbids cannabis use in indoor public spaces where it is forbidden to smoke tobacco and prohibits advertising or any form of promotion.[8] The law also created a new regulatory body charged with overseeing implementation, the Institute for the Regulation and Control of Cannabis (IRCCA). Under the law there are three methods of access to cannabis, with specific parameters set forth in subsequent regulations:

1. **Homegrow:** Adults can grow up to six female flowering cannabis plants per household for their own consumption, so long as they have first registered their plants with authorities. The total annual production of the drug must not exceed 480 grams, but cultivation of more than six plants is allowed so long as they are either male or not flowering. At time of writing, 8,266 Uruguayans had registered as homegrowers.

2. **Cannabis clubs:** Adults can join cooperatives to grow cannabis collectively. These "cannabis clubs" must first be registered with the IRCCA and other authorities, and must have between 15 and 45 members. The clubs may plant up to 99 plants in the same space, but cannot dispense more than 480 grams of the drug to each of their members per year. Any surplus yield must be turned over to authorities. So far, authorities have registered 83 such clubs across the country.

3. **Commercial purchase:** Individuals can purchase up to 40 grams per month (10 grams per week, according to subsequent regulations) at sales points. The law specifies that pharmacies will act as points of sale, though the government has expressed interest in creating new, specifically-designated outlets for this purpose. Under the law, pharmacies are not required to sell cannabis; they can opt into the system if they desire. Under the law a handful of commercial growers can be licensed by the state to produce cannabis for commercial sales. Currently, two companies have been licensed to produce commercial cannabis, and 22,077 Uruguayans have registered as purchasers.

THE IRCCA

The IRCCA was designed with a special emphasis on encouraging cooperation across a variety of other state entities with responsibilities relevant to cannabis regulation. While the institute follows the policy directives of the National Drug Council (JND), it is also formally under the umbrella of the Ministry of Public Health. In addition to the IRCCA president (currently JND Secretary Diego Olivera), the board of the institute includes representatives of the Ministries of Public Health; Social Development; and Livestock, Agriculture, and Fishing.

The text of the law gives the IRCCA a broad mandate to maintain anonymous registries of those intending to purchase cannabis, as well as all club members and homegrowers. In doing so, the IRCCA can request any needed documentation. The IRCCA may also inspect any property used in the cultivation, processing, distribution, or sale of cannabis. For homegrowers, however, IRCCA personnel may only enter households with the consent of the owner or a court order. In the course of its work the IRCCA is also authorized to carry out analyses of commercial cannabis to determine whether it meets the legal and regulatory requirements. If violations occur, the IRCCA may apply fines and, in coordination with law enforcement, force closures, make seizures, and begin legal action.

IMPLEMENTATION

Since its passage, the executive branch has issued a series of presidential decrees further fleshing out the law. The most significant of these was issued in May 2014,[9] when the Mujica government issued the main set of regulations on implementation. In addition to limiting purchase to 10 grams per week, the regulations specified that only Uruguayan citizens and permanent residents over the age of 18 are legally able to acquire cannabis, effectively banning marijuana tourism. The regulations also state that the above three methods of access would be mutually exclusive, meaning that individuals must choose to grow their own cannabis, access it via a club, or purchase it in pharmacies, but cannot legally do more than one of these at the same time. Authorities have described this element of the law as intended to discourage problematic use. In addition, the regulations stipulate that drivers will be considered intoxicated if any THC is detected in their system, and instruct the IRCCA to regulate the potency of THC in commercially-sold cannabis. Authorities have so far said that no product will be sold with THC levels higher than 15 percent.

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Following the May 2014 regulations, authorities proceeded to implement the law at a slow but deliberate pace. The IRCCA began registering interested homegrowers in August 2014, and started club registration in October 2014. In February 2015, Mujica's last month in office, the outgoing government issued additional regulations that permit the IRCCA to authorize the scientific community to obtain the substance for research purposes and lay out a framework specifically allowing physicians to dispense medical cannabis. In addition to allowing physicians to prescribe the drug to patients in monthly increments, the regulations authorize the use of cannabis for "the production of therapeutic products of medicinal use."

Unlike the cannabis legalization measures that have been approved by voters in various U.S. states—beginning in Colorado and Washington in 2012—Uruguay's cannabis law was ushered to passage by the national government despite evident skepticism and disapproval of the effort among Uruguayans. Since Mujica first proposed the reform, public opinion surveys have consistently shown most Uruguayans to be doubtful about the government's initiative.[10] The issue, however, has never been especially salient with respect to national political dynamics. The ruling Broad Front coalition, sensing enough backing among its own supporters, used its majority control of both chambers of the legislature to secure the law's passage in December 2013. In taking this step, Broad Front lawmakers were hopeful that, over time, most Uruguayans would come to approve of regulating cannabis, or at least accept it.

The first major political test came with the October and November 2014 elections, when the Broad Front retained control of both legislative chambers and once again won the presidency. The law to regulate cannabis may not have actually boosted the ruling coalition's fortunes, but nor did it obviously harm them. Since then, the law's implementation has unfolded slowly, but there have not been the kind glaring errors or setbacks that might have converted the law into a political liability for the Broad Front. Authorities remain confident that public support will gradually grow as the law proves itself in practice. Even so, lingering public skepticism has placed palpable pressure on the government, making authorities particularly sensitive to hiccups in the implementation process.

For some, the combination of tepid public support for the law and the transition to a new president following Uruguay's October 2014 elections cast a shadow of uncertainty over the law's future. When Tabaré Vázquez—who preceded Mujica as president from 2005 to 2010—won the presidency for a second time, observers suggested that he was skeptical of the effort to regulate cannabis. However, President Vázquez has gradually allayed these concerns, promising to implement the law to the letter while taking care that the law is meeting its objectives.

Under Vázquez, implementation continued to move ahead cautiously. After a months-long bidding process, in October 2015, the government selected two companies out of more than twenty applicants to grow cannabis for sale in pharmacies. The two,

IMPLEMENTATION TIMELINE

June 20, 2012 – President José Mujica's administration presents "Strategy for Life and Coexistence," which includes proposal to legalize cannabis

August 8, 2012 – To spur debate, Mujica presents legislature with a short proposal to create a regulated state monopoly over the market for cannabis

November 12, 2012 – Lawmakers of the ruling Broad Front coalition replace Mujica's proposal with the bill that will eventually become Uruguay's cannabis law

July 31, 2013 – The bill passes in the lower house, the Chamber of Deputies

December 10, 2013 – Bill passes the Senate

December 20, 2013 – Mujica signs bill into Law 19172

May 1, 2014 – Mujica administration issues regulations which, among other things, specify the mutual exclusivity of the three methods of access and restrict sales to Uruguayan citizens and residents

August 27, 2014 – IRCCA begins registering homegrowers

October 26, 2014 – Ruling Broad Front coalition maintains its slim majority in both houses of legislature

October 30, 2014 – IRCCA begins registering cannabis clubs

November 30, 2014 – Tabaré Vázquez, also of the Broad Front coalition, elected to succeed Mujica as president for the 2015-2020 term

February 4, 2015 – Outgoing Mujica administration issues regulations allowing the government to permit cannabis research and for the health sector to prescribe medical cannabis products

