



ANALYSIS AND INVESTIGATION
OF ORGANIZED CRIME

The End of (Illegal) Marijuana

What It Means for Criminal Dynamics in Mexico



A small map showing the border between the United States and Mexico. The word "UNITED STATES" is written above the border line, and "MEXICO" is written below it. The map is overlaid on a dense background of green cannabis leaves.

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Executive Summary

Marijuana has long been one of the most profitable illicit crops in various parts of rural Mexico, and one of the most important revenue generators for Mexican drug trafficking organizations. It is intimately linked to the origins of these criminal groups, who became the leading suppliers of a lucrative marijuana market in the United States. The trade also became a focal point of an often-tense bilateral relationship between the United States and Mexico.

That era appears to be over. Today, most of the marijuana consumed in the United States is produced domestically, largely due to ongoing legalization and decriminalization efforts in several states. These shifts have changed the game in the international drug market, particularly in the Western Hemisphere. They struck at the core of some of the region's most notorious organized crime groups and gouged Mexican marijuana prices. Beyond those economic issues, the changes may have permanently altered the once-symbiotic relationship between the criminal groups and their long-time social base.

At the same time, marijuana has become far less of a priority for law enforcement on both sides of the border. Today, authorities are increasingly focused on the trafficking of synthetic drugs, which are rapidly replacing plant-based drugs. Marijuana seizures in Mexico and at the US-Mexico border have steadily declined over the past decade, and the Mexican Army is eradicating fewer marijuana plantations every year.

This report aims to analyze what this means on the ground for Mexican organized crime groups and illustrate how they have adapted to these changes. It paints a picture of how criminal governance and the relationship with traditional farming communities has evolved and highlights strategies that large drug trafficking organizations may use to address the market shifts.

The purpose of this report is to inform policymakers who are looking to address changes in and guide discussions on illicit drug markets, specifically marijuana. We also aim to provide relevant stakeholders with opportunities for intervention in this changing space, such as providing support for the local farming communities that once were at the center of marijuana production in Mexico.

The findings are based on one year of desktop and field research across the Mexican states of Baja California and Sinaloa, as well as Mexico City. It includes dozens of in-person and remote interviews with cannabis cultivators, farmers, entrepreneurs, state and federal government officials, marijuana consumers, activists, security experts, and academics, among others. The team also visited several marijuana dispensaries across major urban centers and traveled through the Sinaloa mountains, the former epicenter of illicit crop production. In addition, we analyzed government data on drug seizures and consumption trends, judicial cases and previous studies on the topic.

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Major Findings

1. In traditional production regions in Mexico, the upheaval of the illicit marijuana industry marks the end of an era for various rural communities that have grown the crop for several generations. This has upended the decades-long, symbiotic relationship between such producers and the organized crime groups reaping the benefits of their production. As a result, some small farmers are moving to other crops, migrating in search of new opportunities, taking advantage of government-funded development programs, or planning for ways to enter a potential legal marijuana business. In this context of economic uncertainty, farming communities still live under the constant threat of violence from criminal groups while no longer securing the type of economic benefits they once did from the drug trade.
2. Criminal groups have found ways to adapt to changes in the international marijuana business, diversifying their operations to capitalize on new markets. First, there are indications that trafficking groups are supplying a small subset of users in the United States that do not yet have access to legal marijuana, while also potentially looking for new international markets to exploit. Second, criminal organizations have taken advantage of the growing domestic market for marijuana in Mexico, which is increasingly becoming more sophisticated as society pushes lawmakers towards outright legalization. Third, Mexican criminal groups are now dominating synthetic drug trafficking into the United States, resulting in greater revenues at a devastating cost for residents on both sides of the border.
3. These seismic shifts provide an opportunity for policymakers to weaken transnational organized crime. With farming communities benefiting less from the drug trade, the current evolution of the relationship they've long maintained with criminal groups in these rural regions may now provide an opening for positive intervention. It may also open the door to public campaigns, which could change the traditional "Robin Hood" narrative around drug consumption and production in Mexico.

3

Background and Context

For nearly 50 years, marijuana, and to a similar extent opium poppy,¹ were the foundation of a vibrant, illicit agricultural economy in Mexico. Marijuana in particular became the prime enterprise of the country's budding criminal groups in the 1970s and 1980s. As it was with legal agricultural industries, these criminal groups emerged as major economic, social, and political players -- first locally, then nationally, and finally, on an international scale. Mexico's criminal groups eventually expanded into other illicit markets, but their subsequent cultural and political influence were largely tied to their connections to the marijuana and poppy businesses and the social and economic benefits these entailed, especially in the producer regions where micro-economies revolved around the crops.

Mexico's marijuana also helped shape bilateral relations with the United States. In 1969, as the panic surrounding the use of marijuana was rising -- mostly due to use by US soldiers in, or those returning from, Vietnam -- then-President Richard Nixon ordered a near total shutdown of the US-Mexico border to halt the flow of marijuana.² The shutdown did far more damage to the legitimate flow of goods than making any significant dent in the marijuana trade, but the action set the tone for the steady increase in funding for border security and the public policy of stopping immigration that continues to this day.³

Mexico's marijuana and heroin industries also became a focus of US efforts abroad to clamp down on the supply of illegal drugs. In 1969, a multi-agency special committee formed during the Nixon administration designated Mexico the primary supplier of high-grade marijuana and a major supplier of heroin to the United States.⁴ By the early 1970s, the United States and Mexico were cooperating on anti-drug matters, and in 1974, Mexico launched a heavily militarized eradication effort in Sinaloa and Guerrero, the two states where marijuana and poppy production were thought to be the most prevalent.⁵ Using US-provided helicopters, Mexican authorities destroyed thousands of hectares

1 This project is focused on marijuana, but it bears mentioning that farmers who cultivate marijuana very often cultivate opium poppy.

2 National Security Archive, “[Operation Intercept](#),” 2003.

3 Ibid.

4 Richard B. Craig, “[Operation Intercept: The International Politics of Pressure](#),” *The Review of Politics*, Oct. 1980, Vol. 42, No. 4 (Oct. 1980), pp. 556-580.

