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AP Photo/Matilde Campodonico

GETTING REGULATION RIGHT

Assessing Uruguay's Historic Cannabis Initiative

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A look at the implementation of Uruguay's law so far reveals some apparent early obstacles that policymakers should consider if the measure is to achieve what it is intended to. Studying and evaluating these obstacles in the context of the broader impact of the law is vital to the future of the country's historic cannabis initiative.

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KEY FINDINGS

After nearly three years the final element of Uruguay's historic cannabis law is set to be implemented, as commercial sales are expected to begin in the coming weeks. While advancements have been slow and deliberate, Uruguay is not alone in taking such a cautious approach. The U.S. state of Maryland, for instance, approved a medical cannabis program in 2013, but a series of careful adjustments has postponed sales until 2017.

Now that the commercial sales element of the law is about to be phased in, the government of President Tabaré Vázquez is facing a key moment of opportunity. With the basic structures created by the law soon to be up and running, the government should ensure a robust system of monitoring and evaluation is also in place, to assess whether the cannabis law is in fact achieving its goals, identify problems that may arise, and indicate where and how the new regime may need to be revised.

This report lays out the progress that Uruguayan authorities have made in rolling out the law to date, the current monitoring and evaluation efforts underway, and opportunities for Uruguay to respond to potential obstacles thus far. Uruguay's government makes no pretense that its law should be a model for others. But Uruguay's leaders also know that, as the first nation to legalize and regulate every level of the cannabis market, their new system will be coming under close scrutiny, at home and abroad. As citizens and leaders elsewhere ponder whether and how to legalize and regulate cannabis in their own countries, the lessons to be learned in Uruguay can help inform cannabis policy well beyond Uruguay's own borders.

ON IMPLEMENTATION:

- **THE IMPLEMENTATION OF URUGUAY'S HISTORIC CANNABIS LAW HAS MOVED FORWARD AT A CAUTIOUS PACE.** This has allowed authorities to think through the implications of each element of the law. At time of writing, two of the three methods of legal access to cannabis (home cultivation and cannabis clubs) have begun operating, and the third (commercial sales) will begin in the coming weeks. In Uruguay today, there are over 5,300 registered home growers, and 22 licensed cannabis clubs.
- **AS A RESULT OF A NEWLY APPROVED FIVE-YEAR GOVERNMENT SPENDING PLAN, THE PROJECTED BUDGET FOR THE LAW'S MAIN REGULATORY AGENCY, THE INSTITUTE FOR THE REGULATION AND CONTROL OF CANNABIS (IRCCA), IS EXPECTED TO GROW FROM ROUGHLY US\$650,000 IN 2016 TO NEARLY US\$1.2 MILLION IN 2020.** However, serious challenges to implementation remain. While it will receive new funds under the new budget, the relatively small size of the IRCCA staff could hamper the agency's ability to demonstrate its regulatory capacity, and thus the government's ability to properly regulate the legal cannabis market. Moving forward, the government will also need to ensure that public education campaigns are smartly crafted and adequately funded.

KEY FINDINGS

- **AS IMPLEMENTATION HAS PROCEEDED, IT HAS BECOME CLEAR THAT SOME ELEMENTS OF URUGUAY'S CANNABIS EXPERIMENT MAY NEED TO BE REWORKED.** For instance, there is reason to question the government's plan to sell commercial cannabis at a single price of roughly US\$1.20 per gram, regardless of its potency. Polls also show evidence that Uruguayan cannabis users may be reticent to fully stick to the regulations restricting them to one of the three methods of legal access (home-growing, cannabis clubs, or commercial purchase). The future of Uruguayan cannabis clubs, at least as currently allowed by the law, is also complicated by restrictive financial and organizational rules.
- **THE IMPLEMENTATION OF THE LAW SO FAR HAS BEEN HAMPERED BY A LACK OF COORDINATION AND INFORMATION-SHARING AMONG THE INSTITUTIONS ASSOCIATED WITH CANNABIS REGULATION, AS WELL AS WITH THE PUBLIC.** Although the structure of the IRCCA was meant to bring together a wide range of technical expertise to approach bureaucratic problems, it has occasionally resulted in bottlenecks.

ON MONITORING AND EVALUATION:

- **THE GOVERNMENT OF URUGUAY HAS EXPRESSED A SERIOUS COMMITMENT TO MONITORING THE IMPACT OF A LEGAL, REGULATED CANNABIS MARKET.** Since his election in October 2014, President Vázquez has promised that the law will be subject to a careful monitoring and evaluation process. To this effect, a special research unit in the Ministry of Health will submit annual reports to Congress, which will track the law's effects on a series of indicators previously outlined by an appointed "Scientific Advisory Committee."
- **IN PRACTICE, HOWEVER, THE VÁZQUEZ GOVERNMENT CAN DO MORE TO HONOR THIS COMMITMENT.** Official efforts to monitor and evaluate the law thus far have not been made public, hampering civil society and academic efforts to carry out monitoring and evaluation. Researchers complain of not only a lack of access to official data, but also that officials have been slow or uncooperative in approving important research on cannabis-related issues. This has made it unnecessarily difficult for authorities to benefit from independent analysis of cannabis trends and policy in the country.

HISTORY

In December 2013 the South American nation of Uruguay became the first country to pass legislation regulating every level of the market for cannabis. Since then the government has implemented the law in deliberate, calculated steps, fleshing out the regulations for home cultivation, cannabis clubs, and medicinal cannabis. The largest remaining element of the law not in place at time of writing—commercial production and sales of cannabis in pharmacies—is around the corner, and sales are expected to begin in the coming weeks.

As implementation of the law advances, it is vital for Uruguay to make sure that its effects on public health, security, and market dynamics are closely monitored. For drug policy researchers and analysts, the goal is to ensure that this is based as much as possible on a careful evaluation of the facts, and not politicized rhetoric or hyperbole. In turn, this will allow government officials to present the Uruguayan public with an accurate picture of the societal impact of cannabis regulation and ensure that any future changes to the law are based on scientifically rigorous analyses and a full consideration of the costs, benefits and trade-offs involved.

Effective monitoring and evaluation will also have repercussions beyond Uruguay's borders. Governments across the Americas are pursuing cannabis policy reform, and the experience of those countries and localities that have legalized the substance can inform the future of similar initiatives.

In June 2012, Uruguayan President Jose Mujica released a document known as the "Strategy for Life and Coexistence," which included among its 15 points a proposal to "legalize and control cannabis sales." Unlike a previously existing bill in Congress to authorize home cultivation of cannabis, Mujica's proposal—which he laid out in a short bill submitted in Congress—was to create a state monopoly over cannabis production and distribution.

Eventually, Mujica's proposal and the measure

already under debate were reconciled and a second bill was presented to Congress that allowed for home cultivation, medical use, and industrial hemp 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 lower house in July 2013, and the Senate passed it to Mujica to be ratified the following December. The measure, which became Law No. 19,172, was signed into effect on December 24, 2013.



Image 1: A paraphernalia and seed shop in Montevideo's Old City has posted an advisory for curious foreign customers: "we do not sell cannabis"

Unlike similar measures in the U.S. states of Washington and Colorado, Uruguay's law has consistently remained unpopular among the general public since it was first proposed. Consecutive polls conducted from late 2012 to 2015 repeatedly found

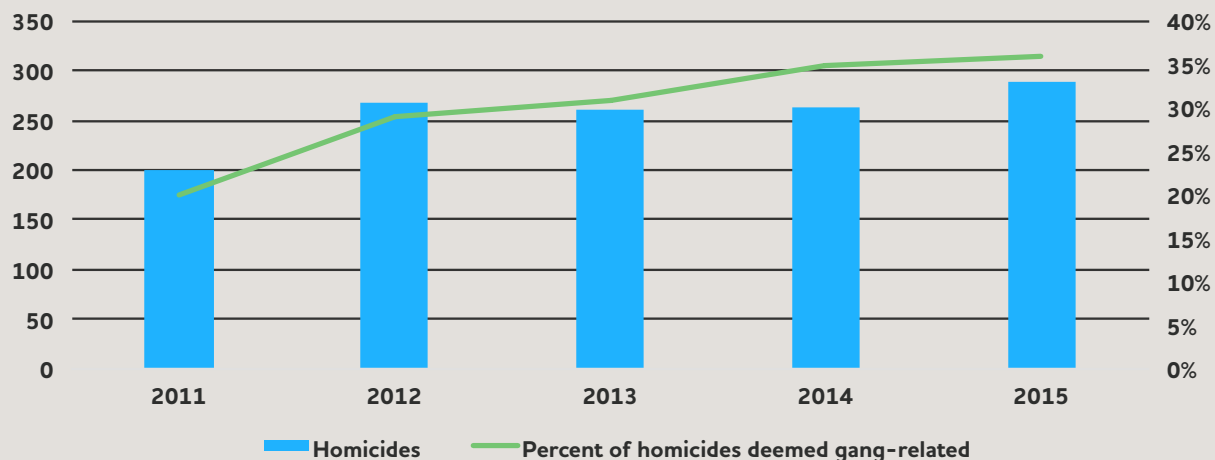
that between 61 and 66 percent of the country opposed the law.¹ Despite this, public attitudes toward the law are more complex than mere disapproval. An October 2013 survey conducted by Factum found that the vast majority (78 percent) of those surveyed said that, given the choice, they would prefer users of cannabis to have access to the drug through the state, compared to just 5 percent who said they would prefer that the drug continue to be sold on the illegal market.²

Despite the unpopularity of the cannabis law, it did not become a primary campaign issue ahead of the October 2014 general election, in which President Vázquez returned to office (he also served as president from 2005-2010) and the Broad Front retained a controlling majority of both houses of Congress. Although the law remains unpopular, it appears that Uruguayans did not feel strongly enough about the issue to punish the government for it at the polls.

It is also important to note that Mujica's support for this law came in the context of its citizen security debate. While Uruguay continues to have one of the lowest homicide rates of the Americas, the number of homicides in recent years has been increasing. Law enforcement authorities in Uruguay have attributed this trend to an increase in so-called “ajustes de cuentas,” or gang-related killings.³ This has fueled perceptions of insecurity in the country. According to a survey released by the Equipos Consultores polling firm in October 2015, 62 percent of Uruguayans view their country as either “unsafe” or “very unsafe.”⁴ While the links between low-level organized crime and the black market for cannabis is not well established in the country, this scenario positions Uruguay as an important case study regarding the impact of legalizing and regulating cannabis on gang-related violence.⁵

FIGURE 1.1

EVOLUTION OF GANG-RELATED HOMICIDES IN URUGUAY, 2011-2015



Source: <http://ow.ly/Q5Fa3044jyJ>

URUGUAY'S CANNABIS LAW: THE FINE PRINT

As passed, the cannabis regulation initiative expressly forbids users from smoking cannabis in schools, enclosed workplaces, hospitals, or any other indoor public spaces where it is forbidden to smoke tobacco. It also lays out three legal methods of accessing the substance, open to all Uruguayan citizens and permanent residents over the age of 18:

1. Individuals can purchase up to 40 grams of cannabis (10 grams per week, according to the regulations) in licensed pharmacies. The cannabis sold by pharmacies is to be produced by a handful of commercial growers specifically licensed by the state to do so. To access the drug, users must first register with the Institute for Regulation and Control of Cannabis (IRCCA).

2. Adults can grow up to six female flowering cannabis plants per household for their own consumption and immediate sharing, so long as individuals have first registered with the IRCCA. 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. Seeds can be obtained through IRCCA-licensed producers, or individuals can register with the National Institute of Seeds (INASE) to grow their own plants.

3. Adults can join non-profit organizations to collectively grow cannabis with others. These “cannabis clubs” must first be registered with the IRCCA and other authorities, and must have between 15 and 45 members. The clubs may grow 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 the IRCCA.

As with any implementation process that spans a transition period in a democratic country, there was a period of uncertainty in Uruguay as to how the incoming government would handle the cannabis law following the October 2014 election.

