From Repression to Regulation:

Proposals for Drug Policy Reform



José Carlos Campero • Horacio Barrancos • Ricardo Vargas Eduardo Vergara • Daniel Brombacher • Heino Stöver • Maximilian Plenert

Hans Mathieu • Catalina Niño Guarnizo / Editors

FRIEDRICH EBERT® STIFTUNG



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Acronyms

ACCU	Peasant Self-Defense Groupe of Córdoba and Urabá (Autodefensas Campesinas de Córdoba y Urabá, Colombia)
akzept e.V.	Federal Association for Accepting Drug Work and Human Drug Policy (Bundesverband für akzeptierende Drogenarbeit und humane Drogenpolitik)
ALBA	Bolivarian Alliance for the Peoples of Our America (Alianza Bolivariana para los Pueblos de Nuestra América)
AUC	United Self-Defense Forces of Colombia (Autodefensas Unidas de Colombia)
BtM	Narcotics (Betäubungsmittel) BtM
BtMG	Narcotics Act (Betäubungsmittelgesetz)
BverfG	Federal Constitutional Court (Bundesverfassungsgericht)
BZgA	Federal Centre for Health Education (Bundeszentrale für ges- undheitliche Aufklärung)
CBD	Cannabidiol
CDT	Commission for the Dissuasion of Drug Abuse (Comissão para a Dissuasão da Toxicodependência, Portugal)
CEDE	Center for Studies on Economical Development (Centro de Estudios sobre Desarrollo Económico, Universidad de los Andes, Colombia)
CICAD	Inter-American Drug Abuse Control Commission (Comisión Interamericana para el Control del Abuso de Drogas)
CSC	Cannabis Social Club (Clubes Sociales de Cannabis, España)
DBDD	German Monitoring Centre for Drugs and Drug Addiction (Deutsche Beobachtungsstelle für Drogen und Drogensucht)
DEA	Drug Enforcement Administration
DGS	German Society for Addiction Medicine (Deutsche Gesellschaft für Suchtmedizin)
DHS	German Centre for the Control of Drug Abuse (Deutsche Hauptstelle für Suchtfragen)

DHV German Hemp Association (Deutscher Hanf Verband)

DIGCOIN General Directorate of Coca Leaf and Industrialization (Dirección General de

la Hoja de Coca e Industrialización, Bolivia)

EBDD Europäische Beobachtungsstelle für Drogen und Drogensucht [European

Monitoring Centre for Drugs and Drug Addiction]

ELN The National Liberation Army (Ejército de Liberación Nacional, Colombia)

EMCDDA European Monitoring Centre for Drugs and Drug Addiction

ENACO National Coca Company (Empresa Nacional de la Coca, Perú)

ENCOD European Coalition for Just and Effective Drug Policie

ESA Epidemiological Studies (Epidemiologische Suchtsurveys)

ESPAD European Project of School Survey on Alcohol and other Drugs (Europäische

Schülerstudie zu Alkohol und anderen Drogen)

EU European Union

EUV European Union Treaty (Vertrag über die Europäische Union)

FAC Federation of Associations of Cannabis Users (Federación de Asociaciones de

Personas Usuarias de Cannabis, España)

FARC The Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucio-

narias de Colombia)

FES Friedrich Ebert Foundation (Friedrich-Ebert-Stiftung)

GAO Government Accountability Office

GBA Joint Federal Board (Gemeinsamer Bundesausschuss)

GHB Acid 4-hidroxibutanoic

GIZ German Society for International Cooperation (Deutsche Gesellschaft für in-

ternationale Zusammenarbeit)

HCL Cocaine hydrochloride

HCl Freebase cocaine

IDUS Intravenous Drug Users

INCB International Narcotics Control Board (Junta Internacional de Fiscalización

de Estupefacientes, JIFE)

IVD Intravenous Drug Users

JES Junkies, Former Junkies, People in Substitution Programmes (Junkies, Ehe-

malige, Substituierte)

LSD Lysergic Acid Diethylamide

MDMA 3,4-methylenedioxy-N-methylamphetamine

MERCOSUR Southern Common Market (Mercado Común del Sur)

MPU Medical and Psychological Assessment (Medizinisch-Psychologische Unter-

suchung)

NAS Narcotics Affairs Section (United States)

OEDT European Observatory for Drugs and Drug Addiction

OMS World Health Organization

PBC Cocaine base paste

PCP Phencyclidine

PREMOS Predictors, Moderators and Outcomes of Substitution Treatment

PSB Psychosocial Care (Psychosoziale Betreuung)

REITOX European Monitoring Centre for Drugs and Drug Addiction (Réseau

Européen d'Information sur les Drogues et les Toxicomanies)

RKI Robert Koch Institute (Robert-Koch-Institut)

SWP German Institute for International and Security Affairs (Stiftung Wissenschaft

und Politik)

THC Tetrahydrocannabinol

TNI Transnational Institute

TRANSFORM Transform Drug Policy Foundation

TUE European Union Treaty

ÜB 61 Single Convention on Narcotic Drugs of 1961 (Einheitsabkommen über die

Betäubungsmittel von 1961)

ÜB 71 Convention on Psychotropic Substances of 1971 (Konvention über psycho-

trope Substanzen von 1971)

ÜB 88 United Nations Conventions against Illicit Traffic in Narcotic Drugs and Psy-

chotropic Substances of 19888 (Übereinkommen der Vereinten Nationen gegen den unerlaubten Verkehr mit Suchtstoffen und psychotropen Stoffen von

1988)

UN United Nations

United Nations Interregional Crime and Justice Research Institute UNICRI

United Nations Office on Drugs and Crime UNODC

Drug Policy Association (Verein für Drogenpolitik) VfD

Hepatitis C Virus VHC

Human immunodeficiency virus VIH

Valley of the rivers Apurimac and Ene (Valle de los ríos Apurimac y Ene, Perú) VRAE

Washington Office on Latin America WOLA

Foreword

The War on Drugs has failed. The strategy implemented for the past few decades has not met its goals. Drug use has neither ceased nor declined. On the contrary, new drug consumption markets have developed in emerging countries, such as Brazil, or transit countries for illegal drugs, such as Central America's northern triangle. Moreover, the strategy itself, focused as it is on the repression of supply, has introduced an element of violence into illegal drug markets. In Colombia and Mexico, for example, this violence has reached alarming levels and has had enormous costs in terms of human life, despite the vast resources invested in the fight against the cartels, illegal crop eradication, interdiction and anti-money laundering efforts. States' repressive measures have usually focused on eradicating crops and eliminating the heads of major criminal groups, which has led the former to move (balloon effect) and the latter to break up into smaller groups and clash violently over control of routes, territories and markets.

Further, the illegal nature of the drug trade, added to the constant demand for drugs, has made it a very lucrative business. This has at least two negative consequences. First, it makes drug trafficking a very appealing option, especially for many young people who have few legal employment or earning prospects, in spite of the risk of being prosecuted by the authorities or murdered by competitors. Thus, there are always volunteers willing to replace those who fall in clashes between drug trafficking groups or with the state, which is a vicious circle that challenges public policies that attempt to tackle this phenomenon.

Second, the vast profits obtained by criminal groups give them enormous power to corrupt and intimidate, which they use extensively to ensure their activities proceed unhindered. These groups' ability to penetrate and corrupt public institutions in the states where they operate threatens democratic governance in those countries, as is already happening in Guatemala, for example, where Mexican criminal groups such as the Zetas and the Sinaloa cartel have relocated as a response to pressure from the Mexican government's war strategy.

The inability of the prohibitionist regime to reduce the harm caused by drug consumption to users and third parties, and the violence associated with the activities of organized crime force us to consider new policy options. In the present context, it is reasonable to suggest that any strategy to combat drug trafficking should aim to reduce and minimize harm caused both by drugs and current drug control policies to users and non-user third parties; substantially shrink the profits that organized crime and other illegal actors currently obtain from the business; and maximize the income that the state would obtain from drugs, in a manner consistent with the above aims, to finance prevention and public health policies and the fight against illegal crime.

With these goals in mind, the Friedrich Ebert Foundation's Regional Security Cooperation Program hired experts from three Latin American countries to present alternatives to current policies across three links of the drug supply chain: production, trafficking and consumption. Their proposals were premised on the notion that a regulated activity can be controlled through clear mechanisms that enable us to know its actual size and scope, the organizations and people that participate in it, its costs and income, and even allow us to tax it.

This volume gathers the documents presented by those experts, their analyses of the current phenomenon and their proposals to modify the policies implemented to date in order to improve their effectiveness in pursuit of the above objectives. It also includes essays by two German authors, who present their approach to drug production, trade and use from a European perspective.

Through the studies published in this volume, we aim to contribute ideas and proposals to the emerging debate that will enable us to move forward in a discussion that is long overdue in Latin America and the rest of the world. We need more effective strategies than those we have implemented thus far. We believe that the countries most severely affected by drug trafficking should develop a common approach, based on reliable information, to allow them to promote this discussion seriously and coherently. We hope this publication will contribute to that effort.

Hans Mathieu

Introduction A Few Aspects of the Current Situation with Illegal Drugs

Hans Mathieu / Catalina Niño*

THE FAILURE OF PROHIBITIONISM: A GROWING CONSENSUS

In the last few years, the debate on illicit drugs – long dominated by voices that favor repressive and punitive policies framed by prohibitionist strategies – has broadened and gained new momentum. It is no longer only academics who criticize the so-called War on Drugs; today, commissions of former presidents and other personalities are calling for a revision of current drug policies and for a global debate to search for more effective alternatives. Even incumbent presidents have put the issue on the table: Uruguayan president José Mujica (2010-) has even proposed specific changes to national policy on the production and commercialization of marijuana, the use of which has already been decriminalized in Uruguay.

Thus, in 2009 the Latin American Commission on Drugs and Democracy, established in 2008 under the leadership of three of the region's former presidents, Fernando Henrique Cardoso of Brazil (1995-2002), César Gaviria of Colombia (1990-1994) and Ernesto Zedillo of Mexico (1994-2000), published a report that highlighted the urgent need to revise the strategy, since it had not yielded the expected results. The Commission proposed that drug use should be treated as a public health issue to be addressed through information and prevention, and that repression should be focused on organized crime actors.

Later, in June 2001, the Global Commission on Drug Policy (GCDP), an expanded version of the above-mentioned Latin American Commission that included such figures as former UN Secretary General Kofi Annan and former US Secretary of State George Shultz, alongside former Latin American presidents Cardoso, Ga-

^{*} We wish to thank Christine Bawaj, Laura Schmitz and William Treherne, interns at the Friedrich Ebert Foundation's office in Bogota, for their contributions to the preparation of this text.

viria and Zedillo, published a report that begins with the following statement: "The global War on Drugs has failed, with devastating consequences for individuals and societies around the world" (Global Commission on Drug Policy, 2011: 2). This new report broadly agrees with the findings of the Latin American Commission's report, suggesting that repressive measures should target violent organized crime instead of consumers, retail drug dealers or the peasants who cultivate currently banned substances. Moreover, the report argues that non-problem drug use should be decriminalized, problem users should be offered treatment rather than incarcerated and alternative substitution therapies, such as methadone, and harm reduction measures, such as needle exchange programs, should be sought, all of this based on a human rights approach to drug users. Further, the report underlines the need to correct existing misconceptions about drugs, their markets and consumers and encourage experiments in legal regulation that safeguard the health and security of users while reducing the power of organized crime, which currently controls the business.