5 US Department of Justice, “[The DEA Years: 1970-1975](#),” Drug Enforcement Administration.

of marijuana and poppy via aerial fumigation using herbicides.⁶ However, in a prelude of what was to come in places like Colombia, farmers either moved to other places, in particular to other areas of the Golden Triangle -- a remote, mountainous region of 10 municipalities connecting Sinaloa, Durango, and Chihuahua -- or waited out the assault and replanted. Still, the approach changed little over the years, even while the crops' progenitors became some of the most powerful criminal networks in the world and production surged under ever-more sophisticated and capital-intensive processes.

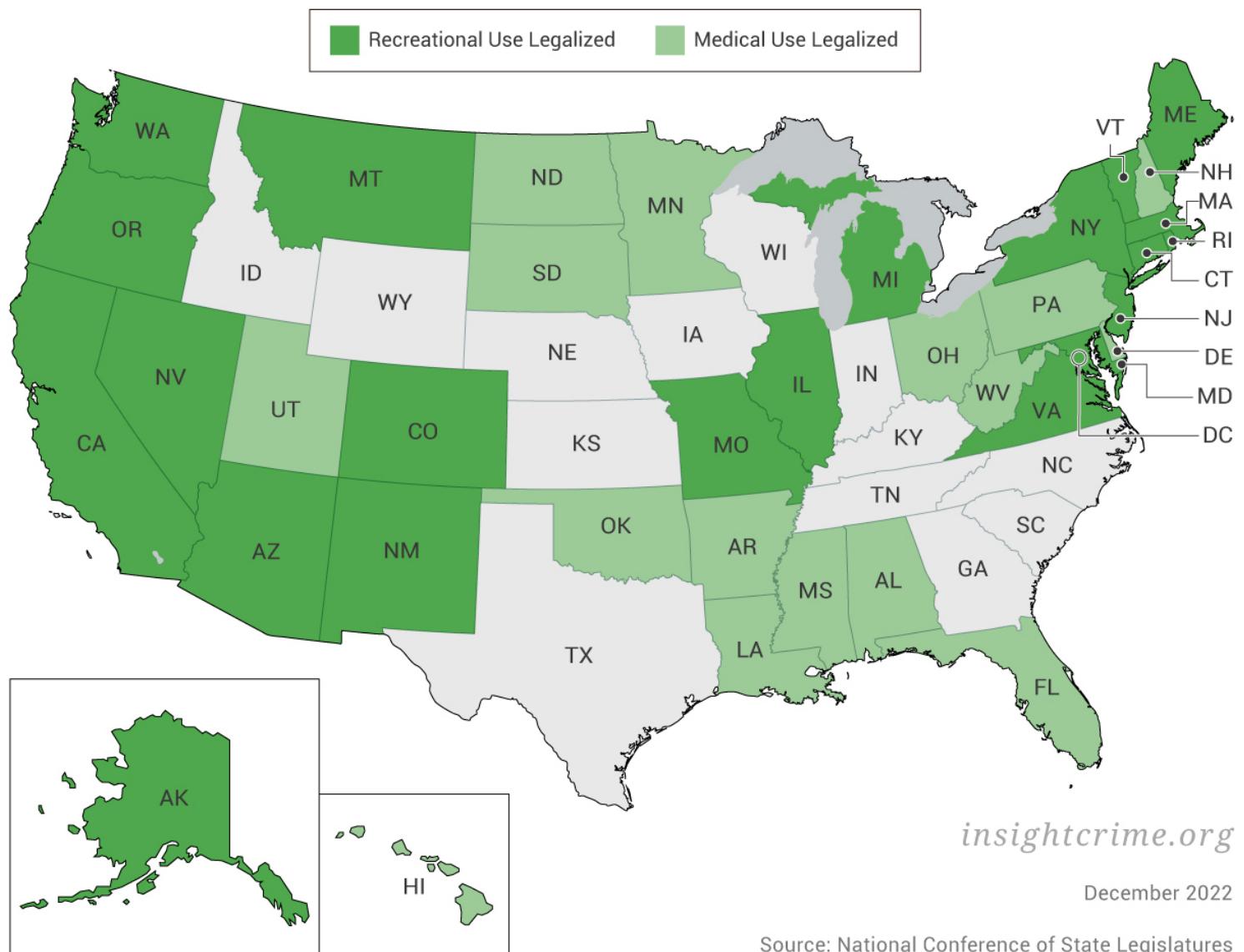
Now the marijuana business is going through yet another upheaval: In the United States, Mexican marijuana has been largely supplanted by domestically-produced marijuana.⁷ The growing push to legalize and decriminalize marijuana on both sides of the border is a major cause of this repositioning. While still illegal at the federal level, as of December 2022, around three-quarters of all US states -- and three of four states on the southwest border, except for Texas -- permit either the medical or recreational use of marijuana. In the late 1990s, about 12 percent of the US population had a “limited form of legal access to cannabis,” according to a report from Justice in Mexico; today, that percentage stands at over 60 percent, the report says.⁸

6 Time, “[Nation: Panic over Paraquat](#),” 1 May 1978.

7 Justice in Mexico, “[The Impact of State-level U.S. Legalization Initiatives on Illegal Drug Flows](#),” February 2022.

8 Ibid.

Status of Medical and Recreational Use of Marijuana in the United States



Across the border, Mexican law is moving in a similar direction. While recreational use is still illegal, marijuana can be used for research purposes, to manufacture therapeutic products made of Cannabidiol (CBD) that have been approved by Mexico's Federal Commission for Protection against Sanitary Risks (Comisión Federal para la Protección contra Riesgos Sanitarios - COFEPRIS) -- the Mexican equivalent of the US Food and Drug Administration (FDA) -- and to treat some medical conditions (so long as the product does not contain high concentrations of Tetrahydrocannabinol [THC], the main psychoactive ingredient in marijuana).⁹

⁹ México Unido Contra la Delincuencia, “Cannabis: cuenta regresiva,” 2022.