Even though Vázquez had consistently maintained

that he would implement the law to the letter while on the campaign trail, observers interpreted his every public remark on the law as an indication of its future. When he publicly expressed doubts about Mujica’s claim that the measure would have an impact on insecurity and take a bite out of criminal profits,⁶ these doubts were repeated and—and arguably magnified—in local and international press, fueling speculation over whether the new law would go “up in smoke” under the new president.⁷ Vázquez’s remarks on implementation also varied significantly from the Mujica administration’s plans in other ways. In a September 2014 interview, for instance, he proposed using the government registry of buyers and home-growers to expose users to treatment. His remarks were interpreted by some as a sign Vázquez would implement a more restrictive approach to the law, which could in turn discourage users from joining the registry.⁸

Vázquez put these fears to rest immediately upon taking office, however, by announcing that Milton Romani, Uruguay’s former drug policy director and former ambassador to the Organization of American States (OAS), would become the secretary general of the country’s National Drug Council (JND), replacing the outgoing Julio Calzada. Calzada was an important architect of the law, and the choice of Romani as his successor was taken as clear sign of continuity. Romani held the same post from 2005 to 2011 during Vázquez’s first presidency, and was one of the first voices in Uruguay to publicly call for regulating the black market for marijuana. Indeed, Romani advocated for the creation of state mechanisms to “regulate and control the markets of production, sale and consumption” of drugs in a report published by WOLA in April 2012, two months before Mujica announced his proposal.⁹

Recently, Romani announced that he would be retiring from his post after the implementation of commercial cannabis sales is finalized. As of June 30, his replacement is Diego Olivera, an official who currently heads the youth outreach program of the Ministry of Social Development (MIDES).

IMPLEMENTATION

Since taking office, the Vázquez administration has continued implementation of the law in methodical steps. This is understandable on some level given that Uruguay has no existing licit medical cannabis industry or substantial domestic production. It tasks the state with assuming control and regulation of “the activities of import, export, planting, cultivation, harvesting, production, acquisition in whatever capacity, storage, marketing and distribution of cannabis and its derivatives.” Implementing this has meant creating not only new state institutions, but also a completely new set of regulations and norms.

As passed, the law affords significant authority and discretion to the executive branch, which provides the presidency with an important degree of flexibility regarding the wide range

of policy details associated with regulating the cannabis market. These were cemented before the transition period, when the Mujica government released regulations of the law on May 2, 2014. Perhaps the most important change between the text of the law as it was passed in December 2013 and regulations issued in May 2014 has to do with the mutual exclusivity of each of the three options for legal access. After the law was passed, the administration concluded that it would be unfeasible to allow access to cannabis from more than one option. As such, the regulations specifically state that “acquiring psychoactive cannabis from more than one of the above sources is prohibited.” They also require the IRCCA to destroy excess yield of the drug submitted by clubs and home-growers alike.

GOALS

Ever since the law was first proposed, government officials have publicly provided a wide variety of possible benefits of the law, ranging from reducing insecurity to reducing the demand for other, more harmful drugs such as a smokeable cocaine precursor known locally as “pasta base.” The text of the law itself allows for a clear expression of its goals. In general terms, it has three main objectives:

- **REDUCING** drug-related violence by removing the most widely-consumed drug—cannabis—from the black market.¹⁰
- **PROMOTING** the health of both the general public and cannabis users through education and prevention campaigns, and controlling both the quality and potency of cannabis consumed in the country.¹¹
- **ELIMINATING** the uncertainties created by previous laws, which afforded judges and police an arbitrary level of leeway regarding the sentencing and repression of drug users.¹²

THE IRCCA

Since the signing of the law, implementation has been primarily carried out by a new regulatory organization, the Institute for the Regulation and Control of Cannabis (IRCCA). This is unique from the U.S. states that have legalized, which have largely opted to assign regulatory responsibilities to existing bodies. The IRCCA is also unique from other state regulatory bodies in Uruguay in that it is organized with an emphasis on interagency cooperation. While the IRCCA follows the policy directives of the National Drug Council (JND), the agency is linked to the executive branch under the Ministry of Public Health.

In addition to establishing the security and consumer safety details related to cannabis cultivation, the IRCCA is authorized to:

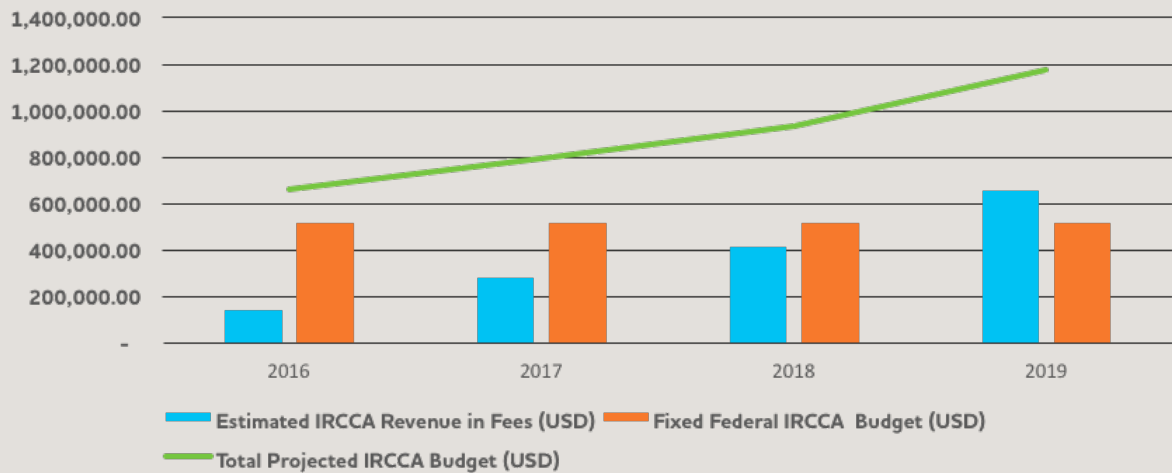
- Require owners or occupiers of real and personal property in which cannabis is cultivated to demonstrate proof of documents authorizing these activities
- Require information from third parties, with the authority to compel their compliance
- Inspect the premises used for planting, cultivation, harvest, production, storage, distribution or dispensation of cannabis, as well as the vehicles used for the transportation of these products (for commercial cannabis cultivators and cannabis clubs). For home growers, IRCCA personnel may only enter households with the consent of the owner or the order of a judge
- Carry out analyses and testing of seeds, plants and the product of cannabis plants located in commercial establishments, in order to determine whether they meet the legal and regulatory requirements
- Apply sanctions for any infractions to the law or corresponding regulations. Penalties include fines, forced closures and seizures, and legal action
- Request the help of the Ministry of the Interior and police force to carry out their duties

IRCCA BUDGET

A major obstacle to implementation for authorities is the fact that, under Uruguayan law, the national budget spans five years, and is created during the first year of every presidential administration. This meant that for 18 months following the IRCCA's May 2014 launch, the institute was faced with the gargantuan task of creating a regulatory framework for legal cannabis using a limited staff, a supplemental budget, and no prior existing regulatory models to build from (e.g., no existing medical or industrial cannabis industry). It has been unable to fully develop all of the institute's organs as a result (see Figure 2.2 below).

This has changed in recent months. On December 20, 2015, the Vázquez government signed a budget bill into effect that devotes 15 million Uruguayan pesos (roughly US\$518,220) per year until 2020, and this figure will be supplemented by licensing fees placed on the companies producing commercial cannabis for sale in pharmacies.¹³ According to official projections, the IRCCA's revenue from fees is expected to climb annually, from an estimated 4 million Uruguayan pesos (US\$138,192) to 19 million pesos (US\$656,412) in 2019.

FIGURE 2.1
IRCCA BUDGET, 2016-2019



Source: <http://ow.ly/uP5Z3044jOB>

FIGURE 2.2
IRCCA BUDGET AND REVENUE

| YEAR | ESTIMATED IRCCA REVENUE IN FEES (USD) | FIXED NATIONAL IRCCA BUDGET (USD) | TOTAL PROJECT-ED IRCCA BUDGET (USD) |
|------|---------------------------------------|-----------------------------------|-------------------------------------|
| 2016 | 138,192 | 518,220 | 656,412 |
| 2017 | 276,384 | 518,220 | 794,604 |
| 2018 | 414,576 | 518,220 | 932,796 |
| 2019 | 656,412 | 518,220 | 1,174,632 |

Source: <http://ow.ly/uP5Z3044jOB>

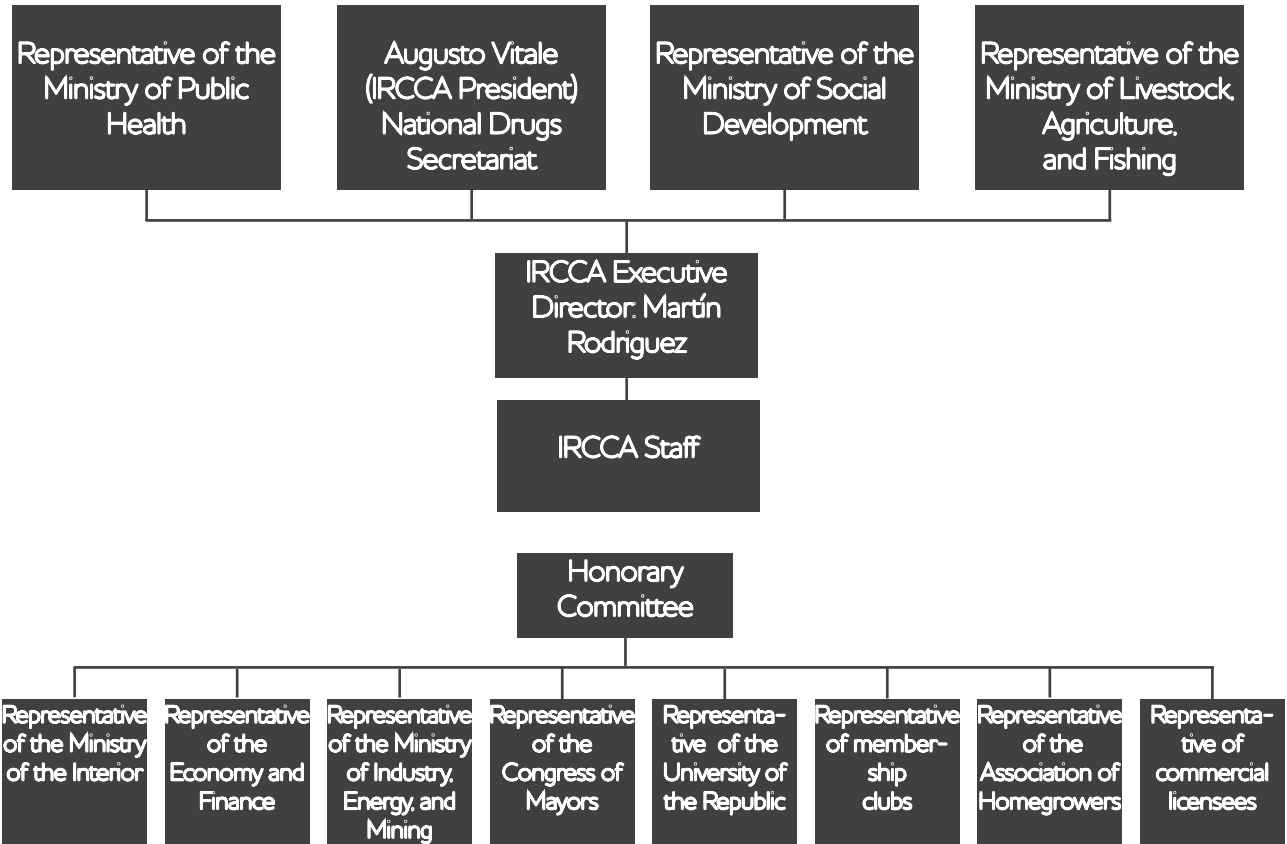
IRCCA BOARD OF DIRECTORS AND EXECUTIVE DIRECTOR

The institute’s main leadership body is the four-person Board of Directors (each of whom has an alternate who can attend meetings and vote on their behalf), which includes a president (currently Augusto Vitale) appointed by the JND. The board has wide authority over the IRCCA’s operations, and must pass by majority vote all “plans, programs and special projects,” as well as administer funds, set the cost of licenses, hire or dismiss personnel, and create its own internal rules and procedures. In the case of a tie, the president of the board is allowed to cast a double vote.