Shortly after the report was published, Colombian President Juan Manuel Santos declared in an interview published in *The Guardian*: "The world needs to discuss new approaches (...) [that] should try and take away the violent profit that comes with drug trafficking... If that means legalizing, and the world thinks that's the solution, I will welcome it. I'm not against it" (*The Guardian*, November 12, 2011, online version). His remarks surprised many, since Colombia, a staunch ally of the United States, has implemented the prohibitionist policies dictated by Washington for decades. Santos even said that, provided there was international consensus on the issue, he would consider legalizing more than just marijuana, and he pointed out the contradictions in the fact that this substance is legal in some places, while others penalize the use of cocaine. "I would never legalize very hard drugs like morphine or heroin (...) I might consider legalizing cocaine if there is a world consensus because this drug has affected us most here in Colombia. I don't know what is more harmful, cocaine or marijuana. That's a health discussion" (*The Guardian*, November 12, 2011, online version).

In terms of political discourse, it is very significant for an incumbent president of a country known for having suffered the negative effects not only of drug trafficking, but also of anti-drug policies for decades, to suggest the need to review such policies and seek more appropriate alternatives. Although Santos qualified his statements by saying that he would not spearhead a movement of this sort, his openness to a broad discussion of the prevailing approaches to drug control provoked similar reactions from other presidents in the region, among them Guatemala's Otto Pérez Molina and Mexico's Felipe Calderón.

While many analysts have criticized the president's proposals for their lack of specificity and his lack of political will to lead the debate, these declarations led to the

issue being debated for the first time in the context of a continent-wide presidential political dialogue, the Summit of the Americas, which was held in Cartagena de Indias, Colombia, in April 2012. Although only limited progress was achieved at that meeting, member states commissioned the Organization of American States (OAS) to write a report reviewing the results of the War on Drugs and exploring new alternatives to strengthen it and make it more effective.

The presence of US President Obama at the Summit was significant, given his country's decisive influence in the formulation and implementation of anti-drug policy in Latin America and in the development of the current international drug control regime. And while the US is clearly still reluctant to talk about far-reaching changes to the current policies, in several of its states one can see a tendency toward change, at least with regard to the treatment of marijuana users. In November 2012, Colorado and Washington voted to legalize the sale and recreational use of marijuana, adding to the other eighteen states in which its medical use is legal, subject to harm-reduction regulations.¹

Meanwhile, in November 2012, in an interview with The Economist, then-outgoing Mexican President Felipe Calderón (2006-2012) defended his war against the cartels, although he clearly stated that the purpose of the public security strategy was not "to end something that it is impossible to end, namely the consumption of drugs or their trafficking" (*The Economist*, November 22, 2012, online version).

Clearly, the discussion about drug policy has gathered pace recently, and diverse voices from academic, policy and social circles are uniting in a growing consensus about the failure of the prohibitionist strategy that has prevailed for years, driven by the United States and by the context in which international conventions on drug control were developed.

THE INTERNATIONAL DRUG CONTROL REGIME

The regime on which traditional policies are based was established over the course of six decades, and has become increasingly restrictive. The 1948 Protocol laid the formal basis for prohibitionism by determining that controlled substances could only be used for medical purposes and scientific research, that is to say it fully banned any ritual, experimental or recreational use, as well as potential industrial uses of drugs. The Single Convention of 1961 reaffirmed the ban on the use and production of

¹ See *The Economist*. "Tax, and tax again". 9 March 2013.

controlled substances, and it established four lists that determine how each should be treated. The Convention on Psychotropic Substances of 1971 added a large number of synthetic substances for controlled medical use to this list.

The 1998 Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances focused on curbing international trafficking through cooperation mechanisms between countries as a means to address the growth of drug trafficking and the increasing strength of trafficking organizations. It established controls on chemical precursors, for the first time it included the need to combat money laundering and it ordered that everything to do with illicit drug trafficking be classed as serious crimes, among other things cultivation, production, trafficking, sale and money laundering. Further, the Convention made it "mandatory to penalize the possession of drugs for personal use" – though not necessarily to criminalize it, leaving it to each country to decide the gravity of the offense (Thoumi, 2011: 5).

Given the bureaucratic nature of the international system, introducing changes, however small, to the system's instruments, which are mandatory for signatory countries, is a slow and difficult process. For example, in March 2009 the Bolivian government asked the United Nations to remove coca leaf from List 1 of the 1961 Single Convention, thus allowing the traditional practice of coca chewing. The request was turned down, which led Bolivia to formally withdraw from the Convention, arguing that the Convention contradicted Bolivia's constitution, in force since 2009, and begin the procedure to return to the convention with a new reservation allowing for the traditional uses of coca leaf.² This re-adherence was subject to the approval of the States Party to the Convention, that is, no more than a third of the 183 member states could object to it (UNODC, January 2013). Finally, by January 10, 2013, the deadline to raise objections, only fifteen countries had done so and Bolivia is once again a member of the Convention, with the above mentioned reservation. However, this change, which took four years and prompted heavy criticism against the Bolivian government, does not mean that coca leaf has been removed from List 1, or that chewing it is legal in every country in which it is traditionally practiced. It simply means that international legislation allows coca leaf chewing in Bolivian territory.

The Global Commission has questioned the international drug control regime's lack of flexibility; its report recommends reviewing the conventions and the rectifying their mistakes regarding the classification of substances such as cannabis, coca

² This is the established procedure for a country that has signed the Convention to modify the terms of its adherence.

leaf and ecstasy. It backs its recommendations by pointing to studies such as Nutt, King, Saulsbury and Blakemore's (2007), who developed a scale to measure the degree of harm caused by various drugs and concluded that the classification of those drugs in Great Britain does not seem to follow criteria based on clear scientific evidence (we will refer to this study in greater detail below).

The drug classification system under international conventions clearly needs to be reviewed. However, this seems unlikely in the near future, given the inertia of the United Nations system, the political interests of many of its institutions and most countries' prejudices and moral judgments about illegal psychoactive drugs. An example of this is the "Cocaine Project" study, carried out in 1995 by the World Health Organization (WHO) with support from the United Nations Interregional Crime and Justice Research Institute (UNICRI), whose publication was announced by both institutions that year (see box about this study in the chapter by Campero and Barrancos). Even though this was the broadest study ever undertaken on cocaine, the World Health Assembly, the highest decision-making body of the WHO, banned its publication in a session in which the United States threatened to cut funds for certain programs if the WHO's activities did not reinforce the traditional approaches to drug control.³ The study was vetoed because its conclusions were at odds with the ideas on which the prohibitionist regime is based and which it disseminates, generally indicating that cocaine is a less harmful and dangerous substance than current policies claim.⁴ Thus, even though the study dates back to 1995, its conclusions are still relevant, among other reasons because the regime is still in force and there is still

³ Part of the study was finally made public in 2010 and is available at: http://www.tni.org/article/ who-cocaine-project.

According to the study, there is no such thing as an "average cocaine user," given the vast differences between users, the amounts consumed, the intensity, duration, reasons and consequences of consumption. However, the study notes certain tendencies that challenge the established ideas about cocaine. These include the notion that coca leaf does not seem to have adverse effects on human health, and that, conversely, it has positive therapeutic, social and religious uses among indigenous Andean populations; that only a minority of consumers are problem users, mostly from marginalized sectors; that, in general, cocaine use does not cause as many health problems as alcohol or tobacco; that the problems associated with cocaine use are more common and serious among frequent users of high doses, and very unusual and less severe among occasional users; and that most of the health problems associated with the use of cocaine cannot be attributed to the drug, which is more likely to exacerbate them than to cause them. The study also points out that prevention programs generally perpetuate stereotypes and misinformation, while treatment services lack the necessary coordination and effectiveness to rehabilitate addicts, who usually come from the poorest sectors and are the least likely to have access to these services (WHO/UNICRI, 1995).

a lack of broad, non-politicized studies about the real effects of each drug on users and society.

It is worth noting that both the above-mentioned studies emphasize the level of harm caused by alcohol and tobacco, two widely accepted legal psychoactive drugs. These studies and others, as will be seen in this volume, point out that these two substances have very negative effects on the health of users and even third parties, generally worse than those of some illegal drugs.

NEGATIVE IMPACTS OF THE CURRENT POLICIES IN LATIN AMERICA

One of the most negative impacts of prohibitionist policies is the alarming increase of violence in countries like Mexico, Honduras and Guatemala. In general, illegal markets are very fragile, since they are based on relationships of mutual trust and have no institutionalized conflict resolution mechanisms. As a result, internal disputes are resolved through violent means. Added to this is the violence that stems from hard-line policies such as the War on Drugs, which constantly decimates the workforce and destroys established trust networks (Brombacher, 2012). During the administration of Felipe Calderón, around 70,000 people were murdered in Mexico (*Proceso*, 15 February 2013). In early 2013, the Mexican government spoke of more than 26,000 disappeared during that period (*Diario Libre*, 26 February 2013). At the same time, the pressure exerted by the Mexican authorities on the drug cartels at that time led them to move to Honduras and Guatemala to conduct their business without so much interference from the government.

The increased presence of organized crime has a very serious impact in these countries, given the historical weakness of their institutions and their high rates of violence and homicide. In 2012, Honduras recorded 86 homicides per 100,000 inhabitants, one of the highest murder rates in the world, while Guatemala recorded 32, following a downward trend that seems to be reverting in 2013 (InSightCrime, 5 March 2013). It is estimated that currently 40% of cocaine destined for the United States reaches sparsely populated jungle zones in Honduras. And, as in many other places, criminal groups in those areas pay their employees in drugs instead of money, which creates an internal market, leading to an increase in drug consumption (The Economist, 2013). Guatemala is also gaining importance as a cocaine route into the United States and as an operational base for Mexican criminal organizations. According to president Otto Pérez Molina, the Zetas and Sinaloa cartels are fighting for control of the drug trafficking routes through Guatemala, and are increasingly penetrating state institutions (El Espectador, 12 January 2013).

Regarding drug consumption policies, while the legislations of many Latin American countries decriminalize the use of drugs, in practice the authorities stigmatize and often persecute consumers, classing them as small-scale drug dealers and criminally prosecuting them. The prevailing ideas and policies in the international drug control regime have had perverse social impacts. A clear example of this is prison overcrowding in many countries in Latin America, a large part of which is owed to the large number of people incarcerated for non-violent drug-related offenses.

A study by Colombia-based Centro de Estudios de Derecho, Justicia y Sociedad (DeJusticia) concludes that Latin America's legislation suffers an "addiction to punitive measures," especially with regard to drugs, which makes it "a more serious offense to smuggle cocaine to be sold to someone who wants to consume it, than to rape a woman or kill a neighbor on purpose" (Uprimny, Guzmán and Parra, 2012: 5). The study indicates a significant increase not only in the number of terms used to describe the behaviors penalized (the wording), as Figure 1 shows, but also in the penalties applied to such behaviors. Figure 2 shows the growth of the highest minimum sentences for drug-related offenses. ⁵

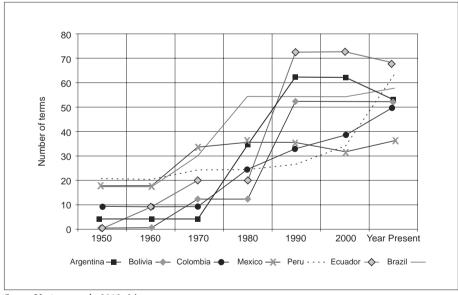


Figure 1. Comparative development of the number of terms used to describe penalized drug-related behaviors

Source: Uprimny et al., 2012: 24.

⁵ That is, the drug-related offense punishable with the highest minimum sentence in the legislation of the countries surveyed.