These legal and societal changes have provoked seismic shifts in marijuana trafficking from Mexico. During its peak in 2010, US law enforcement believed that Mexican criminal groups had increased marijuana production and intensified trafficking into the United States.¹⁰ But from 2009 to 2020, border seizures of marijuana fell from nearly 1.5 million kilograms to around 230,000 kilograms a year,¹¹ and seizures within Mexico fell from almost two million kilograms to around 200,000 kilograms a year.¹² By 2020, the US Drug Enforcement Administration (DEA) was stating that “Mexican marijuana has largely been supplanted by domestic-produced marijuana.”¹³

The impact this is having on criminal and social dynamics in Mexico is profound. Small marijuana producers are leaving the business in large numbers or greatly reducing their dependence on the crop, even while they explore the option of getting into the burgeoning legal market in Mexico. Traditional drug trafficking organizations (DTOs), for their part, have become far less involved in the international transport of marijuana and have turned to more profitable synthetic drugs, which has altered the traditional ties between them and these marijuana and poppy producers.

The knock-on effect for the state is equally profound: Mexican government forces no longer seize or eradicate marijuana fields on the same scale as before and instead have shifted their resources to fighting the production and transport of synthetic drugs. In the United States, there is a similar shift in focus towards interdicting synthetic drugs and away from expending resources on seizing marijuana both at the border and in the interior of the country. The results of these shifts are still not completely clear but provide opportunities for intervention designed to break the economic, political, and social ties between the criminal organizations and their base in marijuana-producing regions.

10 DEA, “[2010 National Drug Threat Assessment](#),” February 2010.

11 Ibid, pg. 20-22; DEA, “[2020 National Drug Threat Assessment](#),” March 2021.

12 Mexican Government, “[Informe del Gobierno](#),” 1 September, 2021.

13 DEA, “[2020 National Drug Threat Assessment](#),” March 2021.

4

The End of an Era

The relationship between criminal organizations and small farming communities has long been symbiotic: illicit crops like marijuana were the foundation of economic development in the Golden Triangle and other areas, and, by extension, those of the criminal organizations.¹⁴ The Golden Triangle, for instance, was largely excluded from the agricultural boom in northwest Mexico at the turn of the 20th Century,¹⁵ in part because it is otherwise secluded from nearby markets, and in part because it did not have the political capital on a national level.

The illicit economy was the alternative. Although the largest share of subsequent profits from the marijuana and opium poppy trades went to the leaders of criminal groups, selling illicit crops to traffickers represented a relatively stable source of income for families living in these remote areas. Other industries supplemented these illicit economies, among them those connected to pesticides, fertilizers, farm machinery (and corresponding maintenance companies), storage facilities, and transport.

However, beginning around 2010, marijuana prices started to drop amid a number of legalization initiatives in states like Alaska, Colorado, and California. According to estimates from the United Nations Office on Drugs and Crime (UNODC), the wholesale price of a kilogram of marijuana in Mexico decreased from \$80 in 2009 to less than \$60 in 2019.¹⁶ Price drops were more drastic in the United States. From a maximum rate of around \$10,000 per kilogram in 2015, US anti-drug officials reported that wholesale prices for Mexican marijuana decreased to about \$2,000 per kilogram in 2020.¹⁷ The drop has made it so many local producers found themselves with a surplus of supply they cannot sell, which put further pressure on the wholesale prices.¹⁸

¹⁴ Benjamin T. Smith, “The Dope: The Real History of the Mexican Drug Trade,” Norton & Company: London, 2022.

¹⁵ Noria Research, “Setting the Table. The Licit Beginnings of Sinaloa’s Illicit Export Economy,” December 2020.

¹⁶ UNODC, “Wholesale drug price and purity,” 2019.

¹⁷ DEA, “2020 National Drug Threat Assessment,” March 2021.

¹⁸ Associated Press, “México: preocupa a cultivadores legalización de marihuana,” 15 April, 2021.

Changes in the Marijuana-Growing Business

The full impact of these economic shifts on rural communities that once lived off illicit crops is only now coming into view, but from our field research in the mountains of Sinaloa, we noted several immediate impacts. To begin with, anecdotal evidence suggests that farmers are leaving marijuana and opium poppy production in droves. Some may be abandoning farming altogether and migrating to larger cities or other countries, but most seem to have moved to other cash crops such as tomatoes and chilis, among other fruits and vegetables. While many migrate internally to major cities like Culiacán, the capital of Sinaloa, for work in the state's agribusiness industry, between 2015 and 2020, almost 100,000 people left Sinaloa for other states like Baja California.¹⁹

Many of those who are staying in farming need help. In places surrounding the municipality of Badiraguato, Sinaloa, InSight Crime encountered farmers who were taking advantage of a government-funded program known as Sembrando Vida. The program provides stipends to rural producers to support the planting of fruit and timber trees, in some cases offering them an alternative to illicit crops.²⁰ In one seemingly tight-knit community, Sembrando Vida seems to represent an effective alternative, at least in the short-term. When asked, residents who once grew opium poppy and marijuana expressed enthusiasm for the program. This stemmed, they said, from a cold, economic calculation that the old economic paradigm had collapsed, as well as a desire to avoid harassment from the military, which for years brutalized small farmers as part of US-backed eradication campaigns targeting marijuana and poppy.²¹

The results of Sembrando Vida, however, are not uniform nor definitive. Elsewhere in the municipality, for example, sources said that some participants in the program continued to cultivate cannabis and opium poppies while also receiving a stipend for Sembrando Vida.²² The project is in its nascent stages but has already enrolled around 455,000 small farmers across 21 states and more than 1,000 municipalities.²³

19 INEGI, “[Movimientos migratorios: Sinaloa](#),” 2015-2020.

20 Secretaría de Bienestar, “[Programa Sembrando Vida](#),” 2022.

21 RioDoce, “[Entre surcos](#),” 21 August, 2018; InSight Crime interview, Sembrando Vida representative, Badiraguato, Sinaloa, Mexico, April 2022.

22 Associated Press, “[México: preocupa a cultivadores legalización de marihuana](#),” 15 April, 2021.

23 Secretaría de Bienestar, “[Programa Sembrando Vida](#),” 2022.



Sembrando Vida nursery in Badiraguato, Sinaloa. Credit: Mike Lettieri/InSight Crime

Amid this increased economic uncertainty, there is some anecdotal evidence to suggest that farmers are willing to enter the legal marijuana market and take advantage of opportunities presented to them should a legal industry take shape. Local farmers who spoke to InSight Crime said the region has a competitive advantage given the years of experience in perfecting growing techniques.²⁴

²⁴ InSight Crime interview, Sembrando Vida farmers, Badiraguato, Sinaloa, Mexico, 6 April, 2022.