In addition to the president, the board includes representatives of the Ministries of Public Health; Social Development; and Livestock, Agriculture, and Fishing; all of whom serve for five-year terms, allowing

for only one consecutive re-election. Complicating this structure somewhat is the fact that while the board is presided over by a JND representative, the law states that the IRCCA will be “linked and coordinated with the executive branch” through the Ministry of Public Health, though the nature of this relationship is not specified further.

While the board is described in the regulations as the IRCCA’s “chief organ,” the board is also tasked with selecting an executive director by majority vote (and with the veto vote of the IRCCA president) who is charged with implementing the board’s resolutions and administering the day-to-day operations of the institute. At time of publication, the IRCCA’s executive director is Martin Rodriguez.



National Honorary Committee

Also included in the IRCCA's structure is a body known as the National Honorary Committee. While it will have no decision-making authority, the committee is tasked with serving in an advisory capacity, providing informed analysis of the IRCCA's work and how it affects all of the various stakeholders in cannabis legalization by resolutions passed with majority vote. The committee is comprised of nine members, one

from each of the following organizations: the Ministry of Education and Culture, the Ministry of the Interior, the Ministry of Economy and Finance, the Ministry of Industry, Energy and Mining, the University of the Republic, the Congress of Mayors, the cannabis membership clubs, the home growing associations, and the commercial licensees. At time of publication, the makeup of the nongovernmental representatives to the committee has not yet been finalized.

THREE METHODS OF ACCESS

After the measure was signed into law, the government issued a decree fleshing out regulations on legal cannabis, which authorize the IRCCA to issue licenses for home-growing, cannabis clubs, and for commercial cannabis cultivation. These regulations also offered some important qualifications to the law that were not clear in its text. As noted, the most important of these has to do with the mutual exclusivity of the methods for legally accessing cannabis. After the law was passed, the government opted for a strict, more tightly-controlled approach, limiting users to sign up for only one of the three legal methods of accessing cannabis.

- Be Uruguayan citizens or permanent residents over the age of 18
- Demonstrate proof of residence (generally by displaying a utility bill)
- Ensure that cultivation occurs on premises, and no more than a maximum of six female flowering plants can be cultivated per household (male cannabis plants, and immature female plants, are not counted)

Additionally, the IRCCA established an initial six-month “amnesty period,” in which it allowed applicants which already possessed up to six plants to register them legally. Since this deadline expired on February 23, 2015, home-growers can still register existing plants but must first register seed varieties with the National Institute of Seeds (INASE). At time of writing the total number of home-growers in Uruguay stands at 5,332¹⁴ yet it is worth noting that this still falls short of the total number who currently tend unregistered marijuana plants already in the country. There is no official figure for this, but home-growing is not uncommon among Uruguayan cannabis users and some estimates have placed the number of growers as high as 10,000-40,000.¹⁵

Home Cultivation

Nearly four months after the regulations were announced, the IRCCA began issuing the first permits for home growing on August 27, 2014. The institute began accepting applications for those wishing to grow up to six cannabis plants per home, with an annual yield not exceeding 480 grams, so long as applicants committed to keeping plants in a secure area and outside the reach of minors. Applicants are allowed to submit applications at any post office around the country, though the IRCCA also requires applicants to:

Cannabis Clubs

The IRCCA moved forward to establish the next method of access, cannabis clubs, in October 2014. Under the law, clubs can have between 15 and 45 members, and grow up to 99 flowering plants, so long as each member does not receive higher than the annual yield cap of 480 grams. To register with the IRCCA, prospective club organizers must first register as civil associations with the Ministry of Education and Culture. They then need to obtain the space which will be used to grow plants, taking into account the IRCCA's guidelines on infrastructure,¹⁶ security and club operations. Among other things, official rules state that:

- Members must be over 18, either Uruguayan citizens or permanent residents for over three months. Minors may not enter clubs under any circumstances.
- Prospective club organizers must present a “cultivation plan” alongside their application, detailing strategies to grow and distribute cannabis to members securely.
- The plan also must detail the club's hours of operations, outside of which any business activity is strictly prohibited.
- Clubs must have a security system that covers every entrance and opening to the property, and make sure that any surveillance equipment is kept in working order.
- Clubs' yields should be logged, and any excess should be reported and turned over to the IRCCA, which will decide what to do with it.
- Club facilities cannot be located within 150 meters of a school or drug rehabilitation centers.
- All activities must be contained on club property, with no use of the sidewalk or adjacent public areas.
- Part of the clubs' mission must include educating members on responsible cannabis use.
- All advertisement is prohibited, as is sponsoring any events off club property. Even posting any kind of sign on the exterior of the property that identifies it as a cannabis club is explicitly forbidden.

According to the IRCCA, authorities has approved 22 club licenses as of October 31, 2016, though there are reports that several others have begun the process or registering with authorities.

Medical Marijuana and Cannabis Research

On February 4, 2015, the government released a set of regulations which permit the IRCCA to authorize the scientific community to obtain cannabis for study, and lay out a partial framework for the dispensation of medical marijuana. 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.”

The regulations establish that acquiring cannabis for medical purposes will eventually be similar to doing so for adult non-medical use: users will be able to purchase cannabis and cannabis products from pharmacies, but will have to present

prescriptions. Each prescription can only be valid for a maximum of 30 days, during which accessing cannabis from any other method is forbidden. The goal of this rule, according to authorities,¹⁷ is to prevent the medical marijuana system from becoming a source of supply for recreational users.

However, these regulations are still a long way from being fully implemented. The Ministry of Public Health has not authorized the development of marijuana-based medication for sale in Uruguay, and many doctors in the country lack a basic understanding of the potential treatments associated with cannabis. To correct this, in mid-2015 the JND began partnering with the Uruguayan Medical Union (SMU) to offer training courses to doctors interested in learning about the clinical uses of medical marijuana. The first of these courses was carried out from August to October 2015. There are tentative plans for future courses but this is contingent on additional funding from the JND.

Dr. Raquel Peyraube, who co-facilitated this training and is a leading Uruguayan researcher of therapeutic applications of cannabis, argues that this kind of reality-based education is sorely needed for doctors in Uruguay.¹⁸ According to Peyraube, the country's medical industry is marked by a persistent, widespread "culture of prohibitionism."

Peyraube also believes that efforts like these also have the potential to greatly ease the lives of patients seeking medical marijuana products. As it stands now, Uruguayan patients that wish to receive tested cannabis or medication containing cannabinoids have to go to a specialist and obtain an "orange" prescription ("receta naranja"), the most restricted category.¹⁹ This puts medical marijuana products—even non-psychoactive medications—in the same category as

amphetamines and opiates. Patients then need to apply for special permission with the MSP under its "compassionate use" exception, which allows individuals in special circumstances to import (free of tax) experimental drugs that have not yet been approved for use in Uruguay.

It may be a long way off, and will ultimately require the approval of the Ministry of Public Health, but authorities are also in the early stages of establishing large-scale cultivation of cannabis for medical purposes. Currently, the JND is in talks with three foreign companies (one Israeli, one Canadian, and one Australian) that have expressed interest in producing medical marijuana in Uruguay. This would in turn be sold in Uruguay as well as exported to other countries which allow legal access to medical marijuana. In remarks to the press while in office, former drug czar Milton Romani has mentioned plans to lease 30 hectares (about 75 acres, and three times the land currently reserved for commercial cannabis) to these companies, and described the potential revenue as potentially "ten times bigger" than the expected income from cultivation for commercial purposes.²⁰

Commercial Cannabis Use and Production

Commercial cannabis sales have not yet begun in Uruguay, but they are expected to begin in the coming weeks. Some have been critical of the Uruguayan government due to the slow rollout of the law since its passage, but authorities say they have prioritized getting a legal cannabis market right over setting it up quickly. Uruguay is not alone in taking such a cautious approach. The U.S. state of Maryland, for instance, approved a medical cannabis program in 2013, but a series of careful adjustments has postponed sales until 2017.

After months of seemingly little progress on this front, the government took an important

step forward on October 1, 2015. In a press conference, Presidential Undersecretary Juan Andrés Roballo and Augusto Vitale of the IRCCA shed light on some of the most important pending questions around Uruguay's cannabis policy innovation. Among other things, they revealed that after a thorough vetting of the more than twenty companies from around the globe that submitted proposals in reply to IRCCA's August 2014 request for bids for commercial cultivation, two initial companies had been selected to grow cannabis for sale in pharmacies.

These two, Simbiosis and ICCorp (International Cannabis Corporation), are both of mixed Uruguayan and foreign ownership. Simbiosis is backed by Uruguayan and Argentine capital, while ICCorp is financed by Uruguayan and British investors. The latter has links to Uruguayan agro-industry magnate Juan Sartori, who is president and founder of the Union Agriculture Group, the largest agriculture business in the country.¹³

The 14-month gap between the opening of the bid process and the selection is due in part, officials say, to complications arising from procedural delays and a long process of obtaining and verifying the financial records of each applicant.

Both of the final firms selected have been licensed to grow a maximum of two tons of cannabis each per year. Estimates of the size of Uruguay's cannabis market have placed it at around 25 tons, so the initial output of the two licensed companies will fall well short of the full market size. However, starting small was a deliberate choice by Uruguayan authorities, in line with their careful implementation of the law. This decision will likely keep from flooding points of sale with too much product that they won't be able to sell.

Starting small also allows for a more realistic

assumption of the number of those who will register to access their allotted 40 grams per month. Like the registration for other methods of access, it will likely be slow at first. Moreover, in the context of Uruguay's market and access rules, four tons of cannabis products can go quite a long way. If the full four tons are produced and commercial sales begin in the coming weeks as expected, the quantity would be sufficient for over 15,000 Uruguayans to register and consume their allocated 40 grams per month before the end of the year.

As more cannabis consumers register to purchase cannabis, so will the output by Simbiosis and ICCorp. Additionally, authorities have not discounted the possibility of carrying out another round of bidding for future licenses, and it is likely that the number of commercial growers will increase in the coming years.

While there are a number of other elements that will need to be ironed out before cannabis is put on sale, the cost to consumers has been settled. Authorities say that commercial cannabis will be competitive with the black market cost of "prensado," and available at roughly US\$1.20 per gram. At least at first, this same price will apply to each of two or three different planned varieties that will be offered, which will reportedly contain low, mid-, and high levels of Tetrahydrocannabinol (THC), up to the legal limit of 15 percent. These varieties will also contain a corresponding percentage of Cannabidiol (CBD), at ratios meant to mitigate potential side effects of the THC.

As with home growers and cannabis clubs, the government plans to carefully document and regulate commercial cannabis. Those interested in obtaining cannabis from pharmacies will have to register with the IRCCA to verify that they are not on either of the other two registries (for home growing and clubs), and prove that they

are adults and either citizens or legal residents of Uruguay. Interested purchasers will also be restricted under the regulations to buying 10 grams per week, and authorities have said that users will have to document their purchases by submitting an electronic fingerprint scan, which will be checked against the confidential IRCCA registry.

According to the May 2014 regulations, commercial cannabis must be grown on state land, and security forces will take part in watching over cultivation to supplement private security paid for by the licensed growers themselves. In its August 2014 request for proposals to private

firms interested in growing cannabis, the IRCCA announced that commercial cultivation will occur on a single plot of land in San Jose Department (just northwest of Montevideo) located near the Libertad Penitentiary, a maximum security prison.

This proximity is no coincidence. Authorities say the 10 hectare (25 acre) plot of land, which has been fenced off with razor wire with guard towers placed on each of its four sides, will benefit from the security detail already stationed at the prison. Cultivation will take place in greenhouses, and will be organized so as to guarantee a perpetual harvest.



Image 2: Uruguay's entire commercial cannabis supply is being grown on state land next to the maximum security Libertad Penitentiary.



Image 3: A security perimeter has been placed around the plot of land used to grow Uruguay's commercial cannabis supply.