Introduction. A Few Aspects of the Current Situation with Illegal Drugs

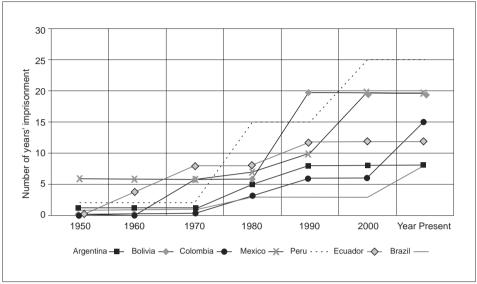


Figure 2. Comparative development of the highest minimum sentences for drug-related offenses

Source: Uprimny et al., 2012: 26.

This increase both in the terms used to describe, and in the penalties imposed for, drug-related offenses has led to imbalances in the legal systems of the countries surveyed, so that more serious crimes with far greater and more direct impacts on people, such as murder, rape and violent robbery carry equal or lesser sentences than drug-related offenses.

This addiction to punitive measures has significantly contributed to extreme prison overcrowding in the region, with grave social consequences. The conditions in our countries' prisons are subhuman. According to a 2011 study coordinated by the Transnational Institute (TI) and the Washington Office on Latin America (WOLA), which examined eight countries in the region,⁶ none of them have a prison system that is able to guarantee the basic standards for the treatment of prisoners, and in some of them the situation is so serious that the lack of resources has led to nutritional deficits and health problems among interns.

Further, since drug legislation does not differentiate between street sellers and major traffickers, or between violent and non-violent crimes, many people receive maximum sentences or are sent to maximum security prisons for minor offenses.

⁶ Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, Peru and Uruguay (TNI and WOLA, 2011).

What is more, many of those already incarcerated have not been convicted, because drug-related crimes automatically result in pretrial detention even though they are minor offenses. In general, the study concluded that there are no major drug barons in prison; most of those imprisoned on drug charges are there for minor offenses, paying disproportionately high penalties. In Colombia, for example, it is estimated that 98% of those detained on drug-related charges did not have a significant role in drug trafficking networks. An area of particular concern is the increasing number of women incarcerated for drug-related offenses. While far lower than the number of men incarcerated for the same reasons, their incarceration has severe impacts on their families (TNI and WOLA, 2011).

The terrible prison conditions in the region make these spaces inadequate for the rehabilitation of prisoners. Many are veritable crime schools, where people entering for the first time, accused of a minor offense such as possession of marijuana to sell on the street, for which they still have not been convicted, come into contact with criminals who are members of organized groups, with contacts outside, who can easily recruit them.

This shows some of the negative impacts of anti-drug policies in Latin America. Both organized crime and states' fight against it have left behind high levels of violence and a large number of deaths, and they continue to deeply tear the social fabric in various Latin American countries, forcing us to think of alternatives. The War on Drugs destabilizes illegal markets and generates violence, since those markets have no institutionalized conflict resolution mechanisms or means to enforce the rights of those who take part in them. However, this strategy has failed to achieve the goal that the international drug control regime set out a while ago: to put an end to the illicit market (Brombacher, 2012). Severe laws against drug-related offenses have not been effective in reducing the trafficking or consumption of illegal substances; on the contrary, they have overloaded the institutions responsible for enforcing those laws. Justice systems are saturated with enormous caseloads that they are unable to process efficiently, and prisons are full of people who, in many cases, have only committed minor crimes (TNI and WOLA, 2011).

A FEW INNOVATIVE PROPOSALS

Despite the difficulties in changing the international drug control regime and the dominant prohibitionist paradigm, for the last few decades innovative proposals, particularly in terms of drug use, have been put forward in many places. It is in this area that drug conventions leave room for states to implement models focusing less on prohibition and criminalization and more on public health. Some well known

examples are coffee shops in Holland, the decriminalization of all illicit drugs in Portugal and cannabis clubs in Spain. In the United States, the main driver of prohibitionism, eighteen states have legalized marijuana for medical use, and a further two have legalized its recreational use.

COFFEE SHOPS IN HOLLAND

In 1976, the Dutch Opium Act, which regulates psychotropic drugs, underwent a profound change when it established a difference between substances that entail unacceptable levels of risk — "hard drugs" such as heroin, ecstasy, cocaine, opium, amphetamines and LSD, and "soft drugs," such as cannabis (herb and resin), hallucinogenic mushrooms and sedatives (Valium or Seresta). The difference is based on the degree to which the drug alters the user's personality, the harm it causes to health and the costs it imposes on society.

Even though the production, trafficking, sale and possession of any drug are punishable offenses, the Dutch government sees the use of cannabis and other soft drugs as less harmful to health and society. Based on this distinction, a toleration policy was established, which considers the possession and use of up to five grams of soft drugs and up to half a gram of hard drugs as a minor offense that is not prosecuted.

This way, the government managed to separate the soft drugs market from the hard drugs market. The clearest example of this policy are the so-called coffee shops, where the sale and consumption of up to five grams of cannabis per person is permitted. The idea behind the coffee shops is to prevent consumers from engaging with illegal sellers, since presumably this would increase the chances of them coming into contact with hard drugs. Coffee shops are a pragmatic solution through which the government seeks to reduce the harm caused by drug use. However, many have been closed down because they violated the criteria for sales; their number has decreased from 846 in 1999 to 666 in 2010 (EMCDDA National Report 2012: Netherlands, 2012: 144). In any case, one of the issues raised by this model (see, for example, the chapter by Ricardo Vargas in this volume) is that, because other elements of the value chain are still illegal, even sales to coffee shops leave room for spheres of illegality that are hard to control.

⁷ http://www.government.nl/issues/alcohol-and-drugs/drugs

The toleration policy turned Holland into a haven for drug tourism in Western Europe. For this reason, in May 2012, by public demand, especially from the residents of the southern border provinces, the government introduced the "Wietpas," which serves as a membership card for coffee shops. Under this system, the sale and use of drugs in coffee shops is only permitted if the person has legal residence in Holland and is able to produce his card. ⁸

Although the government intended to expand the Wietpass nationwide from January 2013, eventually it left it to the local authorities to manage the measure, and many of them, such as the mayor of Amsterdam, have said they will not implement it. His decision was based both on the wave of criticism that the measure received and on the apparent increase in illegal trafficking. 10

According to the 2009 census, the lifetime prevalence of cannabis use among the population aged 15-64 was 25.7%. While the figure is higher than it was in 1997 (19.1%), changes in the measurement methodology make it impossible to compare both sets of data (EMCDDA National Report 2012: Netherlands, 2012: 33). The lifetime prevalence of cocaine use for that year was 5.2% and 6.2% for ecstasy.

The EMCDDA report also reported a decline in the number of HIV and AIDS infections through sharing needles, from 8.6 per 100 people in 1986 to 0.85 per 100 people in 2005 in the case of HIV, and 671 in 2006 to 4 in 2010 in the case of AIDS (2012: 84 y 86).

In general terms, the decriminalization of the use of soft drugs is not seen to have led to a serious increase in consumption, while attempts to harden drug policy are seen to have promoted an increase in illegal trafficking. Such attempts, therefore, have failed, at least partially.

⁸ http://www.government.nl/documents-and-publications/press-releases/2011/05/27/the-dutch-cabinet-coffeeshop-to-be-a-private-club-for-the-local-market.html

⁹ http://amsterdamherald.com/index.php/news-specials/the-new-wietpas-rules-for-coffeeshops/635-20121231-three-quarters-dutch-cannabis-cafes-coffeeshops-turn-blind-eye-official-ban-tourists-tourism-netherlands-dutch-politics-wietpas-ivo-opstelten-marc-josemans;

¹⁰ http://amsterdamherald.com/index.php/news-specials/the-new-wietpas-rules-for-coffeeshops/13-news-wietpas-untagged/584-20121119-justice-minister-abandons-wietpas-plan-to-restrict-entry-coffeeshops-ivo-opstelten-cannabis-drugs-policy-amsterdam-society-tourism-tweede-kamer-par-liament-netherlands-dutch-politics

THE DECRIMINALIZATION OF ILLEGAL DRUGS IN PORTUGAL¹¹

On 1 July 2001, Law number 30/2000 decriminalizing all illicit drugs entered into force. The law was partly a reaction to the significant increase in the number infectious diseases such as HIV and AIDS and of deaths associated to the use of illegal drugs that the country experienced in the nineties (Hughes and Stevens, 2010: 1001). Legally, what changed was that the sale, possession and use of illegal drugs ceased to be criminal offenses, becoming instead administrative offenses. Possession with the intent to supply nonetheless remains a criminal offense.

The reform allows the possession and use of all illegal drugs, including cannabis, heroin and cocaine, restricting the amount to that necessary for personal use for ten days. In practice, this means up to 0.1 grams of heroin, ecstasy or amphetamines, up to 0.2 grams of cocaine and up to 2.5 grams of cannabis. Those caught with a larger amount are charged and sent to court, where they must face penalties for dealing or using/dealing, that is, when someone has an amount of drugs greater than the permitted amount, but which is presumed to be for personal use.

Drug-related offenses are sanctioned by commissions for the dissuasion of drug addiction (Comissão para a Dissuasão da Toxicodependência, CDT), regional panels made up of three people, including lawyers, social workers, psychologists and doctors. People detained by the police are referred to these commissions, where their motivations and the circumstances surrounding their actions are discussed with them. The commissions may apply civil law penalties or community service, fines, suspend professional licenses or ban individuals from certain places. The sanctions aim to keep drug users away from drugs and support them in their treatment. In the case of addicted users, the commissions may recommend treatment or educational programs, and in the case of non-addicted users order a fine or psychological counseling.

In practice, Portugal's strategy is a broad decriminalization of drug use that emphasizes treatment as an alternative to criminal prosecution and aims to implement prevention, treatment and social reintegration, harm reduction and drug supply reduction policies.

The results of the strategy show that, despite a slight increase in the use of drugs among the adult population (according to EMCDDA data, in 2001 the lifetime preva-

¹¹ This section is based on the text of Law number 30/2000 decriminalizing the use of drugs in Portugal. Available at: www.idt.pt/PT/Legislacao/Paginas/LegislacaoTemaDetalhe.aspx?id=34

lence of drug use among the population aged 15-64 in Portugal was 7.8%, while in 2007 it was 12%), ¹² this slight increase cannot be attributed solely to decriminalization, since the same tendency is observed in other European countries, for example Spain and Italy (Hughes and Stevens, 2010: 1006). Moreover, problem drug use among adults and adolescents aged 15-24, in particular intravenous use, has declined from between 2.3 and 4.6 users per 1000 people to between 1.8 and 2.2. Added to this, the rate of users infected with HIV/AIDS and other infectious diseases has declined considerably, from 1,482 cases of HIV and 675 of AIDS in 1999 to 116 new cases of HIV and 88 new cases of AIDS in 2010 (EMCDDA, 2012).

The data also suggests that the authorities improved their ability to combat the illegal drug market and reduce supply, since decriminalization significantly increased the volume of drugs seized by the authorities, which were mostly destined for overseas markets. Between 1995-1999 and 2000-2004, cocaine seizures increased by 116%, hash by 134%, heroin by 219% and ecstasy by 1,526% (Hughes and Stevens, 2010: 1011). Following the reform, cocaine prices have remained more or less stable, while the price of heroin and ecstasy has declined and that of hashish has increased (see Table 1).

Table 1. Average price of illicit substances in Portugal in Euros, by year and type of drug, 1998–2008

PORTUGAL	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Heroin (g)	38.50	31.33	49.72	50.27	43.78	46.80	46.54	41.01	42.17	37.57	33.25
Cocaine (g)	45.63	40.37	60.31	53.51	38.57	41.40	42.23	45.11	45.73	44.65	45.56
Hash (g)	1.78	1.09	4.13	4.06	2.45	2.49	2.31	2.13	2.18	3.45	3.28
Ecstasy (tablet.)	11.70	6.70	5.98	6.86	5.90	5.27	4.50	3.56	3.18	3.20	2.80

Source: Hughes and Stevens, 2010: 1014.