Some politicians are also enthusiastic about the possibilities. Sinaloa Senator Imelda Castro said marijuana legalization could positively impact the rural economy and that producers from Badiraguato had already begun to research cultivation techniques in anticipation.²⁵ Similarly, the municipality's mayor mentioned that if legalization did occur, it would attract a significant amount of investment.²⁶

There is also enthusiasm for the idea beyond Sinaloa. In Oaxaca, several communities have already begun cooperatives to grow hemp cannabis plants for therapeutic, artistic, and textile purposes like using hemp fibers to make clothing.²⁷ And in Guerrero, another historic epicenter for marijuana and opium poppy production, local leaders are hopeful that marijuana cultivation and the potential to produce CBD products may provide new economic opportunities; some have even begun to replace poppy crops with cannabis.²⁸

That said, the possibility for artisanal marijuana cultivation alone to succeed as a rural development strategy seems remote. What's clear is that marijuana is far from the valued cash crop it once was, and the synthetic drug production that is coming online throughout this region is not a valid substitute. Compared to plant-based drugs, the production of methamphetamine and fentanyl -- the two synthetic substances produced the most -- does not require much land, a large workforce, or a series of ancillary businesses to thrive. This means that fewer people from farming communities are being employed to harvest illicit crops.²⁹ And although the domestic marijuana market has grown, it is still significantly smaller and less profitable than the international market was at its height.

Violence Evolves, but Criminal Presence Remains

There are some positive results of this upheaval. After being a staple of anti-drug efforts for decades, marijuana eradication is a fraction of what it used to be, plummeting to about 1,000 hectares in 2021, according to official data.³⁰ Violence associated with these efforts -- including human rights abuses ranging from the use of torture to extract information to forced disappearances and extrajudicial killings³¹ -- is down, primarily as a result of fewer government

25 InSight Crime interview, Sinaloa state Senator Imelda Castro, Culiacán, Sinaloa, Mexico, 8 April, 2022.

26 InSight Crime interview, Badiraguato Mayor José Paz López Elenes, Sinaloa, Mexico, 6 April, 2022.

27 El Universal, “[En 10 comunidades indígenas de Oaxaca, 175 campesinos apuestan por siembra legal de marihuana](#),” 22 November, 2021.

28 Amapola Periodismo, “[Campesinos de Guerrero cambian cultivo de amapola por el de marihuana para fabricar productos con ella](#),” 10 February, 2020

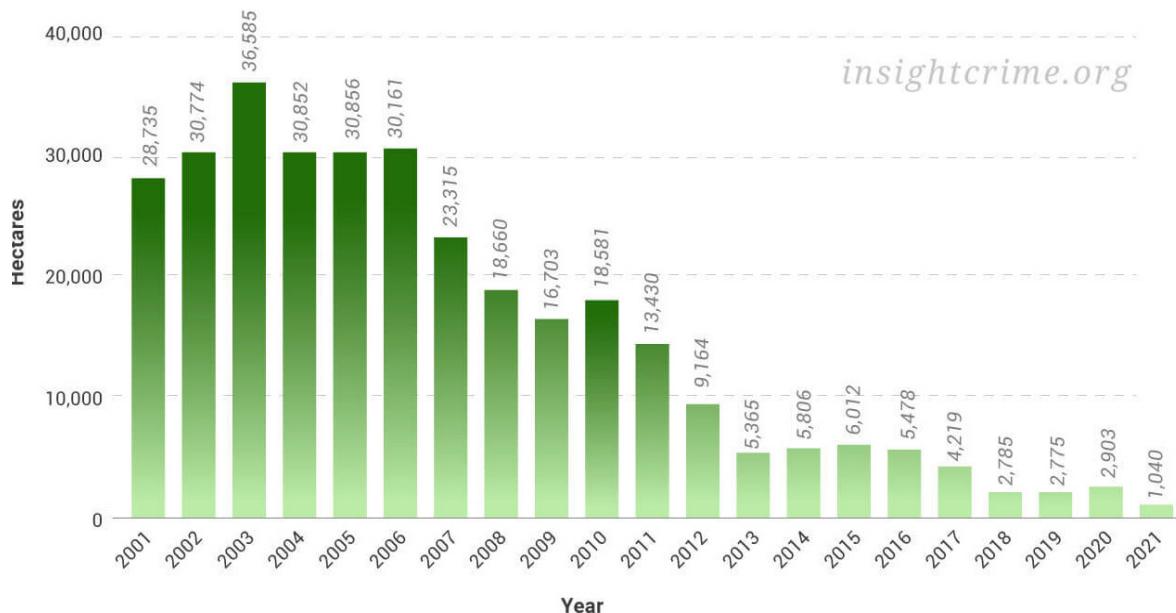
29 Noria Research, “[No More Opium for the Masses: From the U.S. Fentanyl Boom to the Mexican Opium Crisis: Opportunities Amidst Violence?](#),” 2020.

30 Presidencia de la República, “[Informe de gobierno](#),” 2021.

31 Human Rights Watch, “[Neither Rights Nor Security: Killings, Torture, and Disappearances in Mexico’s ‘War on Drugs’](#),” 9 November, 2011.

interventions but possibly also in part from the reduction of competition between criminal organizations over production areas. What was an intense struggle over control of cannabis and opium poppy plantations³² in this region has become less conflictive with levels of violence far lower than previous years, according to homicide data from Sinaloa's Attorney General's Office.³³

Evolution of Marijuana Eradication in Mexico (2001-2021)



Sourc: Mexican Government data

December 2022

That said, homicides are but one marker of violence. Residents still say criminal organizations maintain a sinister presence and exert significant control over the region. The decades-long economic dependence small farmers have had on illicit crops and the lack of state support in production regions allowed organized crime groups to create a certain level of criminal governance. Despite changes to the international drug market involving marijuana, these relationships appear to remain in place. For example, the team needed permission to travel through certain areas of the region and witnessed an armed convoy patrolling parts of the highway from Culiacán to Badiraguato. In contrast, not one police or military patrol was observed during the entire time InSight Crime traveled through this part of the mountains.