Between the executive regulations, the October 2015 announcement, and subsequent developments, authorities have also revealed that:

- Seed varieties were provided to these companies by the IRCCA, which will also attempt to standardize the potency of commercially-available cannabis across varieties.
- The licenses are valid for periods of up to five years, but companies will be reviewed on an annual basis for renewal.
- Companies will be tasked with packaging the product for sale (in accordance with labeling requirements to be set by the IRCCA), as well as the task of transporting it to participating pharmacies directly.
- The companies themselves will pay for additional security, as well as for electricity and water.
- All packaging must preserve the quality of the product for at least 6 months, and contain a maximum of 10 grams. Storing the product in any location that is not on the designated production site is not permitted.
- Pharmacies will be allowed to restock no more than once every two weeks, and are permitted to make 30 percent of the price of the drug in profits, or around 3.6 dollars for every 10 grams sold.²²

While the May 2014 regulations state that transactions related to cannabis sales will be exempt from standard taxes on non-essential goods, it is not entirely accurate to suggest (as some press reports have indicated²³) that it will be “tax free.” Rather, the IRCCA will charge the companies with a “variable fee” for the operating licenses, and officials have suggested that this could be used to adjust the price of the drug in pharmacies as needed. At time of writing, it remains unclear how much the fee for each commercial licensee will be. As mentioned above, however, these fees are expected to generate US\$1.3 million from 2017 to 2019.

It is also unclear just how profitable cannabis production will be, and the commercial licensees have privately expressed doubts about this as well. Officials have publicly said that the growers stand to make between US\$250,000 and US\$300,000 per ton produced, with an initial investment of between US\$600,000 and US\$800,000. With initial cultivation set at a maximum of two tons per grower annually, this means both Simbiosis and ICCorp could stand to begin making a profit after the first year’s operations, assuming maximum production.

However, commercial licensees are conscious that there are other benefits to the contract beyond initial profitability. According to Eduardo Blasina of Simbiosis, both his company and ICCorp see themselves in a privileged position at the forefront of a globally emerging market. While this initial venture may not turn a profit, it will allow both companies to gain valuable technical expertise which they might in turn offer in other countries that decide to follow in Uruguay’s footsteps. Additionally, Blasina is optimistic that the IRCCA will eventually authorize the licensees

to produce and sell cannabis-infused products to supplement their income. According to Blasina:

“We got the license for recreational, but as a company we aspire to take on medicinal, textiles, and oil, beyond this opportunity [...] It’s a one-million-dollar-plus investment, where you have a low price. The numbers are very tight, but the primary objective of all of this isn’t to become rich. The objective is to show the world that this is going well, not losing money but not becoming rich either. In any case, concerning profit margins there is always the pharmaceutical market. If we say, ‘as of now we will make pharmaceutical products and export them to Brazil alone,’ a country 50 times bigger than ours, that is where we would have the capacity for better margins.”

Still, Blasina says that Simbiosis is aware of the risks involved. When asked whether he had concerns about the investment, he claimed:

“Yes, the price seems to me to be extremely low and it’s a big risk. More than anything there is a risk that when the five years of the license are up another government will have won elections. All this is shut down, and then what do you do with everything you have made? But if everything goes well and our license is renewed, and we begin producing a ton of other products, that will be an interesting business.”

Many of the doubts about the future of commercial cannabis appear to have less basis now that sales are set to start, but even still, only time will tell whether the two companies can establish a profitable model out of their experience.

PUBLIC EDUCATION AND PREVENTION



Image 4: The JND's primary prevention campaign has been promoted on public media and limited signage.

The text of the law explicitly charges the JND to conduct education, publicity and outreach and awareness campaigns for the general population “regarding the risks, effects and potential harms of drug use, for which funding may make agreements and arrangements with state enterprises and the private sector.”

Since December 2013, the JND has carried out one major abuse prevention campaign involving cannabis, which is also designed to target the abuse of alcohol and other substances. The campaign, titled “Consuming any drug has risks” (“Todo consumo de drogas tiene riesgos”), receives funding from both the JND as well as the proceeds of any seized funds, goods, or property

decommissioned by the National Police during drug-related operations. Its objectives are 1.) to encourage adult consumers of both cannabis and alcohol to educate themselves about responsible consumption and the health risks associated with ingesting mind-altering substances, and 2.) foster a culture of “zero consumption” among pregnant women, drivers, and youth under the age of 18. To this end, the JND has promoted the campaign on social media and paid for radio and television spots which have played on public media outlets, as well as for limited billboard space at bus stops and on public transportation in major cities.

JND officials say these efforts will be supplemented in the coming months by additional, more targeted campaigns aimed at cannabis users themselves. According to former National Drug Secretary Milton Romani, the JND is planning to launch a promotional drive that will seek to educate cannabis users on the benefits of registering with the IRCCA, as well as to encourage interested users to join the registry for commercial sales. Romani claims the JND is also supportive of creating pamphlets meant to promote risk awareness, which could be offered to users who purchase the drug in pharmacies. According to the official:

“[We are] planning on doing some prevention work meant for inside the pharmacies themselves. I don’t know how yet, but inside the points of access, to set up some kind of protocol or some mechanism that would allow us to, for example, when someone goes to pick up cannabis, recommend which varieties of cannabis are better for which users. But I think we could go further [...] We could have a protocol with civil society that would have a harm reduction outlook to educate users, to say ‘the use of cannabis can bring such and

such problems, if you recognize this, you should see someone, or get help.' I think that would be very good."²⁴

To date, however, it is unclear whether the government has built any of these public education campaigns around research and message testing, either through polling, focus groups, or media analyses. Such scientific approaches to anti-substance abuse campaigns are especially important given the mixed evidence regarding their general effectiveness in the United States and elsewhere.²⁵

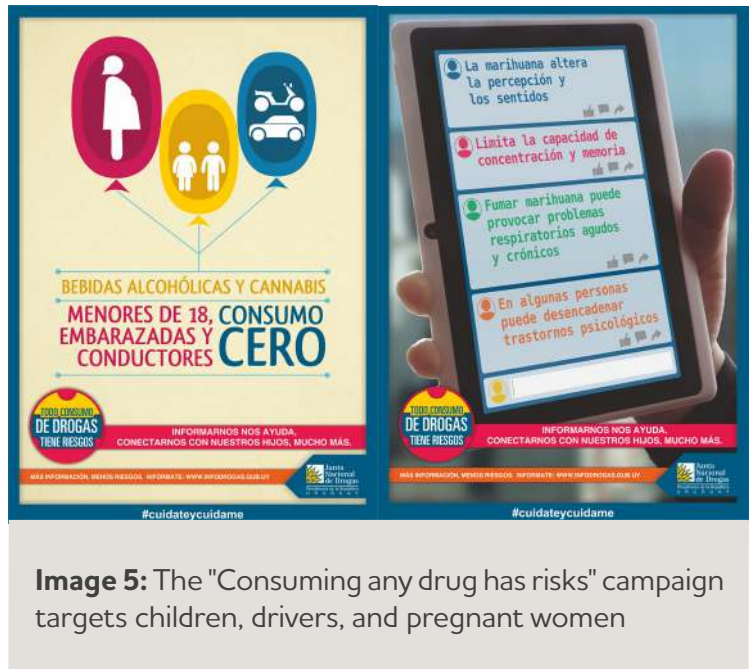


Image 5: The "Consuming any drug has risks" campaign targets children, drivers, and pregnant women

THE MINISTRY OF THE INTERIOR'S POLICE PROTOCOL

In the months after the law was passed, it became clear that in Uruguay a lingering disconnect existed between the letter of the law and how it is actually enforced.²⁶ In November 2014, for instance, an IRCCA-registered grower in the northern city of Bella Union was arrested and falsely accused of violating his license by having 11 cannabis plants in his home.²⁷ However, a judge subsequently released him and returned his plants when it became clear that the extra five were males and seedlings, which do not become psychoactive and do not count as contraband.

As a result of incidents like these, civil society groups that were among the biggest proponents of legalization leading up to the law's passage, such as the human rights organization Proderechos, approached the Ministry of Interior (which is responsible for the National Police) about the need to clarify standard operating procedures during police encounters involving cannabis. As a result of this dialogue, in August 2015

the ministry released a set of guidelines for police officers meant to clear up this apparent disconnect. It established, among other things, that:

- The sole existence of cannabis plants is not, in and of itself, grounds for criminal suspicion. While cultivation exceeding six female flowering plants is clearly proscribed under the law, the ministry guidelines assert that in order for police to get involved, allegations must refer to "the existence in some way of trafficking, sales, commerce, supply or other illicit behavior in order to constitute a crime."
- Police officers do not have authority to demand to see users' registration with the IRCCA. This can only be demanded by a judge, which can refer to the IRCCA for its records directly.

This is an important development in the implementation of the law, as it effectively shields unregistered home growers from direct police action, so long as they do not engage in the black market.

- Seizures or forced checks, as well as the destruction of cannabis plants, may only occur with the permission of a judge. This means that police do not have the sole authority to destroy potentially illicit cultivation without consulting a judge.

The establishment of the protocol was an important development in the implementation of the law, as it effectively shields unregistered home growers from direct police action, so long as they do not engage in the black market. These requirements are, by and large, in line with Uruguay's historically libertarian approach to the use of illicit drugs. In general, when the letter of the law and the privacy concerns of small-time users may potentially cross, these rules tend to favor individual liberty over conformity with the law. Thus, in the words of Martin Collazo of Proderechos, the police protocol is a "great victory of the new social movement [... the result of] a very good process of dialogue between the interior ministry and social organizations."²⁸

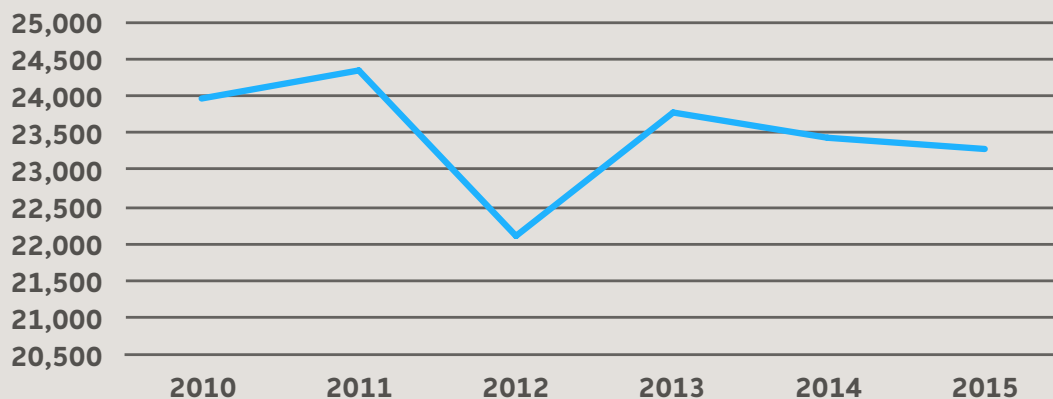
ROAD SAFETY

The text of the law explicitly forbids driving under the influence of cannabis, yet neither it nor the executive regulations established a legal limit for cannabis ingestion. As a result, law enforcement authorities and the National Road Safety Unit (Unidad Nacional de Seguridad Vial, UNASEV) have adopted a "zero tolerance" policy for testing drivers for the use of cannabis (alongside cocaine and alcohol). In mid-2014,

the government ordered 3,000 saliva testing kits from the German government in order to administer to drivers on the basis officers' suspicion. Under the law, those proven to have been driving with cannabis in their system can have their drivers' licenses suspended for six months to one year on the first offense, and after the second offense can have their license suspended for two years or even revoked.

FIGURE 4.1

TRAFFIC ACCIDENTS IN URUGUAY, 2010-2015



Source: <http://ow.ly/x9tz3044kbb>

Clearly, data on the law's impact is premature until commercial cannabis sales go into effect. However, it is interesting to note that data from the National Road Safety Unit (UNASEV)²⁹ suggests that following the law's passage in December 2013, the subsequent 12 months did not see a rise in reported traffic accidents. According to UNASEV data, total reported traffic accidents actually fell compared to the

previous year, as did the number of deaths from traffic accidents (538 in 2014 vs 567 in 2013). UNASV has not, however, made public its data on the number of motorists found to be driving with cannabis and other drugs in their system in violation of Uruguay's "zero tolerance" approach since testing for both cannabis and cocaine traces began in August 2014.