Finally, decriminalization relieved the justice system of the burden of processing drug related offenses and reduced the prison population (Hughes and Stevens, 2010: 1009; EMCDDA National Report 2011: Portugal, 2011: 94-114). These results are in stark contrast with the trend in Spain and Italy.

¹² http://www.emcdda.europa.eu/publications/country-overviews/pt

THE SPANISH MODEL: CANNABIS SOCIAL CLUBS¹³

So-called Cannabis Social Clubs (CSCs) have existed in Spain since 2001. They are non-profit associations that cultivate and distribute marijuana among a small group of adult users. The emergence of CSCs, which have proliferated considerably, especially in Cataluña, promoted by the Federation of Associations of Cannabis Users (FAC, in Spanish), is not based on any specific regulation, but rather on loopholes in the Spanish legislation that allow the use of illicit substances. The clubs that are part of the FAC operate on a democratic and cooperative model, with practices that emphasize self-regulation, public scrutiny and transparency, and have proven they can cover their members' consumption needs without resorting to the black market, with reasonably-priced, quality-controlled cannabis. The fact that they are not-for-profit limits the temptation to promote them for commercial purposes, and their reduced size creates community bonds and trust between members, which favors mutual care and helps to identify problem users. In such cases, clubs have a mechanism that involves talking to the person in question to understand the problem, and in the case of the Basque Country a protocol is triggered through which a specialist in drug addiction is brought in to treat the said individual if they so wish.

The transparent and democratic management of the clubs stems from the fact that in Spain associations are required to have a General Assembly of Members, a decision-making body responsible for approving the annual financial and administrative statements. However, it must be said that over time many of these clubs have greatly increased their membership and this, according to the FAC, which promotes small clubs because of the above mentioned advantages, raises a number of issues. For example, very large associations do not foster the sense of community of the CSCs, and the supervision of production and quality control are made much more difficult.

The proliferation of clubs and the growth of some of them, especially in Cataluña, led the Catalan government to announce the establishment of a commission to discuss the regulation of these associations (a similar body already exists in the Basque Country). This, in turn, has triggered a debate between the clubs and their members, who broadly favor one of two views. On one hand, there are the Cannabis Social Clubs promoted by the FAC, which are small and produce what they consume. On the other, there are larger clubs that do not belong to the FAC and which have the

¹³ This section is based on Barriuso Alonso, Martín. "Los Clubes Sociales de Cannabis en la encrucijada. Entre la autogestión y la mercantilización". 13 August 2012. Available at: http://www.tni.org/es/article/los-clubes-sociales-de-cannabis-en-la-encrucijada.

same structure as the smaller clubs but work very differently; some say they are like membership-based coffee shops. They are sometimes even referred to as Commercial Cannabis Clubs, as opposed to Social Cannabis Clubs.

And though the Catalan government appears to take a positive view of the small social club model promoted by the FAC, larger clubs have been increasing their budgets and influence, which could eventually lead the authorities to favor that model, since it is cheaper and easy to control.

LEGALIZATION AND MEDICAL USE OF MARIJUANA IN THE UNITED STATES

In November 2012, the states of Washington and Colorado legalized the use of marijuana for recreational purposes. At the federal level, it is still illegal to cultivate and consume this substance. This creates legal conflicts with the federal Controlled Substances Act (CSA), which puts marijuana in the same category as heroin and LSD. According to the US Department of Justice, Washington and Colorado's initiatives are currently undergoing revision to ensure their accordance with the CSA.¹⁴

In Colorado, marijuana was legalized on the basis of the so-called Colorado Amendment 64, which modified Article 18 of the Constitution in order to regulate the use of marijuana in a similar way to that of alcohol. This change allowed people aged over 21 to legally cultivate up to six marijuana plants in their home. It is legal to possess these plants at home, as is carrying an ounce. The percentage of tax that will be levied on marijuana has not been defined yet, but it may be higher than that of alcohol (*The Economist*, 9 March 2013).

In Washington, Washington Initiative 502¹⁶ led to a reform of the state's legislation on marijuana, which now allows possession of an ounce for personal use. To

[&]quot;The Department of Justice's enforcement of the Controlled Substances Act remains unchanged. In enacting the Controlled Substances Act, Congress determined that marijuana is a Schedule I controlled substance. The Department of Justice is reviewing the ballot initiatives and has no additional comment at this time." http://www.whitehouse.gov/ondcp/frequently-asked-questions-and-facts-about-marijuana#legalization. Accessed 12 March 2013.

¹⁵ Amendment 64 – Use and Regulation of Marijuana. http://www.leg.state.co.us/LCS/Initiative%20 Referendum/1112initrefr.nsf/c63bddd6b9678de787257799006bd391/cfa3bae60c8b4949872579 c7006fa7ee/\$FILE/Amendment%2064%20-%20Use%20&%20Regulation%20of%20Marijuana. pdf. Accessed 15 March 2013.

¹⁶ Initiative Measure No. 502. http://sos.wa.gov/_assets/elections/initiatives/i502.pdf. Accessed 15 March 2013.

cultivate and sell it one must obtain a license from the state. The state will levy a 25% tax on this drug, and the tax income received from its sale will go to a special fund, the Dedicated Marijuana Fund, which will distribute the resources among the health, substance abuse treatment and education sectors.

In Colorado, for the last few years there have been several medical marijuana cultivation centers, authorized by the state, which bring in around US\$55 million per year in taxes. Medical marijuana is legal in a further 18 states.¹⁷ In California, the state with the highest number of medical cannabis users,¹⁸ one needs a medical order to apply for a Medical Marijuana Identification Card, which, based on the 1996 Compassionate Use Act,¹⁹ allows the cultivation, possession, consumption and purchase of marijuana at medical marijuana centers.

These are all alternatives to the prohibitionist model, but with the exception of cannabis in the states of Washington and Colorado in the United States, they are still limited to the use of drugs, leaving out the rest of the value chain, which remains illegal. The case of the United States shows a deep contradiction between different levels of government, since while some states have legalized marijuana from cultivation to consumption, the federal government maintains a firmly prohibitionist stance, especially regarding the production and commercialization of other drugs.

The only country that has put forward a proposal which contemplates the whole chain is Uruguay. President José Mujica proposed the regulation of marijuana and the establishment of public mechanisms to control the production, sale and use of this substance – the most widely consumed illegal drug in the country – to deprive drug trafficking groups of the vast profits they obtain from the business and prevent users from coming into contact with them. This proposal is premised on the notion that most marijuana users do not have addiction problems, but they expose themselves to social and legal risks because they have to access it through illegal means (Calzada, 2012). However, President Mujica put a stop to the legislative initiative

¹⁷ Alaska, Arizona, California, Connecticut, Delaware, Hawaii, Maine, Massachusetts, Michigan, Montana, Nevada, New Jersey, New Mexico, Oregon, Rhode Island, Vermont, Virginia the District of Columbia.

¹⁸ http://medicalmarijuana.procon.org/view.answers.php?questionID=001199. Accessed 15 March 2013.

¹⁹ http://vote96.sos.ca.gov/Vote96/html/BP/215text.htm. Accessed 15 March 2013.

that he had earlier promoted in Parliament, arguing that there was not enough popular support – polls indicated that 64% of Uruguayans were against the measure. The president clearly stated that the War on Drugs is not working, but he considered that it was too early to make a decision (*Semana*, 21 December 2012), so he decided instead to deepen the debate on the issue. Once again it is evident how deep-rooted ideas about drugs, not necessarily correct, can hinder an innovative policy which, if correctly implemented, could have the positive results that alternative measures have yielded elsewhere, and which the dominant prohibitionist strategies have been unable to produce.

DRUG POLICY MODELS²⁰

The above examples show that in various parts of the world proposals are being made, and specific initiatives are being put into practice, to design new drug policies that really help to lessen the negative impacts of these substances, both on users' health and on societies in general, as well as the negative impacts of the policies implemented so far.

These proposals coexist with traditional prohibitionist policies, which are the most widely applied, if not in the same way, or even uniformly, in every place. On the contrary, there are significant differences between countries and regions, despite the rigidity of the international regime we mentioned earlier. Despite those differences, it is important to note here the different models, or "ideal types," that guide the formulation of drug policies, based on Uprimny's (2003) concepts.

At one extreme is the War on Drugs, the dominant prohibitionist model driven by the United States, which seeks to eliminate the use of certain substances considered harmful or morally hazardous. This model assumes that the state has a right to impose its standards of health, and even virtue, on citizens. It is premised on the notion that if all substances are eliminated they cannot be used or abused. Thus, to eliminate or minimize the supply of drugs it bans their cultivation, production and commercialization, which makes them expensive and difficult to obtain.

At the other extreme is the total liberalization of the drugs market, a libertarian model based on the idea of the market's ability to regulate itself and on the principle that the state cannot interfere with people's decision to use whatever substances they

²⁰ This section is based on Rodrigo Uprimny. "Drogas, derecho y democracia", paper presented at the itinerant seminar on criminal policy POCAL.

want to use, even if they are harmful. From this perspective, psychoactive drugs are products to be traded according to the rules of the market, just like any other good, and any damage caused to a third party by a consumer under the influence of drugs can and should be punished, that is, consumers are free to use drugs, but they must take responsibility for the consequences of their actions. Until a few years ago, that was the policy on tobacco.

Between these two extremes there are two intermediate models based on public health and users' human rights. On one hand, harm reduction policies consider that it is impossible to eliminate consumption, and for this reason they focus on limiting its impacts, while promoting decriminalization to prevent users from being marginalized. An example of this model are the strategies implemented in Holland, which nonetheless continue to ban and criminalize the production and most aspects of the distribution of drugs. On the other hand, there are "selective or regulated legalization" strategies, which contend that it is necessary to go beyond merely regulating consumption – the cultivation, production and distribution of drugs must also be regulated if the "perverse effects of prohibition, in terms of violence, corruption, the loss of respect for the law and the impact on people's rights" (Uprimny, 2003) are to be mitigated.

Even though, as we have seen, the prohibitionist approach of the War on Drugs is still the dominant model, the examples described above show that, in practice, harm reduction policy models have been implemented with very promising results, particularly in Europe. Another case that should be followed closely is the regulation of cannabis in the United States, which in some cases applies to the entire value chain. Although some authors propose a total liberalization of the drugs market, theirs is a minority view. Many researchers working toward the reform of current policies consider that changes should focus on selective regulation that reduces the harm caused by consumption, production and trafficking, as well as other negative effects of the dominant policies.

DESTIGMATIZING THE DEBATE

Despite the positive impacts of some of these new drug control strategies, it is still controversial to suggest the need for a comprehensive, profound reform of the current policies and international drug control regime. And even though there is a grow-

²¹ In northern Europe, consumption is already decriminalized in practice, although in some cases not by law.

ing chorus of voices raising this issue, such views are yet to reach the sphere of policy makers, at least in any way that suggests the possibility of real reform in the short or medium term. This is the case despite the increasing consensus about the failure of the current model, based on the idea of eliminating the drugs market.

The idea of "a drug-free world" is unattainable. It would be impossible to completely eliminate drug use, and therefore it would also be impossible to eliminate the production of substances that alter consciousness, among other reasons because in many places they have traditional uses associated with ancient cultural practices, for example coca leaf chewing among Andean cultures. A case in point is alcohol, which is another of these substances, but whose consumption is so widely accepted and so deeply rooted that nobody thinks of suggesting "an alcohol-free world." The US experience with prohibition in the 1920s underscores the futility of such initiatives.