32 Francisco Sandoval, “The Displaced of Sinaloa,” InSight Crime, 25 September, 2012.

33 Fiscalía General del Estado de Sinaloa, “Información Estadística: Homicidio Doloso,” 1993-2022.

Moreover, farmers in the Sembrando Vida program and cannabis producers in Culiacán told InSight Crime that networks associated with the Sinaloa Cartel still controlled who could buy marijuana and opium poppy crops from producers and punished those who broke these unwritten rules.³⁴ So while this conflict may have simmered as networks linked to the Sinaloa Cartel emerged as the dominant criminal actor in recent years, the threat of violence is still present.³⁵

According to local authorities and activists, forced displacement, a feature of the multi-party conflicts in the past, also continues across the region. This is especially true in the most remote areas of the Golden Triangle, such as the municipality of Choix, Sinaloa, near the border with Chihuahua.³⁶ It is unclear how much of this violence forcing locals to flee is related to illicit crops, but locals said it appears to respond to efforts of territorial control typical of criminal groups and access to resources, especially water.³⁷

The irony, local farmers said, was that their traditional relationship with criminal groups and the state had, at least partially, flipped. Farmers enrolled in the Sembrando Vida program, for instance, mentioned that leaving the illicit-crop economy has protected them from violence associated with the armed forces during eradication campaigns.³⁸ “We used to live in fear of the Army. Their eradication campaigns were brutal, and they would attack anyone near marijuana or poppy plantations,” recalled one farmer who spoke to InSight Crime. “Today, our relationship with them has improved considerably.”

Meanwhile, their symbiotic relationship with criminal organizations has evolved. Although these criminal groups still exert tremendous influence on these areas, that influence is increasingly dependent on their use of force and coercion, rather than positive economic and social interactions. While the criminal-farmer relationship has always been fraught with abuse and a severe power imbalance, the repressive nature of that relationship today could present an opportunity for interventions with these farming communities, something we will turn our attention to in a later section of this report.

³⁴ InSight Crime interviews, Sembrando Vida farmers, Badiraguato, Sinaloa, Mexico, 6 April, 2022; cannabis producer, Culiacán, Sinaloa, Mexico, 8 April, 2022.

³⁵ RioDoce, “[Choix bajo el yugo de Don Rafa](#),” 20 July, 2022; Revista Espejo, “[Desplazamiento forzado. Bajo su propio riesgo, desplazados retornan a la sierra del sur de Sinaloa](#),” 27 June, 2022.

³⁶ InSight Crime interviews, Ricardo Jenny del Rincón, head of Sinaloa’s Executive Secretary of Public Security, Culiacán, Sinaloa, Mexico, 8 April, 2022; activist Óscar Loza, Culiacán, Sinaloa, Mexico, 5 April, 2022.

³⁷ InSight Crime interview, activist Óscar Loza, Culiacán, Sinaloa, Mexico, 5 April, 2022.

³⁸ Alexander Aviña, “[Those Who Live in Luvina. Power and Violence in the Mexican Countryside](#),” Noria Research, March 2022.

5

Mexican DTOs' New Marijuana Strategies

In 2010, the RAND Corporation said it was “noncontroversial” to declare that at least 50 percent of the marijuana consumed in the United States was produced in Mexico.³⁹ At the time, there were but 11 states that had granted some legal access to marijuana, and by all indications, Mexico’s production was booming. In 2009, US authorities along the southwest border seized some 1.5 million kilograms of marijuana, up from about one million kilograms in 2005.⁴⁰ Even so, RAND could see the tide was shifting and predicted, correctly it seems, that the coming legalization of marijuana in states like California would significantly cut into Mexican DTO’s earnings.

RAND’s argument was based on two key factors: potency and price. In terms of potency, RAND said, US legal marijuana was about 300 percent more potent on average than Mexican-produced marijuana. And while the price point for this marijuana was as much as 50 percent higher, the potency more than made up for this difference. Even if legalization was restricted to California, RAND said, its impact on Mexican criminal organization’s market share would be significant. “We believe that legalizing marijuana in California would effectively eliminate Mexican DTOs’ revenues from supplying Mexican-grown marijuana to the California market,” RAND researchers wrote, limiting their prediction to the state they’d chosen to study but with obvious implications beyond.

In response to these changes, Mexico-based DTOs have shifted their strategies. Below we outline three of them.

³⁹ RAND Corporation, “Reducing Drug Trafficking Revenues and Violence in Mexico: Would Legalizing Marijuana in California Help?,” 2010.

⁴⁰ DEA, “2010 National Drug Threat Assessment,” February 2010.

Strategy 1: Supply Limited US Market, Expand to Other International Markets

Since 2010, the percentage of the US population with legal access to marijuana has nearly doubled,⁴¹ far beyond what perhaps even the most optimistic, pro-legalization groups expected. Based on RAND's rough analysis, that would mean the share of the US market supplied by Mexican DTOs smuggling marijuana into the country is currently closer to 25 percent; most likely, it is significantly less. And while news reports, often quoting officials, say Mexican "cartels" are buying up land and growing large amounts of marijuana to distribute in the US, neither the officials nor the news organizations offer any evidence to back up those claims.⁴² The DEA did not respond to any of InSight Crime's requests for comment, and local Fish and Wildlife officials in California said they haven't found any evidence so far to suggest connections between illegal cannabis cultivation and Mexican drug trafficking organizations.⁴³

The reasons for the drop in availability of Mexico-produced marijuana are potency and price, as RAND noted a decade ago, but also availability. Legal supplies, law enforcement says, can and are frequently diverted illegally to those who do not have legal authority to obtain it and to states that retain their restrictions on the sale and use of marijuana.⁴⁴ To be sure, marijuana from California is worth more outside the state and can be sold at a premium further east in states like Texas.⁴⁵ Local and federal authorities also say there are hundreds of so-called "outlaw grows" in the United States. The problem is particularly acute in places like California, where a recent Los Angeles Times' investigation uncovered hundreds of unregistered "hoop houses," which can produce three to five harvests a year.⁴⁶ And with over half the US population residing in areas where marijuana is legally available in some form,⁴⁷ diversion and illegal grows will remain a central issue.