ANALYSIS

The implementation of Uruguay's cannabis law is moving forward, and the approval of the Vázquez administration's budget proposal means that the government will have more resources at its disposal. However, there are still a number of key challenges that policymakers will have to overcome in order to ensure that the law is implemented to its fullest potential. In general, these obstacles can be grouped into three main categories, relating to a lack of resources, the potential unviability of elements of both the law and executive regulations, and institutional challenges.

Insufficient resources

The IRCCA's regulatory capacities remain relatively weak: The new budget will bring new opportunities for the IRCCA to fully flesh out its internal structure. But it remains to be seen whether new funds will translate into an improved ability to register home growers and clubs, and regulate the market for cannabis. As it stands, it is not clear that the IRCCA has the resources necessary to ensure compliance with the requirements for at-home cultivation and cannabis clubs, even though it is officially tasked with the authority to sanction infractions.

This means that the IRCCA runs the real risk of failing to demonstrate that it has the capacity to make sure that the more than 4,000 individuals

who have signed up for the home growers' registry are planting no more than the maximum number of plants or harvesting no more than the maximum annual cap. Particularly at the outset of implementation, it behooves the government to show an enforcement capacity, as doing otherwise runs the risk of fueling noncompliance with the law.

Doing so may require hiring and training enough staff to ensure compliance in the capital city of Montevideo as well as in each of Uruguay's 19 departments. Officials in both the IRCCA and JND acknowledge the importance of this and are working to expand the IRCCA's institutional capacity. To date, According to IRCCA President Augusto Vitale, the IRCCA has grown to a staff of five inspectors charged with monitoring compliance, a team of four administrative personnel, and three specialists working in a technical and legal advisory capacity (in addition to the cabinet representatives on the IRCCA board).³¹ There are also reportedly plans in the works to begin a system of random screenings of home growers in a kind of "lottery." If selected, registered individuals would then face visits from IRCCA inspectors, though only a judge could compel them to open their doors to officials.³²

Public awareness campaigns are as yet unproven in their reach and impact: While the effectiveness of any mass media campaigns in preventing drug use is an open question, it is

unclear what kind of research is being done to bolster JND education campaign efforts, and whether they are reaching target audiences or having an impact. These efforts are limited by resources, as authorities in the JND complain that the budget for prevention campaigns simply does not cover airtime on private media outlets, let alone during primetime slots. In order for the government to meet its goal of raising the perception of risk associated with cannabis use and decrease problematic consumption, it is likely that officials will need to divert more resources to testing the effectiveness of current public campaigns, and the methods used.



Image 6: A pharmacy in downtown Montevideo, Uruguay. Pharmacies are the only authorized point of sale for cannabis under the law.

among users to voluntarily register with the IRCCA, posing a major challenge to the law's objective of undercutting the black market. While the poll found that most individuals who had consumed cannabis in the past 12 months were interested in entering the commercial purchase registry,³³ 41.8 percent of them said they would "probably not" or "definitely not" do so. For potential home growers and club members, this reticence was considerably higher, with the majority (54.9 percent for the home growers' registry and 69.7 for participation in cannabis clubs) expressing a likely or definite rejection of formally registering these activities with the IRCCA. The reasons for this reticence

are unclear, but it may have its roots in some of Vazquez's remarks about using the registries to offer treatment, or perhaps a distrust in government lists dating back to Uruguay's authoritarian past.

Additionally, the regulations' insistence on keeping the three methods of access mutually exclusive creates a mismatch with actual user behavior. In late 2014, Catholic University of Uruguay researchers Fernanda Boidi and Rosario Queirolo conducted a respondent-driven sampling survey of 294 heavy users (defined as consuming

cannabis at least once a week) in Montevideo.³⁴ According to their findings, home growers are particularly likely to find that their plants can only partially meet their demand. While 27.4 percent of respondents listed personal cultivation as one of the methods used to obtain marijuana in the previous 12 months, just 6.1 percent said that

The viability of the law's provisions

There is considerable reluctance to register with the IRCCA, and to sticking to a single method of access: The JND's most recent household survey found widespread reluctance

it had been their primary source of cannabis over the last six months, and just 5.5 said it had accounted for their last use. The researchers claimed that interviews with research subjects suggested “individual self-cultivators do not seem to be successful enough to produce all the marijuana they consume.”

The feasibility of cannabis clubs as a widespread model is in doubt: While cannabis clubs were conceived as a way to encourage cannabis enthusiasts to cultivate in cooperatives rather than relying on a limited variety of commercial products or growing their own plants at home, there are serious questions about their sustainability under the law as it stands. For clubs, the basic collective action challenges faced by all cooperative organizations is compounded by their limit to a maximum of 45 members, making it difficult for organizers to recruit casual users who do not want to play an active role in operations, but would otherwise pay membership fees for access to a high quality product.³⁵

Rosario Queirolo, the Catholic University of Uruguay researcher, is skeptical of their viability. “This is a classic collective action problem,” said Queirolo in an interview.³⁶ “There was a romantic vision of what the clubs would be, but outside a small idealistic circle of activists, people have said: ‘No, I prefer to do something else than participate in the harvest, or prefer to simply pay for it.’ The relation becomes only commercial, and the idea of a club as a meeting space, or of the mystic of the plant, doesn’t interest them.”

On top of this, security requirements and location restrictions make it capital-intensive to start a cannabis club in the first place, in addition to which they require a degree of agricultural expertise. According to Queirolo: “I have my doubts about the long-term survival of the clubs; if the numbers don’t add up, then people

will just end up buying from pharmacies. And if they face the inspection of the IRCCA, many will not pass. Some even have plants just sitting out in the open. The law requires security conditions, but it’s expensive to put up cameras or bars. And what’s more there is a lot of inexperience. There are people who have seen all their plants die, or even people who have had all of their plants stolen, like a club in Maldonado.”

Local human rights organization Proderechos, which has created an experimental club of its own, has lobbied the IRCCA to allow clubs to share cultivation spaces in order to cut down on overhead, but this request was denied when the institute released a November 2015 decree stating that no club could be located within 1,000 meters of another.³⁷

Compounding this problem is the fact that, despite the updated police protocol, neither the general population nor the police force has a clear understanding of the details of the cannabis law. Club members report frequent complaints by neighbors, leading to multiple police encounters with officers that show little understanding of standard operating procedures for legal cannabis cases.³⁸

There is a lack of unanimity among stakeholders involved in commercial sales and distribution: Pharmacies are the only point of sale authorized under the law, and their participation is vital to the success of commercial cannabis sales in Uruguay. However, the main actors in the pharmacy industry are conflicted about the law. The two largest associations of pharmacy owners in the country, the Pharmacy Center of Uruguay (CFU) and the Association of Pharmacies of the Interior (AFI), have been generally supportive since its passage, and have been engaged in close talks with the IRCCA regarding cannabis sales in recent months. These talks include logistical questions such as the installation of electronic

fingerprint scanners and user registry software in participating pharmacies, security guarantees, and the associated costs of the scanners and registry software to the locales. In March 2016, Uruguayan authorities announced an agreement with both of these associations that outlines the security, storage and distribution requirements for interested pharmacies. This agreement represents a crucial step forward, as it tasks pharmacies themselves with responsibilities that have been left pending since the passage of the law, such as the distribution of the product from cultivation sites to points of sale. It also provides pharmacies with a set wholesale price for cannabis, at US\$0.90 per gram—affording them a 30 percent profit margin per each gram sold.

Meanwhile, the talks have occurred without an important actor in Uruguay's pharmacy business: the Association of Chemistry and Pharmacy (AQFU). As a professional association that represents pharmacists, the AQFU has remained critical of the CFU and AFI, is vocally opposed to the implementation of the law, and its leadership has warned of large-scale resignations in protest. The group maintains that its members should not be forced to dispense recreational marijuana, as doing so would violate their professional code of ethics and commitment to promoting their patients' individual health.³⁹ So far, the government has maintained that the AQFU's conflict with the pharmacy owners is a dispute between private actors, and has not interfered. Yet this battle represents a potential stumbling block for implementation. If pharmacy owners fear losing their technicians over their decision to stock cannabis, it could limit the number of locations selling the drug.

Institutional challenges

The implementation of the law has at times

been hampered by institutional challenges. These can be divided up into three categories: organizational concerns, cultural concerns, and informational concerns.

Organizational concerns

In the course of its work, the IRCCA has made important advances while working with other governmental bodies. This includes coordinating with the Uruguayan postal service to facilitate home-grow registration, creating a framework for seed registration with the National Seeds Institute (INASE), and developing strategies on quality control and traceability which impacted the complementary regulations of the law.

However, there have been challenges as well. As noted above, the IRCCA was created with an emphasis on multi-agency cooperation among four ministries: the JND and the Ministries of Public Health (MSP), Social Development (MIDES), and Agriculture (MGAP). But while this structure was meant to bring together a wide range of technical expertise to approach bureaucratic problems, members of the IRCCA say that in practice it has often resulted in the duplication of efforts. Because the four-member board has such wide-ranging authority over, and because its resolutions must be passed by majority, individual board members can wield tremendous influence over the IRCCA's most basic activities.

Complicating matters is the fact that, while the board is headed by a JND representative, the law states that the IRCCA will be "linked and coordinated with the executive branch" through the Ministry of Public Health (MSP). Neither the details of this link nor the extent of coordination are explicitly defined, which has allowed the MSP representative on the board to take an elevated role in the law's implementation.

Cultural Concerns

Uruguayan observers of this dynamic with a background in public policy have said it is in line with the MSP's internal culture, which is reportedly very ambivalent about the law. According to Uruguayan policy specialist Luis Yarzabal, who until March 2016 was a member of a group of experts advising the government on implementation:

"There is tension within the MSP because on one hand the law's focus on public health is accepted by the authorities, but the clinical experts, particularly psychiatrists, have reservations[...] It has to do with institutional cultures. They have existed for many decades with a different focus. And changing that is not simple."⁴⁰

Daniela Osoreo, who was the MSP representative to the IRCCA Board until July 2016, sees an oversight role as an essential part of her ministry's mission. When questioned in an interview, she remarked that while the IRCCA's work is

important, it "cannot overtake the functions of the MSP." According to Osoreo:

"The ministry has to send the population a clear message. We are very convinced that there is a need to assess a lot of things inside the ministry because this is new[...] And that's where we are now. In the beginning perhaps the ministry of agriculture had to have a more active role. Now we have to implement a policy based on public health."⁴¹

Informational concerns

There is a lack of information on the law not only among the general public, but among key state actors. The new police protocol created with the Interior Ministry protects individual liberties, and Uruguayan police are adhering to the new policy. However, raids on licensed growers have continued despite reports that these growers were respecting the law. Cannabis clubs have also reported regular police encounters prompted by complaints from uninformed neighbors.

MONITORING AND EVALUATION

As noted, President Vázquez has sought to measure the impact of the law based on objective analysis rather than ideology ever since the early days of the 2013 presidential campaign. This is due in part to his repeated calls for what he has termed "a strict and close evaluation of the effect on society of this law,"⁴² and his willingness to publicly question major elements of the cannabis measure, like the use of pharmacies as sales points for recreational marijuana.⁴³ The Vázquez administration continued this promise after taking office, and repeatedly chalked up delays in the law's rollout to a staunch support of careful implementation balanced by a methodical evaluation of its impact. As Milton Romani told reporters in March 2015: "When I began, Tabare

was emphatic that the law will be fulfilled, but the one thing he wanted was for it to be done well. [...] We don't want to rush things."⁴⁴

Yet in spite of Vázquez's support for monitoring and evaluation, the first fifteen months of his administration has provided the public with relatively little in the way of hard data on the early effects of initial implementation of the cannabis measure—more than two years after it was signed into law. Observers attempting to study the Uruguayan experiment complained to the author of having to do "guesswork" to infer the effects of cannabis legalization in the country so far, asserting that official data related to the law's main objectives have not been released in

an organized fashion or in an official capacity. Since the law's key features are not even all in place yet, it is quite obviously too early to make judgements about its impacts. Indeed, firm conclusions based on scientifically rigorous data collection and research will require considerably more time. Now is the time, however, to ensure that the necessary data systems and research infrastructure are in place to conduct the kind of monitoring and evaluation that can guide implementation in the months and years to come.