Clearly, some drugs are dangerous, to a greater or lesser extent, not only because of the damage they can cause to users' health, especially in the case of problem users, but also because of the negative impacts they can have on other people. This includes addicts' relatives and those living in their close environment, and even accidental harm that an occasional user may cause to third parties, for example when a drunk driver runs over and kills a pedestrian. It is worth remembering that the number of deaths from alcohol and tobacco is far greater than the combined number of deaths from marihuana, cocaine and heroin use.

A comprehensive and effective drug policy would require better information and an open and honest discussion based on independent, objective research. Part of the problem is that the debate is still highly politicized and dominated by political interests and moral prejudices. The discussion on illegal drugs must be destigmatized on the basis of serious and reliable information. More research is needed on both legal and illegal drugs and their impacts on users' health and behavior, on users' families and social environment, on third parties not directly related to users, and on society at large. It is important to highlight the need for this information to be disaggregated by type of drug. For example, the effects of marijuana on users' behavior are very different to those of cocaine or alcohol. Further, even though there is no scientific evidence to support the claim that there is a relationship between drug use (disaggregated by type of substance) and common crime, there is still a widespread belief that drug use leads to crime.

As well as reliable information, there is a need for serious and sustained political and educational work to help conquer the population's fear of discussing illegal drugs. The prevailing notions about drugs are deeply rooted in moral stances that link any proposal for reform with a desire to legalize "bad" substances, driven by people with shady interests. Such moral stances are hard to overcome.

For these reasons, it is essential to make it clear and promote the understanding that regulation is not limited to legalization. Regulation implies controls – in some cases very tight – as well as monitoring mechanisms to allow governments to supervise activities that may carry risks for their citizens. Ultimately, what most of those who talk about reforming drug policy promote is the regulation of the drugs market. The above-mentioned initiatives propose changes to the current dominant paradigm, but none of them suggest unfettered legalization. Given the politicization of the debate on drugs, this fact should not be overlooked.

Some of the proposals put forward or developed in the last few years advocate for the regulation of the drugs market. Some refer only to consumption, while others suggest that the issue needs to be tackled comprehensively, taking into account not only consumption, but also production, commercialization and retail sale. The proposals we present in this volume, like many others, promote carefully thought out regulation, based on reliable scientific studies and not tied to political interests. They also take into account the differences between the various drugs in terms of their cultivation conditions, trade dynamics and effects on consumers, as well as differences between the countries where they are cultivated or produced and between users and their social and economic status.

Specifically, the proposals presented in this volume suggest a drug policy that addresses the following five objectives:

- 1. Reduce harm caused by drug use to drug users.
- Reduce harm caused by drug users to non-users.
- Minimize harm caused by anti-drug policies to drug users and third parties.
- 4. Minimize the profits from the drug trade that accrue to organized crime and other illegal actors.
- Maximize the share of drug-related income obtained by the state, observing the first four objectives, to fund public health policies and the fight against organized crime.

THE CURRENT SITUATION

The following data on production, trafficking and prices of several plant-based drugs aims to present a clearer picture of the current situation.

PRODUCTION

Coca and cocaine

Figures 3 and 4 show a decline in coca and cocaine production, apparently due to a decline in production in Colombia, which has nonetheless been partially compensated by an increase in Bolivia in Peru (UNODC, 2012).

160,000 140,000 120,000 100,000 80,000 60,000 40.000 20,000 0 2001 2002 2003 2005 2006 2007 2008 2009 2010 Bolivia —◆ Colombia —■ Peru

Figure 3. Illicit coca bush cultivation worldwide, 2001-2010 (hectares)

Source: UNODC, 2012.

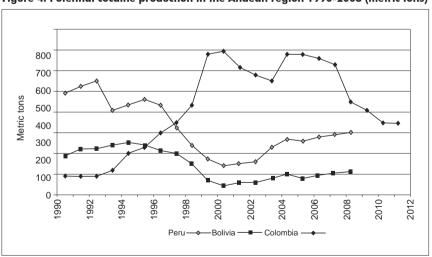


Figure 4. Potential cocaine production in the Andean region 1990-2008 (metric tons)

Source: UNODC, 2012.

Poppy and dry opium

Figure 5 shows that Southeast Asia's opium production potential has increased considerably since 2005. Poppy cultivation has also been on the rise since 2006 (see Figure 6).

9,000 8,000 7,000 6,000 5,000 4,000 3,000 2,000 1,000 2001 2002 2003 2004 2000 2005 2006 2007 2008 Southwest Asia → Southeast Asia — Latin America — Other regions

Figure 5. Potential production of oven-dried opium, 1997-2011 (tons)

Source: UNODC, 2012.

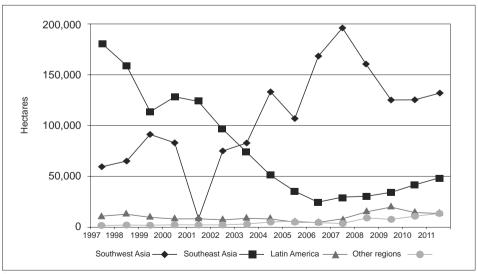


Figure 6. Illicit poppy cultivation worldwide, 1997-2011 (hectares)

Source: UNODC, 2012.

Marijuana

It is hard to estimate the volume of global cannabis production, since it is an easy plant to grow, even indoors, and therefore it is often produced at home for self consumption. Usually local production is enough to satisfy local demand, which reduces the risks and costs of trafficking, although there is still significant interregional trafficking. In any case, many countries have no data on the cultivation and production of this drug. Figure 7 shows an estimate of global marijuana and hashish production between 2002 and 2009.

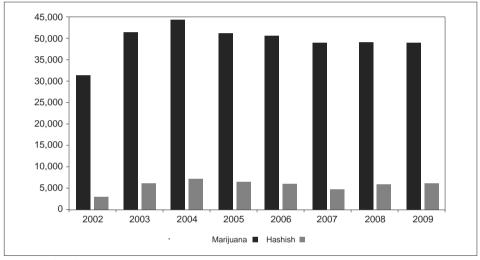


Figure 7. Evolution of marijuana and hashish production worldwide, 2002-2009 (tons)

Source: EarthLink e.V. / UNODC, 2011

TRAFFICKING

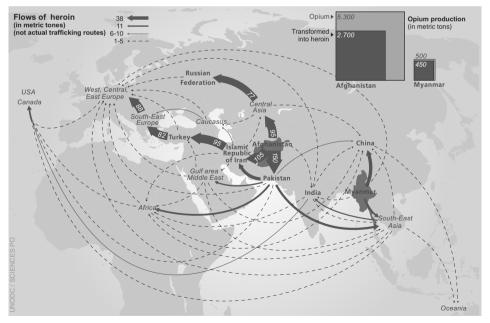
Routes

The map below shows cocaine and heroin trafficking routes, according to the World Drug Report 2010. Cocaine production is concentrated in the Andean region, from where it is exported to the rest of the world. The United States and Europe continue to be the main markets. In the case of heroin, the dynamics of trafficking are similar, but it is produced mainly in Afghanistan and Myanmar, since, as Daniel Brombacher discusses in this volume, there have been successful experiences of legal cultivation and processing of heroin in India and Turkey.

1 Canadá Europe 124 USA Cocaine trafficking* (in metric tons) 165 140 17 Mexico Caribe 60 R. B. de West Africal Venezuela Brazil ANDEAN REGION Southern Africa Main cocaine producers Cocaine consumptions (in metric tons)

Map 1. Cocaine trafficking worldwide, 2008

Source: UNODC, 2010.



Map 2. Heroin trafficking worldwide

Source: UNODC, 2010.

Prices

Clearly, trafficking is the most profitable link in the drug value chain, mainly due to the illegal nature of the business. The high prices of drugs do not stem from high production costs; rather, they are the result of the high payments made to those who take part in the business for the huge risks they face, such as having their product seized by the authorities or being murdered by their competitors. "Those who take part in the illegal economy earn high profit margins as a tax on consumers" (Brombacher, 2012: 3).

Figure 8, for example, shows how, in Colombia, each link in the chain helps to create value added; cocaine trafficking, as a final product, represents 71% of the total. Although this data is five years old, it helps to show how organized criminal groups take most of the profits, even after discounting their expenses, since they are the ones who transport cocaine from the places where it is produced to the major consumer markets.

Figure 8. Distribution of value added along the cocaine production and trafficking chain in Colombia, 2008²²

Source: Mejía and Rico, 2011.

Yet, despite many countries' efforts to reduce drug trafficking, the results of the fight have been poor. The goal of the War on Drugs is to eliminate the illegal market with a focus on reducing supply. However, looking at the historical trend of cocaine prices in the United States (see Figure 9), the main driver of this strategy, one can see that prices have dropped significantly, which indicates that supply is meeting demand. The small price increases recorded in the last few years do not seem to be enough to compensate for Washington's growing investment in a policy that has clearly not accomplished its goal.

²² This data is about trafficking within Colombia.

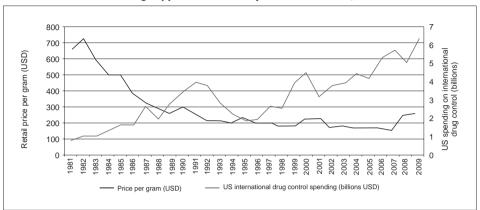


Figure 9. Dramatic decline in domestic cocaine prices despite increasing spending for overseas drug suppression efforts by the United States, 1981 – 2009

Note: Cocaine prices are purity- and inflation - adjusted and spending is inflation-adjusted. All prices expressed in 2011 US\$.

Source: Global Commission on Drug Policy: "The War on Drugs and HIV/AIDS. How the Criminalization of Drug Use Fuels the Global Pandemic." June 2012: 13. Quoted in US Office of National Drug Control Policy.

Something similar occurs with heroin prices in the United States, as can be seen in Figure 10.

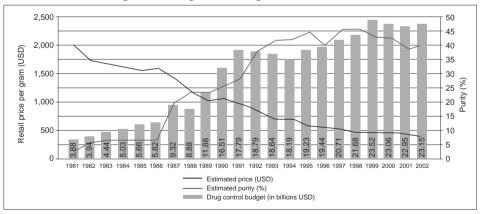


Figure 10. Change in estimated heroin price and purity in the context of the increasing annual drug control budget in the United States, 1990-2002

Note: Data are truncated at 2002 because US federal drug control budget was not consistently reported after this date. Heroin prices are purity - and inflation - adjusted and spending is inflation-adjusted. All prices expressed in 2011 US\$. *Source:* Global Commission on Drug Policy. "The War on Drugs and HIV/AIDS. How the Criminalization of Drug Use Fuels the Global Pandemic." June 2012: 12. Quoted in US Office of National Drug Control Policy, Drug En-

forcement Agency (DEA) STRIDE Surveillance System, DEA Heroin Domestic Monitor Program

In Europe, heroin prices have also declined in the last 20 years, according to the data provided in Figure 11.

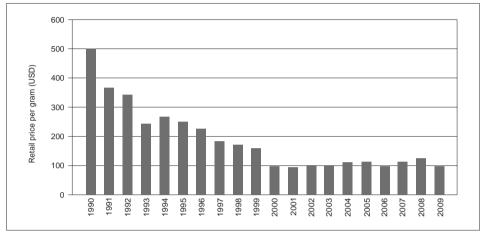


Figure 11. Average estimated heroin prices in Europe, 1990-2009

Nota: Heroin prices are inflation-adjusted. All prices expressed in 2011 US\$.