41 Justice in Mexico, "The Impact of State-level U.S. Legalization Initiatives on Illegal Drug Flows," February 2022.

42 See, among others: Louisville Courier Journal, "[Marijuana wars: Violent Mexican drug cartels turn Northern California into 'The Wild West'](#)," 21 December, 2021; NBC News, Today Show, "[Inside Secret Cartel Weed Farms](#)," 1 December, 2021.

43 InSight Crime interview, California Department of Fish and Wildlife, 28 October, 2022.

44 DEA, "[2020 National Drug Threat Assessment](#)," March 2021.

45 InSight Crime interview, California Department of Fish and Wildlife, 28 October, 2022.

46 Los Angeles Times, "[The reality of legal weed in California: Huge illegal grows, violence, worker exploitation and deaths](#)," 8 September, 2022.

47 Justice in Mexico, "The Impact of State-level U.S. Legalization Initiatives on Illegal Drug Flows," February 2022.

The same is true as it relates to Mexico-produced marijuana. The data, and interviews with law enforcement and experts, indicates that Mexican DTOs seem to be reacting to the changes in legislation by concentrating their efforts in the corridor where marijuana remains illegal, such as in the southern and Midwest regions of the United States. While surveys of marijuana use over the years have illustrated that close to 18 percent of the US tries marijuana in any given year,⁴⁸ there is no data on cross-state marijuana seizures in the country. However, we can see diversion playing out on an international scale with Mexican-grown marijuana. Marijuana seized by Customs and Border Protection (CBP) agents along the border, for example, has been concentrated in recent years primarily in the Rio Grande Valley and Laredo sectors of eastern Texas. While seizures in California and Arizona, the two traditional corridors, have largely dried up, data shows.⁴⁹

US Marijuana Seizures on the Southwest Border (2021)



⁴⁸ Substance Abuse and Mental Health Services Administration, "Key substance use and mental health indicators in the United States: Results from the 2019 National Survey on Drug Use and Health," Center for Behavioral Health Statistics and Quality, 2020.

⁴⁹ InSight Crime, "US-Mexico Data Dashboard," 2022.

Trafficking marijuana through Texas also makes logistical sense for the DTOs. From key production zones like Durango and Sinaloa, Mexico's federal Highway 40 serves as a near-direct trafficking route to the state of Texas, which provides a good pathway to states in the north and east that have not yet legalized marijuana. Cutting through the heart of the country, the highway connects the Port of Mazatlán to the city of Reynosa on the US-Mexico border.

Some powerful crime groups, such as a faction of the former Zetas known as the Northeast Cartel, appear to be carving out a role for themselves in what is left of the marijuana trade to the United States. In one recent case, for example, 15 Northeast Cartel members pleaded guilty for their role in smuggling around 12 tons of marijuana into Laredo, just across the border from the group's base of operations in the northern Mexican state of Tamaulipas.⁵⁰ It's not clear what the destination of the marijuana was, but prosecutors estimated the group would have earned about \$1,000 per kilogram, representing over \$11 million in potential total profits.

There is also evidence to suggest that Mexican organized crime groups may be trying to find new international marijuana markets. Last year, authorities seized more than 1,700 kilograms of marijuana destined for Chile from a shipping container at the Port of Manzanillo in the state of Colima.⁵¹ Days later, Chile's armed forces seized more than a ton of marijuana sent from the Port of Lázaro Cárdenas in Michoacán state.⁵² Both Pacific coast states are home to a smattering of criminal groups, but it would take a sophisticated operation to organize international shipments of this size.

Strategy 2: Get into Mexico's Burgeoning, (Almost) Legal Market

Faced with reduced US demand, DTOs in Mexico appear to be looking to capitalize on the local consumer market for marijuana, which is growing. Marijuana is the most consumed illicit substance in Mexico, according to recent surveys from Mexico's National Commission Against Addictions' (Comisión Nacional contra las Adicciones - CONADIC).⁵³ The estimated percentage of users among the general population has steadily increased from 1.2 percent

50 Justice Department, “[15 convicted in \\$11M cartel drug conspiracy](#),” 26 April, 2022.

51 Marine Secretary, “[MARINA, FGR y Aduana aseguran presunta carga ilícita en Recinto Portuario de Manzanillo, Colima](#),” 7 August, 2021.

52 Chilean Armed Forces, “[Operativo interagencial permite incautar 1.1 toneladas de marihuana tipo creepy](#),” 10 August, 2021.

53 CONADIC, “[Encuesta Nacional de Consumo de Drogas, Alcohol y Tabaco](#),” 2016-2017.

reporting having consumed marijuana during the last year in 2011, to 2.1 percent in 2016. Adolescents are one of the age groups with the sharpest growth, moving from 2.4 percent reporting having consumed marijuana during 2011, to 5.3 percent in 2016.⁵⁴

In large consumer markets like Mexico City, Tijuana, and Guadalajara, marijuana is readily available and easy to access. There, dealers offer “menus” with more than a dozen types of high-end marijuana strains and cannabis derivatives, which appear to be catered to a niche pool of middle- to high-income consumers. In Culiacán, one producer explained to InSight Crime that an ounce of high-quality marijuana that sells for 3,500 Mexican pesos (about \$170) in Sinaloa could be sold for double that price in Mexico City.⁵⁵ And during field research in cities like Culiacán, InSight Crime observed a proliferation of illegal dispensaries selling marijuana and derivatives like edibles and wax-oil cartridges.

These physical stores emulate dispensary models from the United States and Europe, allowing consumers to see, smell, taste, and choose from a selection of products. Some of these are even marketed as being from US states like California, but local producers told us it was more likely that they were produced in Sinaloa or nearby states. Indeed, recent reports concerning an influx of US-produced marijuana into Mexico appear to be greatly exaggerating the amount coming from abroad. Local dealers, law enforcement, and industry experts told InSight Crime that Mexico’s production could more than account for local consumption and adjust for high-end consumers that are expecting a greater level of potency that comes from US-produced marijuana products.