March 1, 2015 – Vázquez takes office amid assurances that he will implement Uruguay's cannabis law as it was passed, and subject it to thorough monitoring and evaluation

August 20, 2015 – Ministry of Interior presents new protocol outlining proper procedures for police encounters involving cannabis

October 1, 2015 – Following 14 months of reviewing bids and verifying financial records of more than 20 applicants, authorities announce selection of the first two companies to receive commercial cannabis cultivation licenses: ICC and Simbiosis

July 19, 2017 – After months of cultivation and quality control, commercial cannabis sales begin in pharmacies across the country

August 2017 – Banks begin to threaten to close accounts linked to cannabis out of compliance with U.S. financial law, and some pharmacies pull out. Others are forced to sell on a cash-only basis

January 2018 – Authorities announce plans to address distribution shortages by allowing for sales in non-pharmacy locations, similar to dispensaries elsewhere

Simbiosis and ICC, are both of mixed Uruguayan and foreign ownership. The latter has links to Uruguayan agroindustry magnate Juan Sartori, president and founder of the largest agriculture firm in Uruguay, the Union Agriculture Group.[11] The companies carry out cultivation through a perpetual harvest system in greenhouses located on a 24-acre plot of land adjacent to a maximum security prison in San Jose Department, just northwest of Montevideo, the capital. Although Simbiosis and ICC began operating in 2016, there was an extended delay before the first sales began, as the IRCCA finalized the details of distribution and sales with pharmacy owners. During this time, authorities established a secure database system that allowed potential buyers to scan their fingerprint at pharmacies, which would be checked with the IRCCA's registry of individuals signed up to purchase.

On July 19, 2017, Uruguay launched the last remaining stage of the cannabis law, with sales finally beginning in 16 pharmacies across the country. The onset of sales saw a surge in interest, with the number of Uruguayans on the IRCCA's purchaser registry increasing from roughly 4,900 to over 13,000 in the first month. Initially, only two varieties of cannabis (referred to on their packaging Alpha I, an indica, and Beta I, a sativa) were made available, sold in five-gram containers at the price of 187.04 Uruguayan pesos each. In January 2018, this price was increased to 200 Uruguayan pesos (or roughly seven U.S. dollars) but at about US$1.40 per gram, the figure remains very competitive with the black market.

There was initial concern regarding the potency of cannabis in Uruguay, as both of the initially available varieties had THC levels at two percent, with CBD at six-to-seven percent. However, this did not dissuade purchasers, and anecdotal reports have suggested that Alpha I and Beta I do indeed have a psychoactive effect. Additionally, in late 2017, the IRCCA made two new varieties available—Alpha II and Beta II—both of which are indica/sativa hybrids and have THC levels of nine percent and CBD levels of roughly three percent.

KEY FINDINGS

A. INTERNATIONAL TREATIES

Uruguay has forged ahead with cannabis regulation despite repeated criticisms from the International Narcotics Control Board (INCB), as in the Board's report for 2016, which states:

> *The Board notes the continued implementation by the Government of Uruguay of measures aimed at creating a regulated market for the non-medical use of cannabis. While this policy has not yet been fully implemented, the Board wishes to reiterate its position that such legislation is contrary to the provisions of the international drug control conventions, particularly to the measures set out in article 4, paragraph (c), of the 1961 Convention as amended, according to which States parties are obliged to 'limit exclusively to medical and scientific purposes the production, manufacture, export, import, distribution of, trade in, use and possession of drugs.'*[12]

In opting for regulation notwithstanding such criticisms, Uruguay has argued that its policy is fully in line with the original objectives that the UN drug control treaties emphasized but have subsequently failed to achieve: namely, the protection of the health and welfare of humankind. While there can be little doubt that, as the INCB has pointed out, Uruguay is contravening its obligations under the 1961 Single Convention to limit cannabis exclusively to medical and scientific purposes, Uruguay has sought to side step the question of drug treaty non-compliance by placing its new law in the context of the country's adherence to its more foundational obligations under international law.

Uruguayan authorities have specifically argued that the creation of a regulated market for adult use of cannabis is driven by health and security imperatives and is therefore an issue of human rights. As such, officials point to wider UN human rights obligations that need to be respected, specifically appealing to the precedence of human rights principles over drug control obligations within the UN system as a whole. In the event of a conflict between human rights obligations and drug control requirements, they argue, Uruguay is bound to give priority to its human rights obligations.[13]

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The argument for the priority of human rights obligations in matters of drug control is not a new one for Uruguay. In 2008, Uruguay sponsored a resolution at the Commission on Narcotic Drugs (the UN's central policy making body on the issue) to ensure the promotion of human rights in the implementation of the international drug control treaties.[14] Uruguay's argument that human rights protections take precedence over drug control requirements finds support in the 2010 report to the UN General Assembly by the UN Special Rapporteur on the Right to Health, which signaled: "When the goals and approaches of the international drug control regime and international human rights regime conflict, it is clear that human rights obligations should prevail."[15]

In 2015, Uruguay co-sponsored a resolution calling upon the UN High Commissioner for Human Rights (OHCHR) to prepare a report 'on the impact of the world drug problem on the enjoyment of human rights.'[16] In its contribution to OHCHR preparations, Uruguay laid out its stance regarding the primacy of human rights:

We reaffirm the importance of ensuring the human rights system, underscoring that human rights are universal, intrinsic, interdependent and inalienable, and that is the obligation of States to guarantee their priority over other international agreements, emphasizing the international drug control conventions.[17]

Uruguay's ability to move forward with a policy clearly beyond the bounds of the UN drug treaties owes to a combination of factors. First, Uruguayan authorities foresaw the international criticism their move would likely trigger, and fashioned an argument based on human rights obligations that was consistent with the country's international reputation, and that was coherent with the country's rationale for revising its cannabis law in the first place.

Second, as a practical matter, the UN drug control treaty bodies, including the INCB, do not have the kind of enforcement authority or practical political power that would be necessary to prevent Uruguay from moving ahead with implementation of its new law. Countries such as the United States have historically wielded their political influence and power to encourage full implementation of the drug treaties. However, with Uruguay's law entering its fifth year since passage, there has not been a concerted U.S. government effort to punish Uruguay bilaterally or in an international arena, suggesting that Uruguay's reforms will not be stymied because of international pressures.

In this regard, Uruguay has taken advantage of felicitous timing, with its law's passage having come in the midst of a major shift toward cannabis regulation within the United States. After the November 2012 ballot initiatives to legalize cannabis in the states of Colorado and Washington, U.S. President Barack Obama's administration adopted a policy of conditional accommodation of state-level cannabis legalization, contained in Justice Department enforcement guidance known as the "Cole Memo."[18] This accommodation provided Uruguay a political cushion internationally, just as the Uruguayan parliament was preparing to approve the country's cannabis reform.

In the wake of the Colorado and Washington ballot initiatives, the U.S. federal government was suddenly in an awkward spot. The United States was the key architect and for decades the chief enforcer of the UN drug treaties, including vigorous enforcement of the global prohibition on non-medical uses of cannabis. To oppose Uruguay's new law or even pressure Uruguay to revise or annul it—as it is easy to imagine previous administrations attempting to do so—would open the United States to charges of hypocrisy.