Even in the face of a reported lack of publicly-available information on these early data points, a number of academic and non-governmental research teams have carried out their own investigations meant to inform implementation and assess both strengths and weaknesses of the law. However, these efforts have faced a host of additional challenges related to official access, varying institutional support, and legal restrictions.



Image 7: The headquarters of the executive branch in downtown Montevideo, Uruguay

DRUG USE SURVEYS

One exception to this lack of information is a series of JND-supported surveys conducted in 2014 and 2015 meant to gauge cannabis and other substance use among both youths and the general population. These include a nationwide household survey on drug use, a nationwide survey of secondary students, and a nationwide survey of university students. Again, these are early indicators that cannot be interpreted as signs that the law has met or failed to meet its aims, but rather a body of research that points to the need for further study. The result of these surveys is an interesting look at both the prevailing trends of substance abuse heading into a climate of full cannabis legalization and

commercialization.

Sixth National Household Survey on Drug Use

In June 2015, the JND released the preliminary results of its sixth household survey on drug use, based on a representative sample of 4,355 individuals between August and December 2014. It should be stated that the sample was collected as the government started to register home grow and cannabis clubs; commercial sales were not yet (and are still not) operational.

The JND household study found that prevalence of cannabis use has increased in every category

FIGURE 5.1**JND NATIONAL HOUSEHOLD SURVEY DATA**

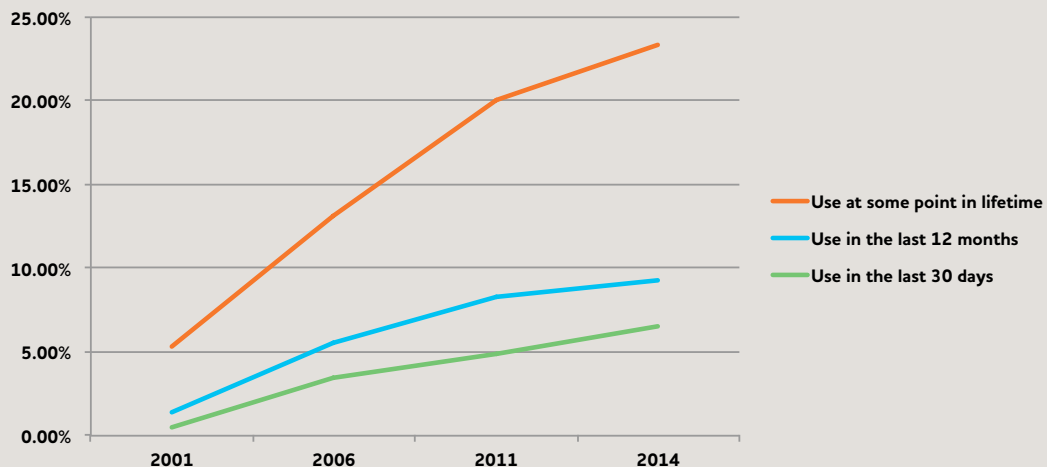
| YEAR | USE AT SOME POINT IN LIFE-TIME | USE IN THE LAST 12 MONTHS | USE IN THE LAST 30 DAYS |
|------|--------------------------------|---------------------------|-------------------------|
| 2001 | 5.3% | 1.4% | 0.5% |
| 2006 | 13.1% | 5.5% | 3.5% |
| 2011 | 20.0% | 8.3% | 4.9% |
| 2014 | 23.3% | 9.3% | 6.5% |

Source: <http://ow.ly/KREM3044km7>

since 2001. Indeed, almost a quarter, or 23.3%, of the population has at least tried cannabis once in their life. Less than one in ten (9.3%), however, reported using cannabis once in the past twelve months. The survey also showed that the rate of the increase in prevalence has slowed somewhat since 2011.⁴⁵ Examinations of use patterns once the law is fully implemented will need to take in

to account the upward trend in prevalence that been apparent since 2001, well before the law was enacted.

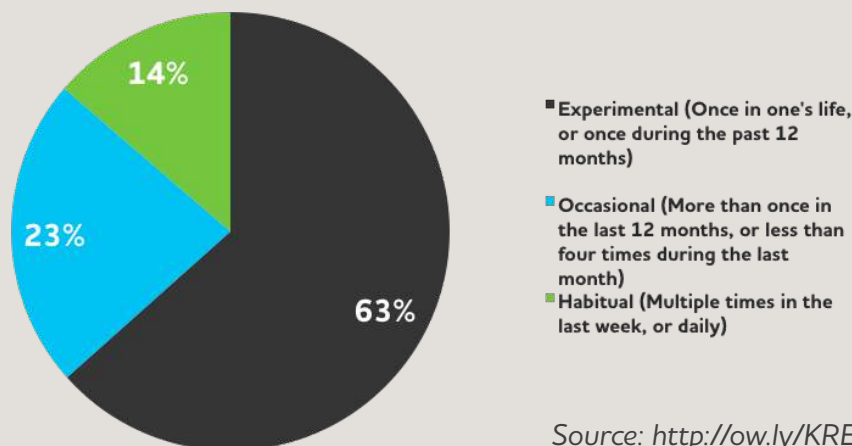
By way of comparison, cannabis use in Uruguay remains somewhat lower than in the United States. The 2014 National Survey on Drug Use and Health (NSDUH) revealed that over

FIGURE 5.2**CHANGE IN CANNABIS USE IN URUGUAY**

Source: <http://ow.ly/KREM3044km7>

FIGURE 5.3

FREQUENCY OF USE AMONG CANNABIS USERS IN URUGUAY, 2015



Source: <http://ow.ly/KREM3044km7>

130 million Americans over the age of 12 have used cannabis at some point in their life, which corresponds to 40.7% of the population; 41.5 million, or 13% of the U.S. population, reported using the substance in the past year.⁴⁶ Both of these indicators increased since 2013.

The breakdown of cannabis users in Uruguay is equally interesting. It suggests that almost two-thirds (63.4%) are “experimental” users, defined as having used cannabis at one point in their lives, or once in the past 12 months. Indeed, “habitual” users, defined as using cannabis a few times weekly or daily, constitute just 13.7% of cannabis users, according to the survey.

Perhaps the most revealing finding of the JND household survey, at least from the perspective of those interested in regulating the black market for cannabis, is the breakdown in methods of access to cannabis. According to the 2014 survey, 60 percent of all Uruguayan cannabis users who reported using the drug in the past year continued to buy “prensado,” or black market Paraguayan product. Because this was the first time that the JND’s regular household survey asked this question, further study is needed on whether this number has been impacted by the passage of the law and ongoing implementation.

| FORM OF CANNABIS USED | PERCENT |
|----------------------------------------------|---------|
| Pressed marijuana (largely from Paraguay) | 60% |
| Cannabis bud (largely cultivated in Uruguay) | 30% |
| Grown by user themselves | 9% |

Source: <http://ow.ly/KREM3044km7>

2014 SECONDARY STUDENTS SURVEY

In December 2014, the JND released the results of its sixth national survey on drug, alcohol, and tobacco use among secondary students aged 13 to 17.⁴⁷ The survey, which included the largest sample ever collected in the survey series (with 11,248 students surveyed), indicated that cannabis use among students had increased between 2011 and 2014.

The survey also found that while this population had a similar lifetime prevalence of cannabis use as the general population (20 percent of secondary students report having tried cannabis but not in the last 12 months, compared to 23 percent of the general population), youth have a greater incidence of use in the past 12 months and past month (17 and 9.5 percent of youth, respectively, compared with 9.3 and 6.5 percent of the general population).

FIGURE 6.1
PERCENT OF URUGUAYAN SECONDARY STUDENTS REPORTING CANNABIS USE AT LEAST ONCE IN THE LAST 12 MONTHS, 2002-2014

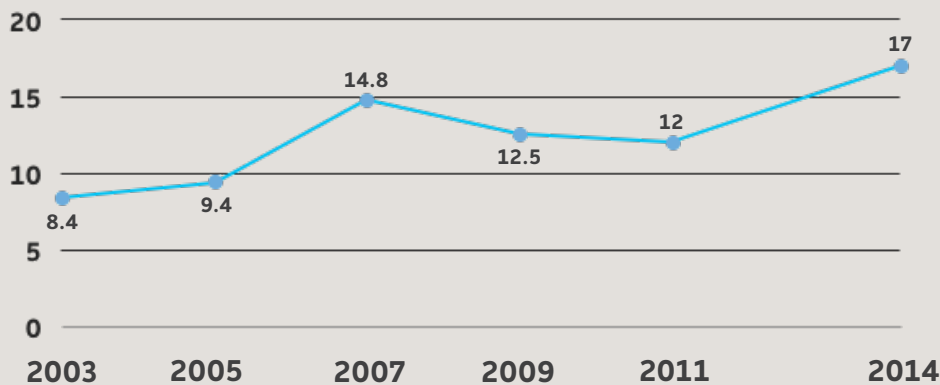


FIGURE 6.2
FREQUENCY OF CANNABIS USE AMONG URUGUAYAN SECONDARY STUDENTS

| | USED CANNABIS AT SOME POINT IN LIFETIME | USED CANNABIS IN THE PAST 12 MONTHS) | USED CANNA-BIS IN THE PAST MONTH |
|-------|-----------------------------------------|--------------------------------------|----------------------------------|
| TOTAL | 20.1% | 17.0% | 9.5% |

Source: <http://ow.ly/zytP3044kvb>

2015 UNIVERSITY STUDENT SURVEY

In December 2015, the JND released the results of the first-ever national survey conducted among university students in the country, carried out with the support of the Inter-American Drug Abuse Control Commission (CICAD).⁴⁸ The study, which surveyed 3,060 individuals, is meant to gauge the consumption

of drugs, alcohol, and tobacco among university students nationwide. Perhaps unsurprisingly, the poll found that lifetime prevalence of cannabis use, use in the last year, and use in the last 30 days were all higher among college students than in the general population.

FIGURE 7.1

FREQUENCY OF CANNABIS USE AMONG URUGUAYAN UNIVERSITY STUDENTS

| | USED CANNABIS AT SOME POINT IN LIFETIME | USED CANNABIS IN THE PAST 12 MONTHS) | USED CANNA-BIS IN THE PAST MONTH |
|--------|-----------------------------------------|--------------------------------------|----------------------------------|
| MALE | 56.00% | 35.05% | 18.97% |
| FEMALE | 46.52% | 25.95% | 13.17% |
| TOTAL | 50.54% | 29.81% | 15.63% |

Source: <http://ow.ly/esj13044kAo>

THE SCIENTIFIC ADVISORY COMMITTEE

Uruguay has released some important information on user trends under the new government. However, beyond this there has been little progress on monitoring and evaluation. In fact, most of the government’s progress has been made under an initiative that began before Vázquez took office. In March 2014, as the Mujica administration was preparing to release the regulations that would flesh out the law, the JND announced the creation of a group of experts meant to advise the implementation and evaluation of the law.

The group, termed the Scientific Advisory Committee (CCA), consisted of seven academics across multiple disciplines. Until March 2016,

it was presided by Dr. Luis Yarzábal, who has worked as a public policy administrator for years in various capacities, including as the head of the National Public Education Administration (ANEP) and president of the Council of Transparency and Public Ethics (JUTEP). In addition to its core members, the CCA also has a “technical secretariat,” consisting of three representatives of the JND.⁴⁹

Upon its creation the committee was tasked with providing authorities in the IRCCA and JND with expert advice regarding the implementation of every aspect of the law, as well as informing the government’s monitoring and evaluation strategy.

Over the course of the year, the CCA engaged in a period of extended study and dialogue. With the support of the administration, multiple seminars were organized which brought both Uruguayan and foreign experts (including internationally renowned drug policy analysts such as Mark Kleiman and Peter Reuter), creating a free flow of ideas among policymakers, researchers, and civil society representatives.