In fact, several sources consulted in Baja California mentioned having traveled to California to acquire expertise in cultivation and growing techniques, which allowed them to refine their production back in Mexico.⁵⁶ In other parts of the country, producers of therapeutic products also mentioned having acquired their knowledge -- and seeds -- from peers in European countries with a well-developed cannabis market, such as the Netherlands and Spain.⁵⁷ Sources noted that extraction capacities and techniques in Mexico had also improved

54 CONADIC, “Informe sobre la situación de las Drogas en México y su Atención Integral 2019,” 17 July, 2019.

55 InSight Crime interview, marijuana producer, Culiacán, Sinaloa, Mexico, 8 April, 2022.

56 InSight Crime interviews, cannabis entrepreneurs in Mexicali, Baja California, Mexico, 22 February, 2022; medical professional specializing in cannabis therapy, Tijuana, Baja California, 7 March, 2022; health professional specializing in cannabis therapy, Tijuana, Baja California, 9 March, 2022.

57 InSight Crime interviews, therapeutic cannabis producer, Culiacán, Sinaloa, Mexico, 7 April, 2022; therapeutic cannabis producer, Culiacán, Sinaloa, México, 8 April, 2022; cannabis entrepreneur, Mexico City, 23 May, 2022.

in recent years.⁵⁸ And some derivative products are now being produced locally. In May 2022, authorities discovered a shipment of 100 tamarind candies containing cannabis extract at a paquetería (a local postal office) in Guanajuato.⁵⁹

Marijuana produced in Sinaloa, for example, supplies several dispensaries. These are located in Culiacán, including one just meters from the main cathedral downtown. The dispensary has operated from the same location for years without any hassle from authorities, local sources told InSight Crime. Networks connected with the Sinaloa Cartel, primarily the Chapitos, a group led by the sons of former kingpin Joaquín Guzmán Loera, alias “El Chapo,” have a monopoly over these dispensaries, according to numerous interviews. And some of the products sold are even labeled with a ratón (a mouse) in reference to El Chapo’s son, Ovidio Guzmán.



Credit: Mike Lettieri/InSight Crime

58 InSight Crime interview with marijuana activist and grow shop owner in Mexico City, May 2022.

59 Guardia Nacional, “En Guanajuato, Guardia Nacional detecta dulces de tamarindo con aparente extracto de cannabis,” 21 May, 2022.

Despite its hold on business within Sinaloa, it's unclear if the Sinaloa Cartel is also still moving marijuana to the United States. Local producers told InSight Crime marijuana smuggled out of Sinaloa is primarily moved to larger domestic markets like Mexico City and Guadalajara. At the same time, there are entrepreneurs, activists, and health professionals who are using the concept of a "wellness market" to dodge the social stigma and divert the attention of authorities away from their operations. From oils, creams, and ointments to lip balms, gummies, and vapes, these products are often sold alongside herbal medicines in smoke shops, or even in stores already specializing in cannabis derivatives. The level of involvement of traditional criminal networks in this market, however, appears to be minimal.



CBD products at a store in Culiacán. Credit: Mike Lettieri/InSight Crime

Perhaps one of the most notable examples of this new market is Paradise, a company partly owned by former Mexican president Vicente Fox, which sells cannabis products for “health, fun and wellness.”⁶⁰ Founded in 2015, the company claims that all their products are legal, produced with their own crops and authorized by COFEPRIS.⁶¹ With a presence in 16 states across the country, this is possibly the largest legally constituted cannabis enterprise in Mexico, but smaller businesses with a more local reach have also started to commercialize similar items.

Even so, the Sinaloa Cartel’s operations in Culiacán suggest larger criminal organizations may be laying the groundwork to profit from a legal marijuana market in Mexico. Through its networks, for example, the group not only has a strategic and logistical advantage having produced marijuana for decades, but it also has the business and political contacts to do so, especially in states like Sinaloa. There could also be other advantages to this strategy, particularly with using the mostly cash-based cannabis and marijuana business to launder money from other illicit earnings. Just as local farmers and politicians are readying themselves for the potential economic advantages of a legal marijuana market, Mexico’s organized crime groups may be well-positioned to secure a piece of the expected profits.

Strategy 3: Move to Synthetics

In 2010, RAND estimated that Mexican criminal organizations were making as much as \$2 billion per year selling wholesale marijuana in the United States.⁶² Some estimates were far higher, including a 2006 estimate by the White House that said Mexican criminal organizations were making \$8.5 billion from marijuana sales in the United States.⁶³ (This estimate was greatly disputed by RAND.)⁶⁴ While that revenue stream has most likely been significantly cut, Mexican DTOs’ shift to the production and export of synthetic drugs appears to have more than made up for this loss in revenue.

Evidence for this comes in various forms. To begin with, consumption of synthetics, in particular methamphetamine and fentanyl, has skyrocketed in recent years. The wholesale methamphetamine market in the United States,

60 Paradise Shop, “[Company website](#),“ 26 May, 2022.

61 Nación Cannabis, “[Vicente Fox expande su negocio de cannabis en México](#),” 28 July, 2021.

62 RAND Corporation, “[Reducing Drug Trafficking Revenues and Violence in Mexico: Would Legalizing Marijuana in California Help?](#),” 2010.

63 The White House, “[National Drug Control Strategy](#),” February 2006.

64 RAND Corporation, “[Reducing Drug Trafficking Revenues and Violence in Mexico: Would Legalizing Marijuana in California Help?](#),” 2010.

for example, once thought to be worth about \$13 billion in 2010, may be closer to \$40 billion now, according to a 2019 Rand study.⁶⁵ Seizures along the US Southwest border, the amount of data samples sent for analysis within the United States, and overdose deaths associated with methamphetamine use bolster these findings.⁶⁶

Similar data is available for illicit fentanyl. The synthetic opioid is increasingly used as a substitute for heroin, laced into fake pharmaceutical pills such as Oxycodone or Percocet, or used as an additive in numerous illicit drugs.⁶⁷ The varied uses and small quantities of the drug make estimating its total revenue difficult, but the markup for fentanyl is astounding -- sales prices at the distribution point can be as much 2,700 times its price at the production point; and the uptick of seizures along the border, as well as the increase in data samples sent for analysis within the United States and overdose data, indicate that use has gone up at least five-fold in the last five years alone.⁶⁸

As DTOs have shifted to synthetic drugs, they have also become aggressive marketers and developed ingenious ways of promoting increased consumption of these drugs. While it is not clear if this is related to the drop in their marijuana market share in the United States, Mexico's DTOs have increasingly packaged fentanyl in fake pills, most notably falsified Oxycodone. This is, in part, because of the well-deserved reputation of fentanyl as provoking overdoses. They have also laced other drugs, including cocaine and methamphetamine, with fentanyl, as a means of differentiating their product in saturated markets.