Indeed, regarding non-medical cannabis, the INCB has also repeatedly noted that the United States is "not in conformity" with the drug treaties,[19] and has underscored that the "strict prohibition of non-medical use set out in the 1961 Convention" applies fully to countries with federal structures of government. In other words, if "sub-national Governments have taken measures towards legalizing and regulating the non-medical use of cannabis, despite federal law to the contrary"—as is quite evidently the situation today in the United States—then such developments are "in violation of the international drug control legal framework."[20] In this new context, the United States has kept its criticisms of Uruguay's cannabis law soft and perfunctory.[21]

Under President Donald Trump, U.S. Attorney General Jeff Sessions has made clear his animus toward legal cannabis. In January 2018, Sessions rescinded the Cole Memo, heightening concerns over how federal enforcement powers will be wielded. But Sessions' bid to turn back the clock on cannabis legalization is considered unlikely to succeed; cannabis reforming states are not expected to be reverse course, even if the Trump administration expends significant political capital in an effort to compel them. This leaves the U.S. federal government in the same awkward situation that began in November 2012 when the voters of Colorado and Washington State approved their ballot initiatives: unable to undo the states' reforms, and therefore out of compliance with the drug treaties it has long championed.

For the foreseeable future, the United States is unlikely to be in a position to oppose efforts to legalize and regulate cannabis, such as that now underway in Uruguay.

B. BANKING

Because Uruguay was the first nation to legalize the cultivation, processing, distribution, and sale of cannabis, it was anticipated it would avoid some of the challenges faced by other nations with less comprehensive reforms. The Dutch model that tolerates cannabis use at the point of sale still relies on an illegal supply model complicated by the risks of drug importation. The U.S. situation of legalization among some states created interstate commerce, tax, banking, and other challenges.

By legalizing the entire production and distribution process nationwide, Uruguay's reforms were designed in ways that learned from other nation's experiences. In many ways, the Dutch and American systems' shortcomings were avoided. Uruguay's model provides a clear framework for a legal nationwide market, but leaves important flexibility to the executive branch on key matters such as pricing, distribution, enforcement, and accessibility. However, shortly after commercial sales began through the nation's pharmacies, one of the biggest challenges to the reform model appeared: banking.

Because cannabis was legalized nationwide, Uruguayan banks continued their existing relationships with pharmacies—as the nation's pharmacies already used financial institutions as part of their pre-cannabis business operations. Soon after, two of the largest U.S. financial institutions, Bank of America and CitiBank, notified the Uruguayan banks with whom they have relationships that they needed to discontinue serving pharmacies that sell cannabis. These large American banks, which have shied away from serving even U.S. domestic markets with recreational or medical cannabis, cited the USA PATRIOT Act as a basis for their claim and demand to shutter the accounts. Under Section 320 of the law, banks cannot serve accounts that commit an offense that "involves the manufacture, importation, sale, or distribution of a controlled substance (as that term is defined for purposes of the Controlled Substances Act)…" and that includes cannabis.[22]

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While some argued that the operations within Uruguay and serviced by Uruguayan banks should be outside the reach of that law, they are not. Section 319 of the USA PATRIOT Act extends the reach of the law to foreign (non-U.S.) banks with "an interbank account in the United States with a covered financial institution." Given that Uruguayan banks, even government-operated ones such as the Central Bank of Uruguay and the Bank of the Republic (BROU) fall under that definition, the U.S. banks' threats were real. This situation left Uruguayan banks with a choice: shut down cannabis-selling pharmacies or risk the withdrawal of major American financial institutions from the country. The latter came with significant economic risk. The former would affect only a handful of pharmacies. For Uruguayan banks, the choice was an obvious one, and pharmacies were notified that their accounts would be closed. The BROU, as well as private banks such as Itaú and Santander, all reportedly closed accounts held by pharmacies in August.

For U.S. banks, this concern was real. The law which they cited in letters to Uruguayan banks allowed the federal government to seize bank assets and file criminal charges against bankers. Even though the purpose of the banking provisions under the USA PATRIOT Act was to stop banks from financing operations that facilitated international terrorism, the language is broad enough to encompass cannabis operations in Uruguay. One can easily argue that the legalization of cannabis in Uruguay aims to diminish illegal drug traffickers' operations and financing in ways that undercut terror and violence, but U.S. law and banks' interpretation of that law generated an ultimatum for Uruguay.

Cannabis-dispensing pharmacies faced a choice, as well. They could switch their entire operations (cannabis and non-cannabis) to a cash-only system, or they could stop selling cannabis, continue as a standard pharmacy, and maintain their access to banking—a choice that Uruguayan banks made clear in their communications with pharmacies. Pharmacies chose different options.

In the authors' discussions with pharmacy owner Alicia Chavert Riverós—who operates Farmacia La Cabina in Las Flores, Maldonado Department—Chavert Riverós noted that while she does not use cannabis herself, she agrees with the aims of the law and wants to afford the community's users with legal access to cannabis. She explained that while the switch to cash-only makes it difficult to pay bills (relying on cash transfers through Abitab), she has seen an increase in revenue for other products in her pharmacy since cannabis sales began. If her pharmacy discontinued sales due to the banking obstacles, people in the area would have to travel to either Atlantida (25 miles away) or Minas (38 miles away) to find the next nearest pharmacy that sells cannabis.

In response to financial institutions' decisions not to bank the cannabis industry in Uruguay, alternative ideas have arisen. The first was to create a central, cannabis-only account through the Central Bank of Uruguay. However, given the Central Bank's dealings with international financial institutions, legitimate worries arose that those same American banks would shutter their relations. Moving forward, the government is assessing its mid- and long-term options on how to address the situation. In the long term, authorities are exploring the possibility of facilitating an arrangement between Uruguayan cannabis entities and domestic credit unions or other financial service providers. This, however, would face the same problem as relying on the Central Bank.

In the immediate term, the IRCCA is reacting to the situation—and in particular to the hesitancy of pharmacies to participate as suppliers in light of the banking difficulties—by preparing to set up new points of sales that operate on a cash-only basis. According to authorities, these new establishments will be privately owned, and unlike pharmacies would exclusively sell cannabis (though they may also sell paraphernalia like rolling papers and grinders, and perhaps other items that would allow them to be economically viable).

C. SUPPLY ISSUES

In any new, legal cannabis market, managing supply poses a serious challenge. Often, cultivators (growers) are unaware of what market demand will be, and in order to avoid product losses, they underestimate consumer demand, leading to huge product shortages and high prices. Over time, as cultivators better understand demand, they supply a level of product that better meets it.

Supply challenges in Uruguay arose because of a combination of typical economic forces and ones particular to the Uruguayan model. Uruguay faced the traditional information challenges regarding how much cannabis would be consumed, even as the law requires people to register to purchase at pharmacies and the law limits the monthly quantity that can be purchased. Growth in the number of registrants can happen quickly, while changes to cultivation (and consequently, output) take months to adjust.

At the same time, in an effort to limit the size of the market, prevent diversion, ensure security, and signal to the world a model of strict regulation, Uruguay authorized only two cultivators—the firms Simbiosis and ICC—to produce cannabis. In addition, it was required that all cannabis produced be tested and approved by IRCCA before it could be supplied to pharmacies. IRCCA (so far) only authorizes cannabis with between two and nine percent THC and also tests for genetic specificity, mold, bacteria, pesticides, metals, etc. Initially, one of the approved cultivators (Simbiosis) was delayed in getting up and running, and once they were, their product did not meet the standards required by the government. The initial Simbiosis crop was turned away from market. So, for several months, only ICC was supplying the entire commercial market with two strains: “Alpha I” and “Beta I.”