Source: Global Commission on Drug Policy. "The War on Drugs and HIV/AIDS. How the Criminalization of Drug Use Fuels the Global Pandemic." June 2012: 12. Quoted in UNODC.

Profit margin

The production of cocaine from coca leaf generates significant profits along the drug trafficking value chain. Figure 12 shows the increase in the price of coca paste upon its transformation into cocaine, but before it is trafficked, in Peru.

However, as Figure 8 showed, the aspect of the illegal drug trade that generates the most value added is trafficking. Clearly, those who obtain massive profits from the business are not the peasants who cultivate coca, or street corner dealers, who often only make enough to cover their own addiction, or the so-called drug mules who transport drugs in their stomachs, seriously risking their health and often reported by those who hired them to divert the authorities' attention from larger shipments, or even other mules.

The major beneficiaries of the drug trade are organized crime groups, which gives them enormous powers of corruption and intimidation, "silver or bullets" (Brombacher, 2011), that erode and weaken the state's already fragile structures in many of the countries in which they operate. This calls for an effective anti-drug policy that takes at least part of their income away from such groups, in turn lessening their

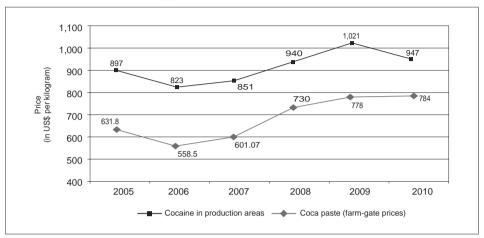


Figure 12. Average annual wholesale price of cocaine of unknown quality in Peru's production areas, 2005-2010

Source: UNODC, 2012. Based on reports on the survey on coca cultivation produced by UNODC and the Peruvian government in 2005-2010.

power. This would reduce the levels of violence that some countries are experiencing (Mexico is the current paradigmatic case), as well as generating resources to better target the fight against organized crime and strengthen state institutions in those countries where the battle is waged most directly and which, as a result, face serious governance issues.

CONSUMPTION

It is important to remember that the UN conventions' current classification of the types of harm caused by drug use has been criticized for its lack of accuracy and transparency (Global Commission on Drug Policy, 2011; Nutt et al., 2007). As noted above, Nutt et al. (2007) developed a scale to assess the harm caused by drug use and designed a procedure to validate it and make it clear and comprehensive in terms of parameters of harm and types of drugs included, consulting two multidisciplinary teams of experts about the harm caused by each substance. The study includes nine parameters of harm, divided into three categories: physical harm, dependence, and social harms (Nutt et al., 2007: 1049). The drugs included in the study are those comprised in the UK Misuse of Drugs Act (MDA), plus several other legal drugs that are subject to abuse, such as alcohol, tobacco and solvents. The conclusions suggest that there is generally a very weak correlation between the classification under the Misuse of Drugs Act (which divides substances into three categories, class A being

the most dangerous and class C the least), and that which resulted from the study. Of the eight substances that scored highest (most harmful) and the eight that scored lowest (least harmful), three are class A drugs and two are not included in the MDA. For example, the study concluded that alcohol and tobacco were more dangerous than LSD, ecstasy or marijuana (Nutt et al., 2007: 1050). Figure 13 shows the harm scores for each drug, allowing one to compare those scores with the classifications under the MDA and appreciate the lack of correlation between the two.

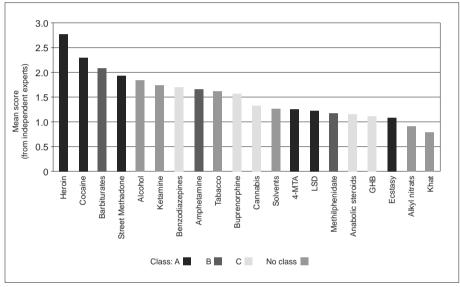


Figure 13. Mean harm scores for twenty substances

Source: Nutt et al., 2007: 1050.

These obvious inconsistencies in the current classification system must be taken into account when analyzing the real effects of a particular substance on users, third parties and society at large.

It is estimated that around 230 million – that is, one in every 20 people aged 15-64 – consume an illicit drug at least once a year. But only one in every 40 uses drugs at least once a month, and less than one every 160, around 27 million, are problem users (UNODC, 2012).

Cannabis is, by far, the most widely used drug worldwide, as can be seen in Figure 14, followed by amphetamines and ecstasy. Only 0.5% of drug users that do so at least once a year use cocaine.

5.0 4.5% 4.5 4.0 In percent of population age 15-64 3.5 3.0 2.8% 2.5 2.0 1.3% 1.5 0.8% 1.0 0.6% 0.5% 0.5% 0.5 0.5% 0.3% 0.0 Cannabis Amphetamines Cocaine Opioids Of which Ecstasy opiates group

Figure 14. Annual prevalence of illicit drug use at the global level as a percentage of the population aged 15-64.

Source: UNODC, 2011, 2012: 25.

Figure 15 indicates that drug use has remained relatively stable over the last decade, with an annual prevalence of around 5% of the population. Only a small percentage of all consumers, around 0.6%, are problem users.

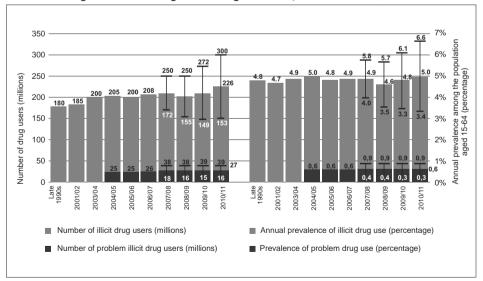


Figure 15. Illicit drug use at the global level, late 1990s-2010/2011

Source: UNODC, 2012: 66.

The following are a few definitions related to drug use that help distinguish between the risks posed by different substances, taking into account that risks can be classified as: risks to casual users; incidental risks related to the frequency and potential severity of harm caused by casual users to themselves and third parties; harm to users and third parties resulting from intensive use or addiction; and the link between drug use and crime, either where drugs are involved in criminal acts or crimes are committed to obtain drugs.

- 1. *Initiation* refers to the percentage of the population that tries a drug for the first time.
- 2. *Continuation* refers to the percentage of those who start to use drugs and continue to do so regularly.
- 3. The capture rate (from use to abuse) refers to the proportion of continuing users who go on to become problems users.
- 4. The *chronicity* or *persistence* of abuse refers to the length of time in which a problem or intensive user typically consumes a drug before quitting or cutting back.
- 5. The *relapse rate* or *recidivism* is the likelihood that someone who has quit or cut back drugs will become a problem user again (Kleiman et al., 2011).

These concepts allow one to present a number of stylized facts²³ about psychoactive drugs that are relevant to the formulation of policies that acknowledge the differences between substances. For example, only a minority of those who start to use drugs continue to do so – less than 50% in the case of cocaine, and more for alcohol; of those who continue to use drugs, between 10% and 30% are 'captured' by addiction and problem use – 10% in the case of cannabis, 30% of heroin and cocaine, and between 15% and 25% of alcohol.

Another key element to design and implement harm reduction policies is analyzing what percentage of users consume each substance. Alcohol and heroin use, for example, is highly concentrated: 10% of users consume 50% of the total volume of drugs used, and 20% consume 80%. Improving the focus of treatment and harm reduction strategies for each drug requires more information on the concentration of drug use and better dissemination of existing data.

²³ A stylized fact is a simplified presentation of an empirical finding, which usually involves a broad generalization that summarizes complex statistical calculations, which may leave out the finer points of individual cases.

Tables 2, 3 y 4 present an analysis differentiated by substance, according to the above-mentioned risk classification, based on Kleiman et al. (2011). Table 2 indicates how likely it is for a person to initiate use, continue to use or become addicted to certain substances.

Table 2. Dimensions of risk of psychoactive drugs: Risk of addiction

	TOBACCO/ NICOTINE	ALCOHOL	MARIJUANA	COCAINE	BASUCO, CRACK*	HEROIN
Initiation	High	Very high	High	Low	Low**	Very low
Continuation	Moderate	High	Moderate	Low	High	Moderate
Capture	Very high	Moderate	Moderate	Moderate - High	Very high	Moderate - High

^{*}The distinction between cocaine and basuco/crack is the authors', not Kleiman et al.'s.

Source: Kleiman et al., 2011.

Table 3 shows the possibilities of chronic drug use, of relapse after having conquered addiction and of links between drug use and crime.

Table 3. Dimensions of risk of psychoactive drugs: Crime and persistence of addiction

	TOBACCO/ NICOTINE	ALCOHOL	MARIJUANA	COCAINE	BASUCO, CRACK*	HEROIN
Chronicity	Very high	Moderate - High	Moderate - High	Moderate	High	Very high
Relapse	Very high	High	Moderate	Moderate - High	High	Very high
Links with crime	Low	High	Low	High	High	High

^{*}The distinction between cocaine and basuco/crack is the authors', not Kleiman et al. Source: Kleiman et al., 2011.

Finally, Table 4 shows some of the risks associated to the use of psychoactive substances.

It is interesting to consider tobacco as an example of the fact that scientific information based on clear evidence, together with regulation, can reduce consumption of a substance and minimize the associated risks. Increasing public awareness of the risks of consuming tobacco has led citizens in some countries to press their governments to design and implement measures that have restricted the spaces where smoking is permitted, which in some cases has reduced tobacco use.

^{**}The exception is Brazil, where there is currently an epidemic.

	TOBACCO/ NICOTINE	ALCOHOL	MARIJUANA	COCAINE ¹	BASUCO, CRACK ²	HEROIN
Harm from casual use	Negligible	Moderate	Low-moderate	Moderate	High	High
Incidental harm	N/A	Very high	Low-moderate	Moderate	High	Moderate
Harm from abuse	Low	High	Moderate	High	Very high	Very high
	2011: almost 6	2.5 million				
Deaths	million world-	annually				
	wide ³	worldwide ⁴				

Table 4. Dimensions of risk of psychoactive drugs: Risks of harm associated to drug use

- 1 Existing information is not conclusive.
- 2 The distinction between cocaine and basuco/crack is the authors', not Kleiman et al.
- 3 Data from Tobacco Atlas (2012).
- 4 Data from World Health Organization. www.who.int/substance_abuse/facts/alcohol/en/

Source: Kleiman et al., 2011.

However, tobacco companies clearly have vested economic interests in maintaining, or even increasing tobacco consumption, therefore they invest enormous amounts of money on avoiding stronger regulations that could affect their business, or on increasing the flexibility of existing controls. The same applies to the alcoholic beverage industry, which, even with the support of consumers, has managed to retain enough influence to avoid a level of taxation that would compensate for the harm caused by alcohol consumption to users and third parties. Thus, when considering a regulated market for other substances, it is important to design and implement measures that avoid, or at least counter, the perverse incentives that can be generated in lucrative markets, such as the psychoactive drugs market, both for the domestic or multinational private sector and for public or mixed, national or international institutions that participate in those markets.

CONCLUSIONS: OUR PROPOSALS²⁴

In this context, the use, production and distribution of drugs are far from likely to decline, much less disappear. So far, the current anti-drug policies have been ineffective. It is imperative to find new ways to solve the problems created by drug trafficking, but also those caused by prohibitionist policies and the international drug control regime. The central idea we present in this volume is that regulation of the

²⁴ This section is a revised version of Campero, J., Vargas, R. and Vergara, E. 2013. "From Repression to Regulation: A Latin American Proposal for Reform of Drug Policies", published in Germany by the Friedrich Ebert Foundation as part of their *Perspektive* series.

entire drug value chain – production, commercialization and use – differentiated by type of drug and based on scientific evidence, would help reduce harm to users and third parties, while depriving organized criminal gangs and other illegal actors of a significant share of the profits they obtain from the drug trade.