Based on a combination of its own research and input from others, the CCA presented the government with a report (drafted in December 2014 and released in May 2015) in which they

sought to lay out a strategy for assessing the impact of the law. In the document, the authors suggested that the government carry out a process of tracking official data along four dimensions: 1.) citizen security and coexistence, 2.) just and equal application of the law, 3.) health promotion, and 4.) the international drug policy debate. The document includes a long list of potential indicators, and it remains to be seen whether authorities are actually gathering data on the various dimensions suggested by the CCA. These dimensions, and their corresponding indicators, are:⁵⁰

- **DIMENSION 1: Citizen Security and Coexistence**

- **Black Market and Violence**

- Annual volume of cannabis seized
 - Annual number of police incidents involving cannabis (by department)
 - Total number of people arrested in cannabis-related incidents
 - Total drug-related homicides
 - Proportion of drug crimes in relation to total crimes
 - Changes in market prices of illegal drugs
 - Per capita production of cannabis declared by home growers and membership clubs per department

- **Human Security and Coexistence**

- Reports for disorderly conduct received through emergency hotlines
 - Reports on narcotics made through emergency hotlines
 - Evolution of violent robberies in black market hot spots
 - Evolution of violent robberies at cannabis distribution points (pharmacies)

- **The Perception of Security**

- Percentage of adults who consider the performance of institutions implementing policies to regulate and control the cannabis market good or very good
 - Percentage of adults who believe that the creation of a regulated cannabis market has implied a decline in the corruption of public officials

- Percentage of adults who believe that the creation of a regulated cannabis market has led to increased insecurity
- Percentage of coexistence in communities where there are black market drug hot spots
- **DIMENSION 2: Equitable Enforcement of the Law**
 - The proportion of drug offenses in relation to the total number of crimes
 - The proportion of persons sent to prison for drug related offenses over the total prosecuted for drug offenses
 - The proportion of detainees released in proceedings involving drug-related offenses
 - The proportion of detainees charged with imprisonment for drug related offenses aged 18-24, with primary school as their highest level of education
 - All persons charged with possession for non-consumption under drug laws
 - All persons processed for holding small amounts of cannabis products as per the current law
 - The average sentence length of imprisonment for drug offenses
- **DIMENSION 3: Public Health**
 - **Impact indicators in the health dimension**
 - For those over 18:**
 - Prevalence of marijuana consumption and other legal and illegal drugs
 - New users of marijuana and other drugs in the past year
 - Average age of first marijuana consumption and other legal and illegal drugs
 - Frequency of marijuana use and other drugs
 - Risk perception of the use of marijuana and other legal and illegal drugs
 - For those under 18:**
 - Prevalence of marijuana consumption and other legal and illegal drugs
 - Average age of first marijuana consumption and other legal and illegal drugs
 - New users of marijuana and other drugs in the past year
 - Frequency of the use of marijuana and other drugs
 - Risk perception of the use of marijuana and other legal and illegal drugs
 - Ease of access to marijuana depending on origin
 - **Indicators for measuring the objectives that the law intends for this dimension (as analyzed by health authorities, the JND, or the education system)**

- The number of user information, service and treatment schemes in the private sub-system
- The number of programs for health promotion and/or prevention of the problematic use of marijuana addressed to health workers
- Dimension 4: Global governance
- **Global governance**
 - The status of opinion at the regional and international level towards the law
 - The political influence within international organizations
 - The political incidence at the regional level

Following the publication of the monitoring and evaluation report, which was received and endorsed by the Vázquez administration, the CCA has continued to serve as an advisor to the rollout of the law. In November 2015, the

CCA began to study various proposals for the medical marijuana system, including laboratory testing, clinical trials, and the level of restriction on cannabis prescriptions.

2015 UNIVERSITY STUDENT SURVEY

Like the CCA, Uruguay's stated commitment to monitoring and evaluating the impact of the cannabis law actually predates the administration of President Vázquez. The text of Uruguay's law explicitly creates a new investigative team within the Ministry of Public Health (MSP), termed the "Specialized Monitoring and Evaluation Unit." According to the law, the body "will have a technical capacity and will be comprised of personnel specializing in the evaluation and monitoring of policy. It will be independent in nature and will issue annual reports which, while unbinding, shall be taken into consideration by the agencies and entities responsible for the implementation of this law." These reports are to be delivered to Uruguay's Congress on an annual basis.

Authorities within the MSP say that the unit has been formed, that it consists of three researchers who will be researching and writing the annual reports, and that these reports will be based on

the indicators put forward by the CCA (although it is unclear whether all of the indicators will be incorporated in the report). While little else is known about the team and its agenda, officials in both the JND and MSP say that the unit will be aggregating reliable official data. Whether it will conduct independent research on its own is unclear.

The research team will be aggregating data from different government data sources like the JND's National Drug Observatory, the National Violence and Crime Observatory of the Ministry of Interior, and the National Healthcare System. The timing of the release of the unit's report to Congress is also unclear. According to JND's Milton Romani, the MSP's report will "ideally" be published sometime before the first commercial sales go into effect.

CIVIL SOCIETY AND ACADEMIC RESEARCH

While the MSP monitoring and evaluation unit has not yet published any quantitative analysis of the impact of Uruguay's cannabis law, the months following its passage have seen some robust monitoring efforts from civil society and academic researchers. Others, such as the Uruguayan office of the Friedrich Ebert

Foundation (FESUR), the University of the Republic of Uruguay, the Catholic University of Uruguay, and other institutions are conducting valuable research into the law's impact as well as the current dynamics of cannabis use, risk perception, and public opinion on the law.

FESUR

Beginning in late 2014, months before the CCA was set to publish its strategy document with the proposed monitoring and evaluation indicators, a team of researchers affiliated with FESUR began to work on a separate strategy. The team benefitted from a close level of access to current and former officials in the JND and IRCCA, and was thus very well-informed regarding the details of the law.

After months of field research and interviews with various stakeholders, the FESUR team shared a strategy document with the JND and IRCCA, outlining all of the various private and public actors involved in the implementation process and laying out a proposal for monitoring and evaluating its impact. The FESUR strategy identified four main components to the process:

1. Monitoring the results of the law's stated citizen security, health, and equitability objectives post-implementation.
2. Monitoring the use of the instruments available to policymakers, namely:
 - a. State regulation of the cannabis market
 - b. Educating and preventing the problematic use of drugs

- c. Treatment, rehabilitation, and social reinsertion of problematic drug users
- d. Police action

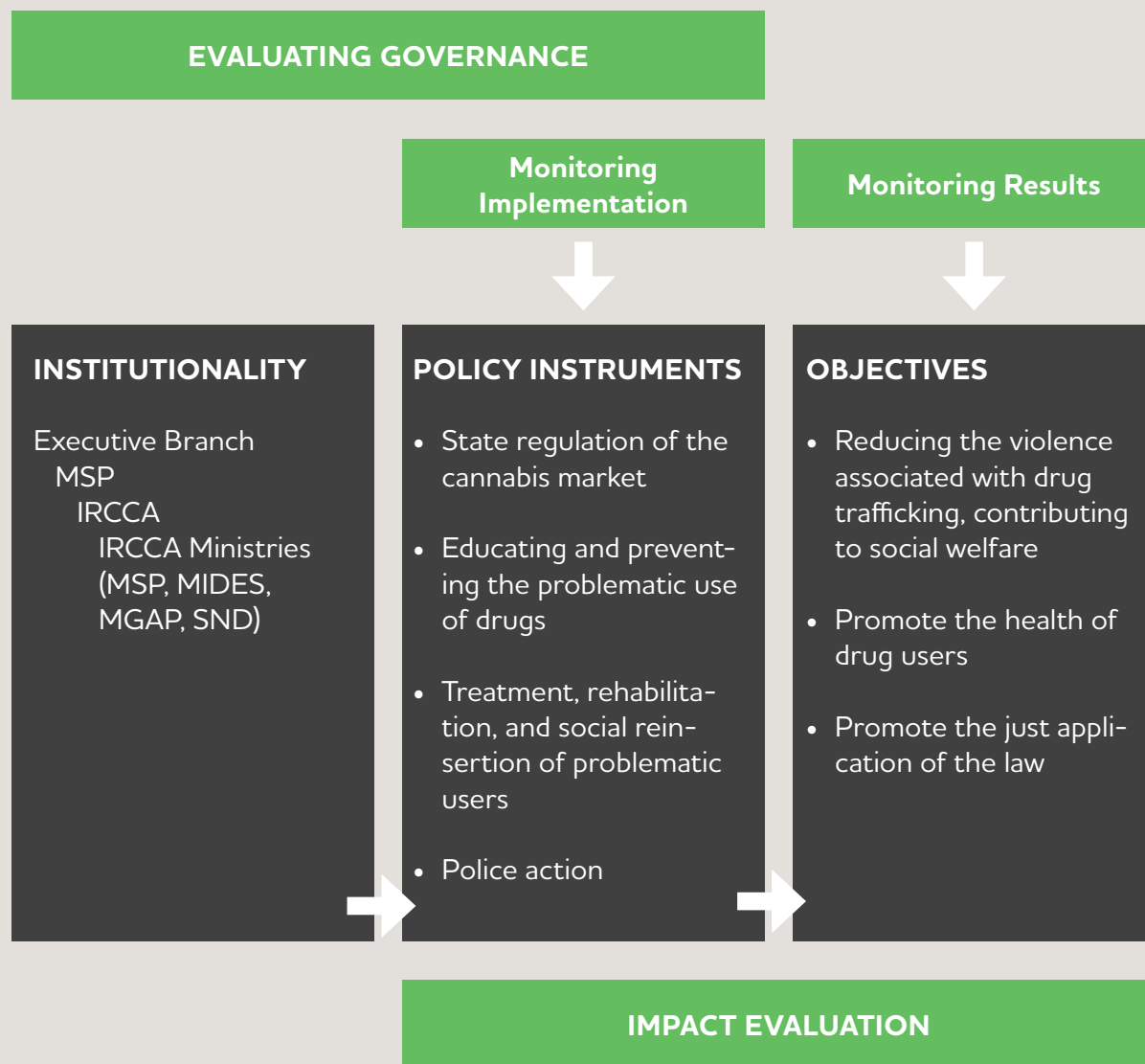
3. Evaluating the impact of the law and its policy instruments, while distinguishing between outcomes likely caused from external factors

4. Evaluating the quality of governance based on the policy instruments adopted and the institutional functioning of the main state organs involved in implementing the law.

However, the FESUR strategy document it appears to have had a limited impact on the government's plan to monitor and evaluate the law. Authorities in both the IRCCA and JND applaud the report as a significant contribution from civil society, but the CCA did not significantly alter its draft strategy as a result of the FESUR report. Instead it made small changes in language. According to former CCA President Luis Yarzabal, the committee partially adopted a facet of the strategy in its final recommendations, suggesting that the government conduct an "impact evaluation" of the law (with no distinction between the policy instruments or objectives of the law).

FIGURE 8.1

THE FESUR ADVISORY TEAM'S MONITORING AND EVALUATION STRATEGY



Source: <http://ow.ly/LXwn3044kLG>

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ACADEMIC CONTRIBUTIONS

In addition to this research, a group of researchers at the University of the Republic (UdelaR) have also begun to study cannabis from an academic perspective. In mid- 2014, a group of seven UdelaR researchers from the fields of chemistry, biology, pharmacology, and medicine formed the Interdisciplinary Group on Cannabis Studies, and the group received institutional support from the IRCCA after a partnership between the institute and the UdelaR's Schools of Chemistry and Medicine was launched in September 2014.⁵² The IRCCA subsequently entrusted the group with "genetically and chemically classifying the cannabis grown in Uruguay in the study of its various bioactive properties, particularly pointing to potential therapeutic applications." The group has also drafted plans to open a new IRCCA-UdelaR "central laboratory" in the coming years.⁵³ Among other purposes, the lab will be used to facilitate the group's analysis of both legally grown and seized illicit cannabis samples.

While the group's research is ongoing and has not been published, the UdelaR researchers have provided the IRCCA with initial observations along with two key goals for the research: 1.) establishing a genetic profile of cannabis plants that are grown domestically among Uruguayan homegrowers and cannabis clubs, and 2.) studying the cannabinoid profile and potency of black market, Paraguayan cannabis.