This limited production meant that pharmacies were undersupplied—not given the maximum product allowed monthly—and that pharmacies sold product so quickly that there would be days of shortages before the next cannabis shipment. This was complicated by some basic aspects of the Uruguayan model. In the month following the opening of sales, more than 13,000 Uruguayans were registered to purchase from pharmacies, each buyer being able to purchase up to 40 grams per month.[23] However, there were initially only 16 pharmacies registered to dispense cannabis, and a pharmacy could only receive two kilograms of cannabis monthly in deliveries every 14 days. That created not just a shortage from the lopsided purchaser to dispensary ratio, but also in terms of the purchaser maximum to pharmacy monthly supply ratio.

Supply challenges compounded because of the failure of one firm to bring approved product to market and the decisions of some pharmacies to end commercial sales (due to the banking challenges mentioned above). At the time of publication there are only 12 pharmacies to serve more than 22,000 buyers, with five of those pharmacies being located in Montevideo. And while the concentration of so many pharmacies in Montevideo closely reflects the population distribution of Uruguay, 11 of Uruguay’s 19 departments do not have a single cannabis-dispensing pharmacy.[24] This has led to periods of deep shortages nationwide, with the most notable occurring in October 2017 and February 2018.

Table 1. Pharmacies selling cannabis in Uruguay as of March 2018

Department	City/Town	Name of Pharmacy
Canelones	Canelones	Las Toscas
Flores	Trinidad	Nueva Brum
Lavalleja	Minas	Gortari
Maldonado	Las Flores	La Cabina
Montevideo	Montevideo	Antartida
Montevideo	Montevideo	Cáceres
Montevideo	Montevideo	Camaño
Montevideo	Montevideo	Silleda
Montevideo	Montevideo	Tapie
Paysandú	Paysandú	Termal Guaviyu
Salto	Termas del Daymán	Albisu
Tacuarembó	Paso de los Toros	Bengoechea

Some of these challenges are standard growing pains that any market would experience and eventually resolve. For example, by November 2017, Simbiosis began distributing "Alpha II" and "Beta II" strains to market, as the products passed IRCCA's testing requirements. However, delivery limits remained for pharmacies and the shrinking number of cannabis-dispensing pharmacies led to continued shortages, in the face of a public increasingly comfortable with registering with the government to purchase from the commercial market.

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To the government's credit, it has maintained its commitment to a heavily regulated market. It has allowed neither the supply shortages nor the banking challenges to push them to weaken regulation. Instead, the government has sought alternative solutions including a government-regulated dispensary model, rather than an exclusive pharmacy model for sales. In the interim, the government could entertain (temporarily or permanently) increasing the monthly maximum that pharmacies (and eventually dispensaries) are allowed to receive.

D. ENFORCEMENT

In implementing Uruguay's law, authorities have placed a clear emphasis on law enforcement aimed at non-compliant clubs and homegrows, hoping to prevent them from fueling a black market. One clear priority for the government in this effort is the tourist market, particularly during peak summer months of November through February. Because sales to tourists are prohibited, some Uruguayan homegrowers and clubs have attempted to get around the ban by offering "cannabis tours," which are framed more as social and educational experiences, in which participants are free to sample cannabis while on a paid tour. Others simply sell directly to tourists behind closed doors, a gray market quietly operating via word of mouth. The IRCCA is aware of this dynamic and has relied on a combination of stern warnings and police action to dissuade such activity. In February 2017, for instance, police seized some 800 plants associated with a cannabis club that was offering cannabis samples to tourists through a hostel in Maldonado Department. The club also had its license revoked by the IRCCA.

Another priority for law enforcement is the medical market. Because the government has been slow to ensure patients have access to affordable medical cannabis and cannabis-derived medications, there has been a small but growing trade in oils and extracts. Since the law's passage, there has been a proliferation of informal networks, many of which operate through Facebook and other social media, which offer cannabis products to those seeking them. In many cases, purchasers tend to be interested in products with purported medical benefits, such as tinctures or salves.[25] These products generally lack standardization, and in most cases, those who purchase them have no guarantees regarding their potency or purity.

In carrying out enforcement, however, IRCCA authorities are aware that they face a dilemma. While they are eager to curtail the black market, they also know that the law is still young. If regulatory authorities were to launch an aggressive strategy of raids against any registered actor suspected of fueling the black market, they are concerned that this would risk discouraging individuals from registering with the IRCCA at all. For this reason the IRCCA has largely followed a more quiet enforcement strategy, prioritizing verbal warnings for those running afoul of the law and only pursuing police action in severe, emblematic cases such as the hostel in Maldonado.

However, the IRCCA's careful enforcement strategy is occasionally complicated by the National Police. In the period following the law's passage, Uruguay saw some disconnect between the letter of the law and how police enforced it. Reports surfaced of IRCCA-registered growers being arrested and falsely accused of violating the law. In November 2014, for instance, a registered homegrower in the city of Bella Union, Artigas Department, was arrested and accused of having 11 cannabis plants, five over the legal limit.[26] However, he was released when a judge found that these five were male plants and seedlings, making his grow entirely compliant with the law. More recently, in July 2017, the newspaper La Diaria documented two cases of registered growers claiming to have had similar encounters with police.[27] In both cases, authorities reportedly found more than the legal annual harvest of 480 grams. However, one of the growers told La Diaria that he had contacted the IRCCA regarding what to do with his excess yield, and had not received a response.

These cases illustrate a defining challenge for enforcing Uruguay's law: the law itself is stringent, and its regulations are fairly complex, straining the government's still-limited manpower to ensure total enforcement. The IRCCA's limited staff—it has a team of six inspectors who are responsible for ensuring compliance[28]—does not realistically allow the institute to check the annual plant yields for all 8,266 homegrowers and 83 registered clubs. Instead, this job falls to law enforcement, who often act on tips from neighbors who may be uninformed about what the law actually allows. And while police themselves are becoming increasingly informed about ensuring compliance with the law, there is still a great need for education of law enforcement—particularly in the country's interior.

The IRCCA is aware of the need for better education of police, and has taken steps to provide it. In August 2015, the Ministry of Interior (which controls the National Police) issued a new set of guidelines meant to train growers and police alike about the proper procedures in cannabis-related police encounters. The protocol, an eight-page document developed in consultation with civil society groups, lays out specific rules for such encounters. Among other items, the protocol establishes that the sole existence of cannabis plants is not, by itself, sufficient cause for criminal suspicion. Instead, the Interior Ministry asserts that police should only respond to allegations that refer to "the existence in some way of trafficking, sales, commerce, supply or other illicit behavior in order to constitute a crime."

The protocol also asserts that police officers cannot legally demand to see a homegrower's proof of registration with the IRCCA. Individuals can only be compelled to show documentation by a judge, who can reach out to the IRCCA directly. In theory, this measure effectively protects unregistered homegrowers from police action, so long as they do not engage in sales. Similarly, police are forbidden from engaging in seizures or the destruction of cannabis, without permission of a judge.