In order to achieve these goals, policies must take into account the differences between drugs and their derivatives. Each drug is different in terms of the health risks it poses, the likelihood of addiction, and the social and economic costs associated to its use, addiction and treatment. Drug policies must take account of the fact that most consumers are not problem users (in a social or criminal sense); rather, consumption is typically highly concentrated among a small percentage of frequent and addicted users.

So far, however, anti-drug policies have tended to be uniform, rather than differentiated, and have focused on controlling supply and repressing production and trafficking, ignoring the impact of these activities on the countries in which they take place. Latin America has borne a disproportionate share of the burden of current anti-drug policies, which have had limited success in destroying criminal organizations, for example the major Colombian drug cartels, but have not succeeded in diminishing the market for illegal drugs. On the contrary, while there have been some changes in the composition of these markets, particularly in those countries with the highest levels of drug use (consumption levels of plant-based drugs have stagnated, or even declined lately, while those of synthetic drugs are on the rise), overall demand for drugs continues to rise, with growing markets in producer and transit countries. In future, global demand for drugs will tend to be proportional to per capita GDP, while repressive policies become increasingly more costly in fiscal, social and political terms, and less effective in limiting consumption, combating organized crime and reducing production. Overall, these will remain stable, although crops, processing sites and trafficking routes will shift in response to repression.

In light of this scenario, the proposals presented in this volume call for the regulation of the entire value chain, not only final consumption. From the point of view of Latin America – and also other producer and transit regions and countries, such as Afghanistan and West Africa – drug control policies must shift the balance between the resources invested in fighting organized crime and other illegal actors, and those invested in legitimate state actors. This move would aim to weaken the former and reduce their powers of intimidation and corruption, while enabling states to strengthen their institutions and guarantee the rights of their citizens.

It is worth insisting that we are not advocating for the legalization of drugs, but rather making a case for the need to regulate the drug business. The status quo of prohibition and illegality has the perverse consequence of creating completely unregulated black markets, and does not help the government fight organized crime. In this regard, these proposals are pragmatic: they aim to reduce the harm currently associated with drugs (consumption and contact with illegal markets), and to deprive criminal groups of some of the drug trade revenue they have been enjoying.

CANNABIS AND ITS DERIVATIVES

Generally speaking, the health-related harm and the risk of addiction of cannabis and its derivatives are not greater, and indeed appear to be less serious, than those linked to tobacco and alcohol; thus, the regulation of the former should follow best practices learned from the regulation of the latter. Cannabis products should be legally available and subject to quality controls throughout production and at the point of sale. Consumption should be taxed to maximize tax revenue, and it must be banned in public places. Self-production should be permitted, within certain parameters. Commercial producers should be required to register, not only for quality control purposes, but also to prevent the diversion of produce for illegal uses, and to allow them to prove to law enforcement agencies that their produce is legitimate. The cannabis control regime should allow individual countries to choose their own policies, as long as they ensure that cannabis production is registered so that the international commercial flow of cannabis-based products can be monitored and controlled to prevent its diversion to illegal markets and its entry into countries subject to prohibitionist regimes. Such policies would largely destroy the cannabis markets in the countries that adopted them, which would reduce criminal groups' income and keep consumers away from illegal markets and the groups that take part in them, lessening the likelihood of them coming into contact with harder drugs.

COCA LEAF, COCAINE AND ITS DERIVATIVES

Current evidence of the harm caused by cocaine is inconclusive, since most studies focus on users of crack and other cocaine derivatives, which are very harmful and addictive substances, or report harm attributable to substances used to dilute cocaine for retail sale. Given that most cocaine consumers are not problem users, more research is needed into the real health impacts of this substance and other coca derivatives. However, on the basis of the available evidence, drug control policies should differentiate between coca leaf, cocaine, and derivatives like crack and paco/bazuco. The latter should remain banned, though without criminalizing their use.

With regard to coca leaf, there are no reasons to ban its traditional uses (chewing and tea), or other uses that do not rely on chemical processes to extract and process its alkaloids. Each country should be free to choose its own coca leaf policies as it sees fit; Bolivia is a good example of this. However, since coca leaf is the raw material from which cocaine is produced, growers should be registered and production regulated. Eradication programs should be implemented alongside effective alternative income-generation strategies.

As for cocaine, a regulated value chain should be established, with registered producers, traders, distributors and consumers. Taxes should keep consumer prices at the current level. Pharmacies should be responsible for final sales and user registration, and to this end they should acquire the necessary infrastructure if they do not already have it in place. Quality control should reduce harm to users to a minimum. Since, as noted above, most users of good quality cocaine are not problem users, a regulated value chain would help lessen illegal profits while increasing legal ones, thus generating resources for public health, treatment and research. Problem users should be able to sign up for treatment programs similar to those that exist for heroin users. The volume of consumption by registered users would significantly reduce the profits of organized crime (probably by more than half, around US\$40 billion per year). Moreover, if regulation allowed direct commerce between producer and consumer countries, this would take some pressure off the weakened institutions of, for example those in the Northern Triangle of Central America.

HEROIN

In the case of heroin, prohibition should be maintained without criminalizing consumption. It has been proven that this drug harms users' health, has a high rate of addiction and causes harm to third parties. At the same time, however, drug maintenance programs should be expanded to include every user that wishes to register for them. Among other things, these programs include medical treatment and the use of the drug in controlled hygienic conditions, with clean needles to prevent the spread of blood-borne diseases. Given the large number of addicts among heroin users, successful drug maintenance programs should be able to attract a significant portion of previously criminalized users.

IMPLEMENTATION ISSUES

There is no doubt that implementing the measures we propose is a very complex task, particularly in a context where the institutions of democracy are weak or historically

absent. These complexities must be taken into account to guarantee the success of a reform such as is proposed in this volume. It is also imperative to find solutions that help reduce the number of lives lost to organized crime and the risk and harm faced by drug users in every country.

The difference between the current predominantly prohibitionist policies and the regulatory approach to drug policy proposed here can be illustrated as follows: the current world of drugs (CWD) consists of 1) drug production (DP), 2) drug consumption (DC), 3) harm (DH) resulting from drug quality (DQ) and victimization of consumers (VC) and d) drug revenues obtained by organized crime (DROC):

$$CWD = DP + DC + DH(DQ + VC) + DROC$$

Under the current prohibitionist policies and regime, drug production and consumption have not been reduced. On the contrary, global drug use appears to have increased proportionally to world per capita GDP, with a 5% prevalence of annual use among the population aged 15-64 and frequent and/or problematic consumption of about 0.6% (see Figures 14 and 15).

The fact that supply relies on illegal markets and that consumers are subject to persecution has resulted in high levels of harm, both from poor quality drugs and the victimization of users by dealers and repressive policies. The revenues of organized crime are maximized under these conditions:

CWD (Prohibition) =
$$\overline{DP}$$
 + \overline{DC} + DH \uparrow (DQ \downarrow + VC \uparrow) + DROC \uparrow Max

The proposals outlined here would reduce neither production nor consumption, at least initially, but would divert more than half of it into regulated and quality-controlled value chains. Taxation would prevent a potential increase in consumption. As a result, harm to users and third parties – including social and political institutions in the worst affected countries – would be drastically reduced thanks to the improved quality of drugs, treatment offers to problem users, and an almost complete elimination of user victimization. Moreover, revenues of organized crime and other illegal actors would be reduced considerably – on our estimate by 50–75%, depending on implementation.

CWD (Regulation)= DP +
$$\overline{DC}$$
 + DH ψ_{Min} (DQ \uparrow^{Max} + VC ψ_{Min}) + DROC_{50-75%}

Taxing the drug business would allow governments to invest most the revenue diverted from organized crime in harm reduction, treatment and rehabilitation of problem users, and in providing better and more transparent information on the risks associated with the available drugs. Further, those resources could be used to focus the fight against organized crime on serious and extremely harmful crimes like forced (sexual) labor, arms smuggling, organ trafficking, etc.

In the medium term, regulated markets may also help to reduce problem drug use as a result of more transparent markets and better information about the risks of various drugs.

A CALL TO ACTION

If implemented, the policies proposed here will significantly reduce harm to drug users and third parties, avoid peasants and small farmers in producer countries having to bear most of the burden of repressive policies, and, most importantly, reduce the profits obtained by organized crime and other illegal actors from drug trafficking. At the same time, they will increase states' income and free resources and capacities for fighting organized crime and treating drug addicts. They will not, however, eliminate illegal markets entirely. Just as with cigarettes and alcohol, high taxation will continue to imply an illegal market. Nonetheless, illegal markets for plant-based drugs will be considerably reduced, probably by more than half of their current size.

The debate is underway in Latin America, with several presidents calling for reforms. It is time for the rest of the world, especially the largest consumers, the United States and the European Union, to get involved in this debate about new approaches to drug control. A lot can be done within the limits of the current global drug regime to redress its disastrous bias toward repressive measures; the international community must work together to this end. More needs to be done to change the global regime eventually, even if that might seem an audacious ambition at present. It is crucial to move away from the highly ideological and polarized debate of the last few decades and develop evidence-based policies. After all, the answer to the failure and devastating consequences of the War on Drugs should not and cannot be "more of the same."

REFERENCES

American Cancer Society. 2012. "The Tobacco Atlas". By Michael Eriksen, Judith Mackay and Hana Ross.

Barriuso Alonso, M. 2012. "Los Clubes Sociales de Cannabis en la encrucijada. Entre la autogestión y la mercantilización" [online]. Available at: http://www.tni.org/es/article/los-clubes-sociales-de-cannabis-en-la-encrucijada [Accessed 13 August 2012].

- Brombacher, D. 2011. "Los enlaces entre diferentes economías ilegales: plata, plomo y mano de obra criminal". Presented at the Forum on Illegal Economies and Citizen Security organized by FES-Ildis Ecuador and Flacso and held in Quito on 8-9 September 2011.
- ——. 2012. "This is what you get. Mercados ilegales y violencia en América Latina". FES Cooperation Program on Regional Security in Latin America and the Caribbean. Available at: http://library.fes.de/pdf-files/bueros/kolumbien/09230. pdf.
- CALZADA, J. 2012. "Una nueva política de drogas es posible. Realidades y desafíos del caso de Uruguay". FES Cooperation Program on Regional Security in Latin America and the Caribbean. Available at: http://library.fes.de/pdf-files/bueros/kolumbien/09304.pdf.
- European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). 2012. *National Report 2012: Netherlands*. Available at: www.emcdda.europa.eu.
- ———. 2012. National Report 2012: Portugal. European Monitoring Centre for Drugs and Drug Addiction. Available at: www.emcdda.europa.eu.
- GLOBAL COMMISSION ON DRUG POLICY. 2012. "The War on Drugs and HIV/AIDS: How the Criminalization of Drug Use Fuels the Global Pandemic" [online]. Available at: http://www.globalcommissionondrugs.org/.
- ——. 2011. "War on Drugs. Report of the Global Commission on Drug Policy" [online]. Available at: http://www.globalcommissionondrugs.org/.
- HUGHES, C. AND STEVENS, A. 2010. "What can we learn from the portuguese decriminalization of illicit drugs?" *British Journal of Criminology*, 50 (6).
- KLEIMAN, M., CAULKINS, J. AND HAWKEN, A. 2011. *Drugs and drug policy. What everyone needs to know.* Oxford University Press.
- Latin American Commission on Drugs and Democracy. 2009. "Drugs and Democracy: Toward a Paradigm Shift" [online]. Available at: http://www.drogasedemocracia.org/Espanol/
- Mejía, D. and Rico, D. 2011. "La microeconomía de la producción y el tráfico de cocaína en Colombia". In Alejandro Gaviria y Daniel Mejía (eds.). *Políticas antidroga en Colombia: éxitos, fracasos y extravíos*. Universidad de los Andes. Bogotá.
- NUTT, D., KING, L., SAULSBURY, W. AND BLAKEMORE, C. 2007. "Development of a rational scale to assess the harm of drugs of potential misuse". *The Lancet*. 369.
- THOUMI, F. 2011. "Sueños de reforma de las políticas contra las drogas y del régimen internacional de control de drogas". FES Cooperation Program on Regional