The DTOs have employed similar tactics in the methamphetamine market. Beginning around 2019, they have begun packaging methamphetamine in fake Adderall pills.⁶⁹ The black-market Adderall market is significantly larger than that of methamphetamine, and they may believe this gives them access to an even larger share of users. At the same time, the DTOs have mass-produced methamphetamine and offered it at extreme discounts or sometimes for free. The result is that areas, such as New England, which have little history of methamphetamine use, are seeing spikes in addiction rates and overdoses.⁷⁰

The move to synthetics can also be felt in Mexico. Data from Mexico's government and civil society-run addiction clinics suggests that methamphetamine consumption is now landing more users in treatment than

65 RAND Corporation, “[What America’s Users Spend on Illegal Drugs, 2006–2016](#),” 2019.

66 Steven Dudley and Parker Asmann, “[The United States is Now Meth Country](#),” InSight Crime, 27 April, 2021.

67 Parker Asmann and Steven Dudley, “[How Fentanyl, More than Heroin, Drives US Opioid Market](#),” InSight Crime, 28 April, 2021.

68 Ibid.

69 Steven Dudley and Parker Asmann, “[The United States is Now Meth Country](#),” InSight Crime, 27 April, 2021.

70 Ibid.

any other drug, outpacing both alcohol and marijuana.⁷¹ And in 2019, Mexico's National Statistics and Geography Institute (Instituto Nacional de Estadística y Geografía -- INEGI) said the number of methamphetamine addicts had risen 775 percent since 2000.⁷² For years there have also been reports that fentanyl has penetrated the local drug supply in border cities like Tijuana,⁷³ and that it is starting to cause overdose deaths further south in states like Sinaloa.⁷⁴ To be sure, activists and health professionals who spoke to InSight Crime believe overdose deaths in Mexico are severely underreported.

Violence associated with synthetics also appears to be rising. The areas of highest use correlate with some of the most violent places in Mexico. These include Tijuana, which is a hub for both synthetic drugs crossing into the United States and drug use. In 2021, Tijuana saw almost 2,000 murder victims,⁷⁵ almost six times as many recorded in 2012.⁷⁶

The shift from plant-based to synthetic drugs may present yet another opportunity for positive messaging and educational strategies. The DTOs have long peddled a mythic narrative that their social ascension is about upending the Mexican elites with few costs to the average citizen, especially as it relates to addictive drug use, which Mexicans like to say is a “gringo problem.” However, the rise in addiction and violence associated with synthetic drugs may cut into the DTOs’ legitimacy in ways that their connection to marijuana, which is considered a relatively benign drug, and opioids, which were once largely sold abroad, never could.

71 Secretaría de Salud, “[Presentación Institucional: Cifras Anuales 2021](#),” 2021.

72 Animal Político, “[En los últimos 18 años, el consumo de anfetaminas aumentó 775% en México](#),” 16 October, 2019

73 InSight Crime, “[Fentanyl Enters Heroin Supply in Tijuana, Mexico](#),” 30 January, 2020.

74 RioDoce, “[Fentanilo empieza a causar muertes en Sinaloa](#),” 25 May, 2022.

75 Fiscalía General del Estado de Baja California, “[Incidencia Delictiva](#),” 2021.

76 Fiscalía General del Estado de Baja California, “[Incidencia Delictiva](#),” 2012.

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Opportunities for Intervention

- 1. Authorities and civil society groups should take advantage of the fact that large rural populations are moving away from illicit crops and support programs offering alternatives.**

Funds should be allocated for conducting field studies on how to implement crop substitution programs -- and eventual legal cannabis production -- in a sustainable and socially-just manner to benefit communities that have historically been marginalized and that are vulnerable to criminal governance. Social development programs such as Sembrando Vida should be closely monitored. Their impact must be measured to understand how implementation varies across different communities to design projects that can be tailored to specific local conditions.

- 2. Preparations should be made for possible legalization in Mexico so that small farmers can factor into this transition and do so independently and legally.**

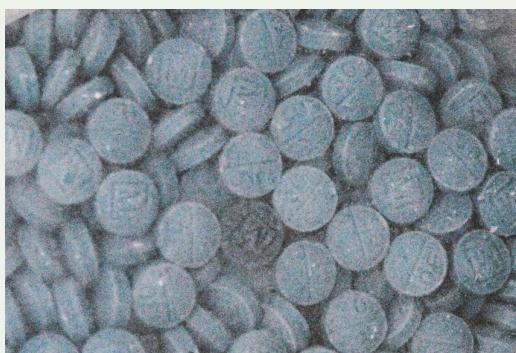
Local producers can and should have an equal opportunity to thrive in the emerging market. For example, taxes and regulatory fees should be carefully considered to ensure that small farmers have a reasonable chance to transition, thus reducing their reliance on the black market. Although state dynamics vary widely, and it is often difficult to find the proper balance between a robust regulatory regime and supporting small farmers, evidence from some legal marijuana markets suggests that high taxes and stiff requirements are among the reasons why many cannabis growers and distributors do not enter the legal market and therefore continue operating clandestinely. Moreover, in the Mexican context, it is necessary for the government to invest in infrastructure that allows producers to collect, process, and move their products to be sold in nearby markets.

3. Authorities and civil society groups should immediately deal with the effects of synthetic drugs in Mexico by supporting further study, research, and public campaigns to undermine DTO legitimacy.

With the advent of the synthetic era, the image of drug traffickers as local heroes could be dealt a severe blow should authorities connect increased usage of highly addictive and deadly synthetic drugs with the DTOs through public campaigns. In addition, the Mexican government lacks the basic technical capabilities needed to achieve even a baseline understanding of the potency of the synthetic drugs they are interdicting, particularly fentanyl. More funding should be directed to Mexico's lab technicians for equipment needed to analyze the chemical makeup of fentanyl to better understand its threat to consumers.

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