E. TOURISM

Uruguay's regulations allow only Uruguayan citizens and permanent residents to access cannabis legally. Non-citizen tourists are therefore not eligible to legally purchase cannabis. During debate over the bill, lawmakers were concerned about attracting "marijuana tourism," which they perceived as a potential threat to both Uruguay's international reputation and its existing tourism trade. Due to the lack of public support for the law, authorities also expressed concerns that an influx of tourists seeking cannabis could widen opposition to the law.

Nevertheless, since the law's passage there has been an increasing number of tourists who, if not primarily coming in the hope of accessing cannabis, have sought to acquire it once in Uruguay. There are no official estimates, but reports of tourists paying for "marijuana tours" and inquiring about purchasing cannabis in pharmacies have been widespread in local media.[29] During an October 2017 research trip, this report's authors witnessed this dynamic firsthand, observing illicit sales at a Montevideo paraphernalia shop that itself catered to tourists.

Ultimately, this dynamic suggests a tourism market exists, despite the preferences of Uruguayan authorities. And as the Uruguayan tourism industry continues to grow (official data shows that the flow of tourists is on track to increase by 20 percent in the November 2017- February 2018 tourist season[30]) the cannabis tourism market is likely to increase.

> Uruguayan authorities will likely see an increasing rationale to create a legal tourist market in the coming years.

Confronted with this dynamic, so far the IRCCA has responded with enforcement, making an example of those who are most flagrantly catering to tourists. But this response is unlikely to eliminate the market, in the same way that prohibition of cannabis has been ineffective at stemming its use. For this reason, Uruguayan authorities will likely see an increasing rationale to create a legal tourist market in the coming years. Some figures have already publicly mused about such a fix. In January 2018, lawmaker Sebastian Sabini—one of the two original sponsors of the law in Uruguay's legislature—told La Republica newspaper: "Many come to Uruguay to get to know the legal [cannabis] system. However, they end up buying in illicit drug markets because pharmacies still can't sell to tourists. In the medium term we are evaluating the possibility of changing this situation."[31] The government could open sales to tourists without going through the legislature, as the restriction to citizens and permanent residents is contained in the regulations, not the legislation itself.

F. MEDICAL CANNABIS

While the government has made significant advances in implementing non-medical cannabis access, it has struggled to overcome obstacles to medical cannabis. To date, the most significant regulations governing medical cannabis remain the February 2015 executive order signed by the outgoing Mujica administration. The order instructs the IRCCA to authorize researchers to access cannabis for research purposes, authorizes physicians to prescribe cannabis in monthly increments, and allows for "the production of therapeutic products of medicinal use."

In broad terms, the order also makes clear that eventually, acquiring medical cannabis will be similar to making non-medical purchases. The only difference will be that patients would have to submit a prescription to purchase cannabis and cannabis products from pharmacies. According to the document, cannabis prescriptions can be valid for a maximum of 30 days before a new prescription must be filled, and during this period patients are not allowed to access any other form of legal cannabis. Authorities say this is intended to prevent recreational users from obtaining cannabis through the medicinal cannabis system. Former President Mujica specifically expressed this sentiment in May 2014, when he described medical marijuana in the state of Colorado as "a fiction" and "hypocrisy."[32]

The 2015 executive order creates the framework for medical cannabis on paper, but in reality it has not been easy for Uruguayans to access medical products. It was not until December 2017, four years after the law's passage, that a medical cannabis product became available for purchase in pharmacies, and even this has its critics. The product is a two percent CBD extract, sold in 10 millimeter vials and marketed as Epifractan. Dr. Raquel Peyraube, president of the Uruguayan Endocannabinology Society, has publicly questioned whether Epifractan can actually be effective in treating conditions such as epilepsy and Parkinson's Disease, suggesting that its low potency is better suited for "infants and small children."[33] Others have criticized the product due to the fact that it is manufactured using imported cannabis from Switzerland, rather than from locally cultivated cannabis.

While the availability of Epifractan is a positive step, much still remains to be done in order ensure affordable access to a wider variety of medical cannabis products. Currently, Uruguayan patients seeking other products, like cannabinoid oral sprays or synthetic cannabinoids used for treating pain and other conditions, have to clear numerous hurdles. First they must go to a specialist to obtain an "orange" prescription ("receta naranja"), the most restricted category and the same prescription used to prescribe amphetamines and opiates. Then patients are required to apply for a special waiver from the Ministry of Public Health to be able to import the drug from abroad under its "compassionate use" exception, which allows Uruguayans to import experimental drugs that have not been approved for use in the country. Although this waiver allows patients to import the drug tax fee, the costs of shipping are often prohibitively expensive.

> The 2015 executive order creates the framework for medical cannabis on paper, but in reality it has not been easy for Uruguayans to access medical products

Despite the obstacles Uruguayans face in accessing medical cannabis, the government has prioritized large scale production of cannabis for the export medical market. On October 5, 2017, the IRCCA approved the first license authorizing a joint Uruguayan and American company to produce up to ten tons of medical cannabis, and at least two other companies have already begun working with the IRCCA to set up similar arrangements.[34] While these contracts are for export to other legal markets, it is likely that the Ministry of Public Health will in the future authorize domestic sales of the plant itself for medical purposes. Such a move would decrease costs to the average patient, while ensuring that the economic activity around medical cannabis remains within the nation's borders. However, advocates of this proposal complain of a "culture of prohibition" within the ministry, and so far it is unclear when the ministry may actually greenlight sales of products beyond Epifractan.

G. INFORMATION-SHARING AND TRANSPARENCY

The fact that President Vázquez has consistently maintained that he is committed to implementing the law while evaluating whether it is meeting its goals is commendable. However, there is more that his government could do in order to benefit fully from the work that civil society and academic researchers are conducting. Since the law's passage, there has been a proliferation of important research on its impacts on cannabis use, citizen security, public opinion, and other factors. Since 2016, a multidisciplinary team of researchers at the University of the Republic (UdelaR) has been studying the law, and cannabis more broadly, collectively publishing reports on their website, the Cannabis Monitor.[35] At the Catholic University of Uruguay, a team of political scientists and pollsters have partnered with Florida International University researchers to conduct a series of studies on user behavior and attitudes. But while these researchers have each carried out groundbreaking work, they have all had difficulty in engaging with authorities.

A common complaint among cannabis researchers in Uruguay is related to access. Researchers complain that the IRCCA and JND are reticent to share data on implementation with them. In some cases, the government has even denied researchers' attempts to get projects off the ground. The IRCCA must approve scientific studies that involve physically accessing cannabis, and researchers complain of serious bottlenecks in the approval process. In 2015, for instance, authorities rejected two consecutive proposals from Catholic University researchers seeking to obtain small samples of cannabis from users in order to study the black market. In both cases, the rejection came after repeated rounds of revision in consultation with the IRCCA.

Regardless of the bases for the government's denials of such research, these experiences have fueled concerns among researchers that authorities may be trying to exercise control over the available information regarding the impacts of implementation. The law itself requires the Ministry of Public Health to submit an annual report on the impact of the measure to both houses of the Uruguayan Congress, to be prepared by a special research team for that purpose.[36] To date, however, only one such report has been submitted (in late 2016), and its findings were not made public. So far, the only official data related the impact of the law has been limited to regular surveys of households and secondary/university students regarding substance use, as well as scattered information released by other institutions, such as crime data from the police. In recent months, there have been indications that the government is seeking to cooperate more closely with independent researchers, particularly with a view toward facilitating the Cannabis Monitor's focus on monitoring and evaluation. In November 2017, for instance, IRCCA authorities met with the Monitor team and agreed to adopt the researchers' proposal for tracking certain indicators, but it remains unclear what form such cooperation will take, and whether future reports will be made public.