The first of these goals is directly related to the

government's plans to ensure that any cannabis grown on Uruguayan soil is genetically traceable. While not required by law, this has been an official objective for the government since before the law was even passed, and reportedly played a role in Uruguay's efforts to soothe initial protests to the law from the governments of neighboring Brazil and Argentina.⁵⁴ According to initial findings of UdelaR researchers released in February 2015, the team has begun to establish a database of genetic markers based on roughly 200 samples obtained from homegrowers and cannabis clubs.

The second of these goals, testing the chemical properties of black market cannabis, is also essential to the law's objectives, as it will be key to informing the THC and CBD content of the cannabis to be sold in pharmacies. With the help of the Ministry of Interior, in the UdelaR researchers were able to obtain six different samples of black market, "prensado" cannabis in late 2014. This information is of vital importance to the IRCCA, particularly considering that commercially-available cannabis (expected to be the most widely used method of legal access) is still in its early stages and the specifics regarding the THC/CBD potency of commercial marijuana are still being assessed. The research found that the seized samples contained an average THC content of roughly 5.5 percent, which stands at the lower end of the range that officials are considering offering on the legal Uruguayan commercial cannabis market.⁵⁵

As noted, another research team at the Catholic University of Uruguay, comprised of Rosario Queirolo and Fernanda Boidi, has made significant contributions towards assessing the potential impact of the law. Since the law's passage, the two have carried out two seminal studies on the law: a case study of five different cannabis clubs and a Respondent Driven Sample (RDS) survey of 294 high-frequency marijuana consumers that live in Montevideo and the metropolitan area.

As noted above, both of these studies found important gaps between the ideal implementation of the law and its actual results. The RDS study documented widespread resistance among Uruguayan cannabis users to "choosing and sticking to" a single method of access to cannabis. The cannabis clubs analysis highlighted the fact that clubs were beset by a range of challenges,

ANALYSIS

While the new presidential administration has been vocal about its commitment to rigorously monitoring and evaluating the impact of the cannabis law, progress has been slow under the Vázquez government. Additionally, it appears to be hampered by a number of systemic shortcomings, including:

A lack of available official data

There is little public data on key variables: As noted, both the CCA and the MSP's task force predate the current administration, and neither has yet produced a quantitative assessment of the status of Uruguay's implementation of its cannabis legalization measure. So far, the only official data linked to the impact of the law has been limited to user surveys released by the JND and a handful of statistics released separately by other agencies (like crime statistics released by the Ministry of the Interior). As policy analysts wait for the MSP team's first report,

including financial sustainability due to the high operating costs associated with IRCCA security requirements and a broad "collective action problem."

Another contribution to the implementation of the law has come from the International Center for Ethnobotanical Education, Research & Service (ICEERS), and its Clinical Director Dr. Raquel Peyraube. Peyraube, who is also a member of the civil society advisory council for the JND, has advised the administration at key moments since the law's passage. Most recently, ICEERS has been advising the JND and the IRCCA on the details of medical and commercial marijuana, particularly on issues related to pricing and potency.

independent researchers have attempted to fill the gap. But these efforts are limited by the fact that no official data has been released on other important variables like police incidents involving cannabis, or changes in the black market price or potency of the drug since the early stages of implementation.

Some information has been made public, but filtered anonymously to the press: The absence of clear public data on the law's impact has fueled investigation not only among independent researchers, but among journalists as well. In the months following the law's passage, Uruguayan media have published reports based on both accounts from anonymous officials. These range from sanctioned but still anonymous updates in the implementation of the law from the JND and IRCCA, to non-sanctioned reports that have fueled criticism of the law. An important example of the latter came in November 2015, when newspaper *El Observador* reported that

the number of illicit plants seized since the law was passed has skyrocketed.⁵⁶ The account, which was based on internal data shared by sources within the judicial branch's Technical Forensic Institute (ITF), found that the number of illicit cannabis plants seized by police had increased since 2013. According to the report, police seized 261 plants in 2013, 621 in 2014, and 1,058 in 2015, most of which were taken from growers who were not registered. Despite the increase, so far no authorities have commented on the report. When questioned, IRCCA President Augusto Vitale did not deny the number but stressed that "seizures alone do not mean that arrests were made in these cases," a claim that would be in line with the Ministry of the Interior's new police protocol.⁵⁷

While authorities have sponsored some research on cannabis in Uruguay, some researchers complain of being shut out:

Investing in the work of independent researchers represents an important opportunity for the IRCCA: that of creating a kind of "canary in a coal mine," in which autonomous research mechanisms can signal openings for important changes in the law's implementation to meet the law's goals. The IRCCA's institutional partnership with the UdelaR on cannabis testing is the best example of the institute's cooperation with researchers on efforts to measure the effects of the law. But even the UdelaR researchers have limited access. According to chemist Carlos Garcia, who oversaw the first reliable potency tests of black market cannabis in the country, he and his partners were not able to establish ideal requirements on the seized samples. Instead, they were unable to obtain a large enough number of samples to be properly representative, and were given official assurances that the handful they

received were "recently" seized.

Researchers affiliated with other institutions, meanwhile, complain of obstacles to beginning their research in the first place. According to the law, the IRCCA needs to sign off on any study involving physical access to cannabis, or in some cases (like clinical trials) may require the approval of the Ministry of Public Health. Dr. Peyraube of ICEERS, for instance, has waited for two years at time of writing to receive authorization for a proposal to test the applicability of medicinal marijuana as a treatment for cocaine addiction.⁵⁸ While Peyraube's proposal has gained the approval of the ethics committee of the country's largest public hospital, there is no guarantee of the MSP's approval. In the course of 2015, Catholic University of Uruguay researchers Rosario Queirolo and Fernanda Boidi were denied two consecutive proposals to obtain small amounts of cannabis from users in order to evaluate potency, despite months of dialogue and revisions to their proposal based on IRCCA feedback. Queirolo chalks this up to a desire within the IRCCA to "have control over the information that is filtered out" in light of the negative public opinion climate. According to the researcher:

"I think that also there was an issue of trust that got complicated between us and the IRCCA. We function in an independent way, and even though each time we let them know before we published our findings, at a certain point they began to see us as putting a spoke in their wheel. The reality isn't like that at all. We are not anti-law at all, but we do academic research, so we are not an advocacy group. I think they had difficulty understanding this."⁵⁹

RECOMMENDATIONS

It is far too early to draw all of the conclusions about whether Uruguay's cannabis law is meeting all of its objectives; indeed, the feature of the law that is likely to be most important—commercial sales of cannabis at pharmacies—has yet to be implemented. And even once those sales have begun, it will take time of the legal market to mature and demonstrate its viability. Still, a look at the implementation of the law so far reveals some apparent early obstacles that policymakers should consider if the measure is to achieve the law's objectives. Studying and evaluating these obstacles in the context of the broader impact of the law is vital to the future of the country's cannabis experiment.

Fortunately for Uruguayan authorities, the law has considerable regulatory flexibility built into it, such as the regulations concerning the price for commercial cannabis and the mutual exclusivity of the three methods of access. As a result of this flexibility, the government is in a position to take advantage of its power to adjust the rules governing the newly-legal cannabis market in accordance with new insights gained from monitoring and evaluation. With this in mind, the author recommends that the administration of President Vázquez take the following steps:

- **ENSURE THAT THE GOVERNMENT HAS SYSTEMS IN PLACE TO SOLVE PROBLEMS IDENTIFIED EARLY ON IN IMPLEMENTATION.** According to existing surveys, independent research, and registration patterns, the government of Uruguay should reconsider its insistence on the mutual exclusivity of accessing cannabis, as well as the single price for all strains of commercial cannabis. Depending on the findings of these monitoring efforts, some of the necessary changes may require congressional action, so the ruling Broad Front majority will have to be prepared to take up a more nuanced policy debate on the cannabis law in the future.
- **ENSURE THAT THE IRCCA HAS THE INSTITUTIONAL CAPACITY NEEDED TO PROPERLY REGULATE AND CONTROL THE LEGAL CANNABIS MARKET.** Under the new budget, the IRCCA will receive roughly US\$518,220 annually, but will supplement its funds with licensing fees placed on the companies producing commercial cannabis for sale in pharmacies. This supplemental income should be used to address the IRCCA's difficulties in staffing and funding efforts to ensure compliance with the restrictions on home growing and cannabis clubs.
- **INCREASE FUNDING FOR CAMPAIGNS EDUCATING BOTH THE GENERAL PUBLIC AND YOUTH ON THE DETAILS OF THE LAW, AS WELL AS ASSOCIATED HEALTH RISKS OF CANNABIS USE.** A significant amount of funding for prevention campaigns in Uruguay comes from seized funds. In the first ten months of 2015, Uruguayan officials seized the equivalent of over \$US1.25 million in currency alone.⁶⁰ Assuming that the civil liberties of those affected by seizures are respected, these resources hold major potential for public education efforts, and should be allocated not only to the "Consuming any drug has risks" campaign, but to new campaigns that can educate the public on the details of the law.

RECOMMENDATIONS

- **ENSURE THAT PLANS FOR A SINGLE PRICE FOR CANNABIS, REGARDLESS OF ITS POTENCY, ARE COMPETITIVE WITH THE BLACK MARKET WHILE NOT FUELING ABUSE.** Now that the IRCCA appears poised to set a single price of roughly US\$1.20 per gram of cannabis, regardless of its potency, authorities should keep a close eye on purchasing trends. The danger of establishing a single price for more potent forms of cannabis is that it could fundamentally alter the local market, potentially exposing more new or infrequent users to negative short- and long-term effects of consuming higher potency cannabis. If users appear to be favoring high-potency strains of cannabis, this may be a sign that pricing should be adjusted, and based on potency. However, it is also important that the price for all strains of legal cannabis compete with the black market, so efforts should be made to ensure that a tiered pricing structure is still able to undercut the illicit market.
- **TRAIN LAW ENFORCEMENT OFFICIALS IN THE NEW MINISTRY OF INTERIOR POLICE PROTOCOL.** News reports of increased plant seizures, as well as complaints by cannabis club organizers of unfounded police interference in their efforts, are signs that the police protocol needs to be more broadly institutionalized. Interior Minister Eduardo Bonomi should make this a priority for the Uruguayan National Police, and place pressure on police across the 19 departments to educate their workforce on the new rules governing police encounters with cannabis cultivators.
- **ENCOURAGE THE MINISTRY OF PUBLIC HEALTH TO HASTEN PATIENTS' ACCESS TO MEDICINAL CANNABIS.** Currently, only patients who receive special permission to import medical cannabis from licensed specialists and the MSP can receive medication. While there are plans to develop both a domestic medical market and prescription system, these elements should be implemented as soon as possible to guarantee access to necessary care.
- **DIRECT AUTHORITIES TO PUBLISH IMPACT INDICATORS OF ALL RELEVANT POLICY AREAS AFFECTED BY THE LAW, BEFORE AND DURING COMMERCIAL SALES.** The rollout of commercial cannabis sales has the potential to alter Uruguay's cannabis market more than home-growing and cannabis clubs. It will signify the beginning of the test of one of the law's central objectives: shutting out the black market for cannabis. As such, it is extremely important that the MSP's Specialized Monitoring and Evaluation Unit gather and synthesize the data needed for its annual report before commercial sales go into effect. This will ensure that a reliable and comprehensive "baseline" is available from which to compare the impact of the law's most important elements in the future.

RECOMMENDATIONS

- **ALLOW RESEARCHERS TO CONDUCT INDEPENDENT ANALYSIS OF THE LAW'S SOCIAL, HEALTH, AND ECONOMIC IMPACTS, AND TO ACCESS AND VERIFY OFFICIAL DATA.** Regardless of when the MSP's monitoring and evaluating team produces its report, and regardless of its content, the Vázquez administration should encourage the efforts of independent researchers. Their work represents a crucial opportunity for the government to identify any initial shortcomings in implementation that must be corrected in the months and years to come. Because of its historic nature, the cannabis measure is bound to come under public scrutiny. Taking advantage and encouraging independent assessments of implementation will enhance the likelihood that the public debate over the law's impacts will be undertaken on the basis of scientifically sound evidence and research.

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