RECOMMENDATIONS

Uruguay makes no claims of being a blueprint for others to follow, but its legal regulation of cannabis is a pioneering effort from which other governments will surely learn. Like any administrative model, there is room for improvement. The effort to strengthen an already robust regulatory and administrative program is critical to meet public expectations and to advance the overall goals of a law.

We offer ideas in seven key areas for the Uruguayan government to consider as implementation of cannabis legalization continues. In some cases, these recommendations suggest that Uruguay be nimble to changing policy environments and prepare for opportunities that may organically develop that will assist with the program. In other areas, we recommend that Uruguay consider steps to address unforeseen or unintended gaps in ways that could improve the overall program.

A. ACCESS TO FINANCIAL INSTITUTIONS

The Uruguayan government understands the need for cannabis-related businesses to have access to banking. Such access improves businesses' ability to compete, levels the playing field across sectors, enhances accountability, and reduces opportunities for graft. However, forces outside of Uruguay, namely financial institutions in the United States, have prevented such access.

Uruguayan government officials genuinely, but unsuccessfully, sought to find domestic solutions for this challenge. However, Uruguay has a few additional options. Officials can work closely with other nations' large financial institutions (non-U.S. banks) to see if an institution is willing to assume the risk of banking Uruguayan cannabis businesses. To that end, those financial institutions must also be willing to play a game of chicken with U.S. financial regulators, as any large financial institution capable of assuming such risk will likely have an interbank account in the United States.

A second possibility exists in Canada. In 2017, the Canadian House of Commons approved legislation to regulate cannabis, and barring a surprise decision from the Senate, legal sales should commence in 2018. Such a move will make Canada the second nation to legalize non-medical cannabis, and the first G7 nation to do so. Canada will be expected to use standard financial institutions to bank its businesses. Otherwise, it will be urged to find some other internal solution to grant access to financial products. Uruguay could engage with any private financial institutions working with Canadian cannabis companies or, perhaps, with the Bank of Canada if it is willing to work with Uruguay.

There exist positive trade relations between both countries generally and an alliance based on long-term trust. Canadian Prime Minister Justin Trudeau sees cannabis legalization as a positive part of his agenda, and he could encourage Canadian financial institutions to work with Uruguay as a signal of support both for an ally and for a common area of groundbreaking policy reform. What's more, Canadian financial institutions' willingness to work with Uruguay would raise the same hypothetical legal concerns among American financial regulators that Canada's own system of cannabis banking would raise. So long as they had interbank accounts in the United States, Canadian banks working with Canadian cannabis companies would fall under the same American legal jurisdiction as Canadian banks working with both Canadian and Uruguayan cannabis companies. However, it is less likely that American banks would threaten large Canadian banks or follow through on those threats. This situation may provide Uruguay with its most promising opportunity to grant its cannabis-related businesses access to stable, safe banking.

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B. EDUCATING MEDICAL AND LAW ENFORCEMENT PROFESSIONALS

One challenge that exists after a government reforms its laws with regard to medical or non-medical cannabis is that other professionals receive limited education with regard to new laws and policies. As a result, problems can abound in a variety of contexts. Two professions frequently subject to such challenges are medical professionals and law enforcement.

Some individuals in Uruguay use non-medical cannabis for medical purposes (i.e., seizure disorders, anxiety disorders, chronic pain, etc.). Medical professionals, including doctors and researchers, should see legalization as an opportunity. They can collect data, conduct research, understand consumption patterns among patients, identify side effects or interactions, and work to have open conversations with the nation's cannabis users. The government can play a role by sponsoring continuing education classes, working with universities and medical schools to outline changes in curriculum that reflect the current law, and fund research into the medical efficacy of cannabis. These efforts can help begin a process of cultural change within the medical community—a group that is notoriously conservative and hesitant to change.

Law enforcement authorities in Uruguay also face challenges with regard to the law. From department to department, municipality to municipality, and even officer to officer, the knowledge of the new law can vary dramatically.

Reports exist, particularly in municipalities outside of Montevideo, of product seizures and arrests at cannabis clubs or homegrows (as discussed above). In some cases, those actions arise because of genuine violations of the law. In others, charges are dropped because individuals are not violating the law. In order to combat these challenges and to improve the capability and resource management of law enforcement, the Ministry of the Interior should design a continuing training course based on its protocol for cannabis enforcement. The Ministry can train individuals at the department-level who can then hold training sessions throughout the country with law enforcement. Such training will help officers better understand the new law and can be updated regularly in order to be responsive to minor and/or dramatic changes in the nation's cannabis laws.

C. EXPAND MEDICAL CANNABIS

Medical cannabis in Uruguay is a complicated issue. The law allows a process by which patients can access medical cannabis. Doctors can prescribe cannabis to patients; that product can be dispensed through pharmacies. However, to date, the Ministry of Public Health has only authorized a single product, Epifractan, for sale to patients. In lieu of more products available in a regulated system, patients are forced to join cannabis clubs, grow at home, access the commercial market in order to get recreational cannabis to use medically, or resort to black market activities.

In addition, medical doctors in Uruguay are quite skeptical of cannabis' medical efficacy. In response, medical professionals like Dr. Raquel Peyraube have offered Uruguay's first medical cannabis (continuing education) course to help improve the knowledge base of doctors, highlight existing research, understand different types of products, clarify proper dosing, discuss conditions that cannabis can help and possible side effects, and answer other questions doctors may have. This resource is an important step toward expanding medical access in Uruguay.

Right now, Uruguayans with medical needs not met by Epifractan seek out cannabis through the domestic, non-medical market or travel to other countries with more comprehensive medical cannabis laws to obtain products to bring back home. Both systems remove the doctor from the medical process and make patients less likely to be forthcoming with their doctors about their use of medical cannabis. Uruguay should take steps to expand patient access and make the system safer and more regulated. In fact, the country has an infrastructure in place to do this, as it has authorized the production of medical cannabis for export to other countries like Canada and Mexico. Uruguay could simply expand those existing operations to supply a domestic market with little disruption to the system.

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D. RECONSIDER THE EXCLUSIVITY OF DISTRIBUTION

As mentioned above, Uruguayans must choose among three options to procure cannabis: the commercial market, homegrows, and membership in a cannabis club. Each of these systems comes with its own challenges. Homegrown cannabis is subject to crop failure, particularly among amateur growers. Cannabis clubs face membership shortages, crop failures, and, in some cases, legal challenges or institutional hurdles that threaten the supply to all members. The commercial market has faced significant shortages nationwide and "cannabis deserts"—areas of the country that lack any pharmacy dispensing cannabis.

These individual challenges across methods of access leave prospective buyers with few options when they are unable to purchase. That can induce illegal behaviors in multiple forms, two of which stand out. First, individuals in clubs or homegrows can cultivate excessive amounts of cannabis (a number of plants beyond what they are legally allowed) so as to have inventory in the case of a temporary lack of access. In this situation, people are violating the law, and in times when there is an uninterrupted supply of cannabis, excess cannabis could be sold to others—an additional violation of the law. Second, when individuals are unable to access cannabis through government-approved legal channels, they may simply resort to the black market. That black market may include "legal" growers who grow in excess (as mentioned above), illegal growers, or the purchase of illegal products like pressed cannabis largely grown in Paraguay, referred to locally as prensado.

Each of these situations undermines the goals of the law. While no level of reform will entirely eliminate black market activity, some of the activities described above exist because of the way the law is structured. The government may consider devising a system whereby individuals who are unable to access legal cannabis because of external shocks can find a secondary means of access. For example, if a cannabis club loses its crop because of an agricultural mistake, the IRCCA could certify the crop loss, confiscate the plants, and certify that those individuals can temporarily access the commercial market. A similar system could be constructed for homegrowers who fail to harvest cannabis.

E. CREATE A DISPENSARY MODEL WITH A VIABLE REVENUE STREAM

In the wake of pharmacies' lack of access to banking and the decision of several pharmacies to exit the cannabis market, the government has opted to consider cannabis-only dispensaries as a cash-only solution to maintain access for consumers. This effort is an admirable one and one that overcomes multiple challenges (lack of access to banking, the limited number of pharmacies agreeing to participate, and the limited distribution of cannabis-dispensing pharmacies across the country).

However, it is unclear whether these dispensaries will have a viable revenue model given the limitations placed on pharmacies with regard to the maximum supply they can receive and the fixed price point. As mentioned above, the price of cannabis is currently fixed at about US$1.40 per gram. Based on our conversations with pharmacy owners and others, it is clear that very little money is made off of the sale of cannabis, even by selling every gram of product distributed per month per location. While pharmacies may be able to sustain this model because of their other business operations and the positive impact on non-cannabis sales that cannabis consumers provide, such would not be the case for an entity charged only with the sale of cannabis.

This situation could be addressed in three ways. First, the government could directly subsidize cannabis dispensaries, effectively underwriting their operations either as private entities or as government-run institutions. This proposition may not sit well among the Uruguayan public, given the public's limited support for the law. Second, the government could allow the price to fluctuate to a market equilibrium, which would drive the price up to a point that would allow dispensaries to pay for themselves. This option is likely unpopular with government officials who seek to keep prices low in order for the legal market to displace larger portions of the black market, especially the market for prensado.

Third, dispensaries can be allowed to sell other items including food products, cannabis-related products, branded items, or other products in order to increase revenue for the establishment, making it more viable.

F. CONSIDER ALLOWING LEGAL SALES TO TOURISTS

Uruguayan officials were clear during the passage of the law that they did not want the nation to become a cannabis vacation destination. However, the reality is that tourists come to Uruguay with the understanding that cannabis is not difficult to find if it is desired. As a result, tourists purchase through illegal means, and that demand induces individuals to produce cannabis illegally for sale to tourists. This product is unregulated and the government collects no revenue from those sales. In many ways, the desire to reduce black market demand among Uruguayans generated a law that increased the black market demand among visitors.

In many ways, the desire to reduce black market demand among Uruguayans generated a law that increased the black market demand among visitors.

Uruguayan officials may consider piloting a program by which tourists can purchase cannabis legally. Such a move—likely through the commercial market—should only come once supply issues are stabilized for the domestic market (citizen consumers). However, Uruguay could increase the price point for consumers in ways that could generate revenue for dispensaries to be better financed and for the government to collect additional tax revenue. There can also be a smaller, maximum quantity that a visitor is allowed to purchase (a model the state of Colorado used early on in its legalization process). Such a maximum reflects the reality that most visitors stay for short periods of time, do not need as much as citizens, and might illegally sell excess marijuana to others if they were able to purchase larger amounts.

G. READINESS TO CORRECT FUTURE IMPLEMENTATION PROBLEMS

Although Uruguay has done well in rolling out the implementation of non-medical cannabis, the country has encountered some significant challenges. That is not necessarily a flaw in the system, but a reality of cutting-edge public policy. As the world's first country to legalize cannabis fully, it was bound to encounter problems. And, as the country continues to implement this program, more problems will arise. Good public policy making requires governments to anticipate problems before they happen and respond effectively when they do.

Uruguay will surely encounter more challenges in the future. In order to prepare for those situations, the IRCCA needs to be well-funded and well-staffed. It needs to go out into communities and talk to business owners, consumers, homegrowers, club owners, medical professionals, law enforcement, civil society groups, and activists (on both sides of the issue) to understand fully what is working and what is not working. The government should employ its own evaluators to assess the functionality of all aspects of the system. However, government cannot do it all alone. The IRCCA and other government entities must rely on independent, academic analysis about the positive and negative aspects of the system and listen to recommendations with regard to solutions. Comprehensive input and community conversation is essential for Uruguay to continue to be a cannabis policy success story into the future.

ENDNOTES

1. Estrategia por la Vida y la Convivencia—15 medidas. (2012). República Oriental de Uruguay— Ministerio del Interior. Retrieved from https://www.minterior.gub.uy/images/stories/convivencia.pdf

2. Article 4 of Law 19172: "This law aims to protect the inhabitants of the country from the associated risks in connection with the illegal drug trade through the intervention of the state, attacking the devastating health, social and economic consequences of the problematic use of psychoactive substances, and reduce the incidence of drug trafficking and organized crime."

3. Article 1 of Law 19172: "It is hereby declared that it is in the public interest to protect, promote and improve the health of the general population through policies oriented towards minimizing the risks and reducing the harm of cannabis use, which promote accurate information, education and prevention of the consequences and damaging effects associated with its consumption as well as the treatment, rehabilitation and social reintegration of problematic drug users."

4. While this is not explicitly stated in the text, Law 19172 directly overturned the 1974 law which allowed judges to determine autonomously whether a certain quantity of an illicit substance was intended for personal use, and thus a non-criminal offense.

5. "Alguien tiene que ser primero" en legalizar, dijo Mujica. Subrayado. (2012, June 21). Retrieved from http://subrayado.com.uy/noticias/13486

6. United Nations General Assembly. Single Convention on Narcotic Drugs. (1961, March 30). Retrieved from https://www.unodc.org/pdf/convention_1961_en.pdf

7. Within the current regime cannabis is considered among the most dangerous of all psychoactive substances under international control. This is reflected in its double listing in the Single Convention. Cannabis, cannabis resin, and extracts and tincture of cannabis are in Schedule I among substances whose properties might give rise to dependence and that present a serious risk of abuse and are subject to all control measures envisaged by the Convention. Cannabis and cannabis resin are also listed in Schedule IV, along with another fifteen substances that are already listed in Schedule I and are deemed particularly dangerous by virtue of what are regarded to be their harmful characteristics, risk of abuse and extremely limited therapeutic value.

8. Poder Legislativo de Uruguay. Ley 19172. Marihuana y sus derivados. Control y regulación del Estado de la importación, producción, adquisición, almacenamiento, comercialización y distribución. (2013, December 20). Retrieved from https://legislativo.parlamento.gub.uy/temporales/leytemp2762533.htm

9. Regulation and Control of Cannabis Market. Law 19172 and Decrees. Junta Nacional de Drogas. Retrieved from https://alfa.portal.gub.uy/JND/PDF/Ley_19.172_Control_y_regulaci%C3%B3n_del_mercado_de_cannabis.pdf

10. El consumo de marihuana y su venta en farmacias. CIFRA / González, Raga & Asociados. (2017, August 17). Retrieved from http://www.cifra.com.uy/index.php/2017/08/17/el-consumo-de-marihuana-y-su-venta-en-farmacias-2/

11. Fumata Verde. La Diaria. (2015, October 2). Retrieved from http://www.infodrogas.gub.uy/index.php?option=com_acymailing&ctrl=archive&task=view&listid=16-grupo-asesor-legal&mailid=703-2-de-octubre-2015-sintesis-de-prensa#noticia9

12. International Narcotics Control Board. Report of the International Narcotics Control Board for 2016. United Nations. (2017). Retrieved from https://www.incb.org/documents/Publications/AnnualReports/AR2016/English/AR2016_E_ebook.pdf

13. Marihuana: Uruguay se defendió ante ONU. Montevideo Portal. (2014, March 13). Retrieved from http://www.montevideo.com.uy/Noticias/Marihuana-Uruguay-se-defendio-ante-ONU-uc228901?plantilla=1391

14. Commission on Narcotic Drugs. Resolution 51/12: Strengthening cooperation between the United Nations Office on Drugs and Crime and other United Nations entities for the promotion of human rights in the implementation of the international drug control treaties. (2008). Retrieved from https://www.unodc.org/documents/commissions/CND/Drug_Resolutions/2000-2009/2008/CND_Res-2008-12e.pdf

15. Anand, G., UN Special Rapporteur. Right of everyone to the enjoyment of the highest attainable standard of physical and mental health. (2010, August 6). Retrieved from http://www.ohchr.org/Documents/Issues/Water/ContributionsStigma/others/SPhealthI.pdf

16. United Nations Human Rights Council. Contribution of the Human Rights Council to the special session of the General Assembly on the world drug problem of 2016. (2015, March 23). Retrieved from https://documents-dds-ny.un.org/doc/UNDOC/LTD/G15/060/81/PDF/G1506081.pdf?OpenElement

17. Junta Nacional de Drogas. Impact of the World Drug Problem in the exercise of Human Rights. (2015, May 15). Retrieved from https://www.wola.org/sites/default/files/Drug%20Policy/AportedeROUalaUNGASS2016enDDHHENG.pdf

18. United States Department of Justice, Office of the Deputy Attorney General. Guidance Regarding Marijuana Enforcement. (2013, August 29). Retrieved from https://www.justice.gov/iso/opa/resources/3052013829132756857467.pdf

19. International Narcotics Control Board. Report of the International Narcotics Control Board for 2013. United Nations. (2014). Retrieved from https://www.incb.org/documents/Publications/AnnualReports/AR2013/English/AR_2013_E.pdf

20. International Narcotics Control Board. Application of the international drug control treaties in countries with federal structures. (2017, December). Retrieved from https://www.incb.org/documents/News/Alerts/Alert_on_Convention_Implementation_December_2017.pdf

21. Forero, J. Pot growers celebrate as Uruguay legalizes cultivation and consumption of marijuana. Washington Post. (2013, October 23). Retrieved from https://www.washingtonpost.com/world/pot-growers-celebrate-as-uruguay-legalizes-cultivation-and-consumption-of-marijuana/2013/10/23/f8044fc6-3bfe-11e3-b0e7-716179a2c2c7_story.html

22. United States Department of Justice, Office of the Deputy Attorney General. Guidance Regarding Marijuana Enforcement. (2013, August 29). Retrieved from https://www.justice.gov/iso/opa/resources/3052013829132756857467.pdf

23. Marihuana: estudian alternativa a farmacias. Diario El País. (2017, August 25). Retrieved from http://www.elpais.com.uy/informacion/marihuana-estudian-alternativa-farmacias.html

24. About 38 percent of Uruguay's population lives in Montevideo and 42 percent of the cannabis-dispensing pharmacies are located there.

25. Blanco, L. (2017, October 5). Personal interview.

26. La Policía seguirá allanando casas de cultivadores. El Observador. (2014, December 12). Retrieved from https://www.elobservador.com.uy/la-policia-seguira-allanando-casas-cultivadores-n294024

27. Martínez, I. La Policía sigue allanando a cultivadores de marihuana registrados. La Diaria. (2017, July 7). Retrieved from https://ladiaria.com.uy/articulo/2017/7/la-policia-sigue-allanando-a-cultivadores-de-marihuana-registrados/

28. Bello, C. Gobierno salió a fiscalizar a fin de evitar el turismo cannábico. El Observador. (2018, January 2). Retrieved from https://www.elobservador.com.uy/gobierno-salio-fiscalizar-fin-evitar-el-turismo-cannabico-n1155653

29. Capurro, E. Florece el turismo cannábico en Uruguay a pesar de estar prohibido. Vice. (2017, October 11). Retrieved from https://www.vice.com/es_mx/article/evp3ww/florece-el-turismo-cannabico-en-uruguay-a-pesar-de-estar-prohibido. Also see Vexler, E. Aunque se prohíbe para turistas, en Punta del Este los argentinos piden marihuana. Clarín. (2018, January 7). Retrieved from https://www.clarin.com/sociedad/prohibe-turistas-punta-argentinos-piden-marihuana_0_SJQOYcJEG.html

30. Presidencia de la República. Ingreso de turistas a Uruguay se incrementó 21% en 2017. Página Oficial de La Presidencia de La República de Uruguay. (2017, December 29). Retrieved from https://www.presidencia.gub.uy/comunicacion/comunicacionnoticias/dos-mil-dieciocho-alcanzara-crecimiento-de-un-veintiun-porciento-turistas

31. Sabini: La regularización de la marihuana ha sido “efectiva y necesaria.” Diario La República. (2018, January 1). Retrieved from http://www.republica.com.uy/sabini-la-regularizacion-la-marihuana-ha-efectiva-necesaria/

32. Haberkorn, L. Uruguay leader calls Colorado pot law ‘fiction.’ The Denver Post. (2015, May 2). Retrieved from https://www.denverpost.com/2014/05/02/uruguay-leader-calls-colorado-pot-law-fiction/

33. Un primer día difícil para el cannabis medicinal. El Observador. (2017, December 20). Retrieved from https://www.elobservador.com.uy/un-primer-dia-dificil-el-cannabis-medicinal-farmacias-n1152975

34. Empresa australiana comienza a plantar cannabis en Uruguay para uso medicinal. Montevideo Portal. (2017, August 16). Retrieved from http://www.montevideo.com.uy/contenido/Empresa-australiana-comienza-a-plantar-cannabis-en-Uruguay-para-uso-medicinal-351981

35. Monitor Cannabis. Retrieved February 26, 2018, from http://monitorcannabis.uy/proyecto/

36. Article 42 of Law 19172: “It is hereby created within the scope of the Ministry of Public Health, a Specialized Unit in Evaluation and Monitoring of this law that will have a technical nature and will be made up of personnel specialized in the evaluation and monitoring of policies. It will be independent and will issue annual reports that, without being binding, should be taken into consideration by the agencies and entities in charge of the execution of this law. Said report will be submitted to the General Assembly.”

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