- Security in Latin America and the Caribbean. Available at: http://library.fes.de/ pdf-files/bueros/la-seguridad/08461.pdf.
- TNI and WOLA. 2011. Systems Overload Drug laws and prisons in Latin America. Amsterdam/Washington.
- UNODC. 2012. World Drug Report. 2012.
- ——. 2010. World Drug Report. 2010.
- ———. 2011. World Drug Report. 2011.
- UPRIMNY, R. 2003. "Drogas, derecho y democracia". Paper presented at the itinerant seminar on criminal policy POCAL. Available at: http://es.scribd.com/ doc/105041008/Drogas-Derechos-y-Democracia.
- Uprimny, R., Guzmán, D. and Parra, J. 2012. La adicción punitiva. La desproporción de leyes de drogas en América Latina. Centro de Estudios de Derecho, Justicia y Sociedad (DeJusticia). Bogota.
- WHO/UNICRI. 1995. "Cocaine Project" [online]. Available at: http://www.tni.org/ article/who-cocaine-project

Press articles

- "Bolivia quiere volver a adherirse al Convenio sobre Drogas de la ONU, mientras que hace una excepción en cuanto a masticación de hoja de coca". In UNODC. Availhttps://www.unodc.org/colombia/es/press/boliviaconvencion1961. html. [Accessed 20 February 2013].
- Diario Libre. 2013. "Gobierno reporta más de 26,000 personas desaparecidas en México". 26 February. Available at: http://www.diariolibre.com/latinoamerica/2013/02/26/i373074_gobierno-reporta-mas-000-personas-desaparecidasmexico.html. [Accessed on 1 April 2013].
- El Espectador. 2013. "Carteles mexicanos llevan su guerra a Guatemala. Así lo reconoció el presidente de Guatemala, Otto Pérez". 12 January. Available at: http:// www.elespectador.com/noticias/elmundo/articulo-396241-carteles-mexicanosllevan-su-guerra-guatemala.
- El Nuevo Herald. 2013. "Bolivia retorna a Convención de 1961 con reservas sobre el masticado de coca". 10 February. Available at: http://www.elnuevoherald. com/2013/02/10/1404458/bolivia-retorna-a-convencion-de.html

- InSightCrime. 2013. "Guatemala Murders Up 8% in 2013, Bucking Downward Trend". 5 March. Available at: http://www.insightcrime.org/news-briefs/guatemalan-murders-rise-president-starting
- *Proceso.* 2013. "Segob: 70 mil muertos con Calderón". 15 February. Available at: www.proceso.com.mx/?p=333688. [Accessed on 1 April 2013].
- Semana. 2012. "Frenan la legalización de la marihuana en Uruguay". 21 December. Available at: http://www.semana.com/mundo/articulo/frenan-legalizacion-marihuana-uruguay/326248
- The Amsterdam Herald. 2012. "Three-quarters of Dutch cannabis cafes will turn blind eye to official ban on tourists". 31 December. Available at: http://amsterdamherald.com/index.php/news-specials/the-new-wietpas-rules-for-coffeeshops/635-20121231-three-quarters-dutch-cannabis-cafes-coffeeshops-turn-blind-eye-official-ban-tourists-tourism-netherlands-dutch-politics-wietpas-ivo-opsteltenmarc-josemans. [Accessed 15 March 2013].
- ———. 2013. "Justice minister abandons 'wietpas' plan to restrict entry to coffee-shops". 19 November. Available at: http://amsterdamherald.com/index.php/news-specials/the-new-wietpas-rules-for-coffeeshops/13-news-wietpas-untagged/584-20121119-justice-minister-abandons-wietpas-plan-to-restrict-entry-coffeeshops-ivo-opstelten-cannabis-drugs-policy-amsterdam-society-tourism-tweede-kamer-parliament-netherlands-dutch-politics. [Accessed 15 March 2013].
- The Economist. 2012. "Felipe Calderón on his presidency of Mexico. Looking back on the Calderón years". 22 November. Mexico City. Available at: http://www.economist.com/blogs/americasview/2012/11/felipe-calder%C3%B3n-his-presidency-mexico.
- ——. 2013. "Out of control". 9 March. Tegucigalpa. Available at: http://www.economist.com/news/americas/21573108-first-two-reports-threat-rampant-violence-central-americas-small?fb_action_ids=10151296346210919&fb_action_types=og.likes&fb_ref=scn%2Ffb_ec%2Fout_of_control&fb_source=aggregation&fb_aggregation_id=288381481237582.
- ———. 2013. "Tax, and tax again". 9 March. Los Angeles. Available at: http://www.economist.com/news/united-states/21573135-americas-first-market-recreation-al-marijuana-will-be-far-free-tax-and-tax-again
- 2012. "The drugs business. "Impossible" to end drug trade, says Calderón".
 November. Mexico City. Available at: http://www.economist.com/blogs/americasview/2012/11/drugs-business.

- The Guardian. 2011. "Juan Manuel Santos: 'It is time to think again about the war on drugs". 12 November. Available at: http://www.guardian.co.uk/world/2011/ nov/13/colombia-juan-santos-war-on-drugs
- Time. 2012. "Two U.S. States Become First to Legalize Marijuana". 7 November. Available at: http://healthland.time.com/2012/11/07/two-u-s-states-becomefirst-to-legalize-marijuana/

WEB PAGES

- Amendment 64-Use and Regulation of Marijuana. Available at: http://www. leg.state.co.us/LCS/Initiative%20Referendum/1112initrefr.nsf/c63bddd6b-9678de787257799006bd391/cfa3bae60c8b4949872579c7006fa7ee/\$FILE/ Amendment%2064%20-%20Use%20&%20Regulation%20of%20Marijuana. pdf. [Accessed 15 March 2013].
- Government of the Netherlands. http://www.government.nl/issues/alcohol-anddrugs/drugs y http://www.government.nl/documents-and-publications/pressreleases/2011/05/27/the-dutch-cabinet-coffeeshop-to-be-a-private-club-for-thelocal-market.html. [Accessed 15 March 2013].
- "How many people in the United States use medical marijuana?". http://medicalmarijuana.procon.org/view.answers.php?questionID=001199. [Accessed 15 March 2013].
- Initiative Measure No. 502. Available at: http://sos.wa.gov/_assets/elections/initiatives/i502.pdf. [Accessed 15 March 2013].
- Law number 30/2000 decriminalizing the use of drugs. Portugal. Available at: www. idt.pt/PT/Legislacao/Paginas/LegislacaoTemaDetalhe.aspx?id=34

DRUG LAW REFORM IN LATIN AMERICA

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Alternatives to Current Drug Policy at the Production Stage

José Carlos Campero / Horacio Barrancos

INTRODUCTION

A little more than four years ago, the Comisión Latinoamericana sobre Drogas y Democracia (Latin American Commission on Drugs and Democracy), led by former Latin American presidents César Gaviria, Fernando Henrique Cardoso and Ernesto Zedillo, and the Global Commission on Drugs and Democracy proposed the need to change international policies on illegal drugs, and presented recommendations for the decriminalization of personal use and treatment of addiction as a public health problem. They advised that the international drug regimen and repressive policies against drug trafficking should be reviewed, and referred to the harm reduction approach as applicable not only to production, trafficking and consumption, but also to the negative consequences of these policies. In recent statements regarding the failure of drug policies, Latin American presidents such as Juan Manuel Santos of Colombia (2010 -), and Otto Pérez Molina, of Guatemala (2012 -), spoke of the urgent need to adopt reforms, including the decriminalization of some drugs.

However, neither the opinions and proposals of the two commissions nor the subsequent statements of some regional leaders, offer specific reform alternatives to existing policies, even when there is no doubt that the diagnosis they make about the failure of repressive policies to address the issue is correct.

Consequently, and to contribute to the debate from a technical perspective, this paper analyzes the current situation of policies against the most widespread plant-based illegal drugs, with emphasis on the stages of cultivation, production and commercialization, and presents alternatives to the corresponding aspects of the international anti-drug regimen that are designed to combat them.

The project is intended to present alternative policy guidelines regarding the cultivation and production of plant-based drugs, in order to contribute to harm

reduction in consumption and enable a more efficient fight against organized crime. Specifically, the objectives of these guidelines are:

- Reduce both harm to consumers and third parties in the production stage of plant-based drugs as well as the negative effects of traditional anti-drug policies in that stage in terms of human rights and the environment, to name a few.
- Reduce as much as possible the resources received by organized crime gangs and illegal armed groups as a result of the current drug control policies being implemented along the cultivation and production stages of plant-based drugs.
- Maximize state income received through taxes and other mechanisms, so that these resources can be used for research, treatment of problematic users, and the fight against organized crime and other illegal actors.

In terms of methodology, the work we are presenting here is an exercise in the identification of proposals for action in the field of regulation of the cultivation and production stages of plant-based drugs, specifically cocaine. The proposals presented are not tested or modeled versions; with them, we hope to encourage discussion of public policy ideas that could be more fully expanded to verify their possible outcomes, impacts and implementation costs.

In this sense, the proposal has two levels of abstraction. The first has to do with the macro level of the coca-cocaine chain and is a public policy proposal of what could be called a regulatory model; the second identifies possible actions applicable to a case like that of Bolivia, based on the guidelines of that model. This study is presented as an annex to this chapter.

Part of the information used comes from official sources, though almost all is from secondary sources. That is due to existing restrictions on the access to databases of both governments and supranational entities. Despite these restrictions, it was possible to build a primary database that allowed us to perform most of the analysis, and to use the experiences of the legal and regulatory developments in countries like Bolivia, Spain, Holland, India, Portugal, Turkey and Uruguay as a guide for most of the proposals.

BACKGROUND CONSIDERATIONS RELATED TO THE PRODUCTION AND COMMERCIALIZATION OF COCA AND COCAINE

Before making policy proposals to change the current management of the drug problem, it is necessary to identify a number of issues that serve as baseline problems to be solved. To begin, we can mention at least these three:

- 1. The growth of the coca-cocaine chain and the financial returns it generates for organized crime can be largely explained by the restrictions imposed by current anti-drug policies and their significant effects on price distortion.
- The main health problems associated with cocaine use are based on invalid assumptions due to a lack of rigorous scientific knowledge (at least among the general public) of the effects of this substance, at high purity levels, on humans.
- Much of the violence and crime associated with the production, trafficking and
 consumption of cocaine is the product of the excessive levels of illegality coded
 into national legal frameworks that do not distinguish between large and small
 offenders.

We will analyze these issues below.

PRICE DISTORTIONS

Microeconomics of the market structures of coca production

While a grower in Peru receives approximately US\$726¹ for the amount of coca leaf needed to produce one kilogram of cocaine, and a grower in Bolivia gets US\$1,638,² the price of a kilogram of cocaine hydrochloride is US\$1,025 in Peru and US\$2,333 in Bolivia. In the United States, that kilogram reaches a price of US\$31,000 and in Europe it fetches US\$41,000 (UNODC, 2009) (see Table 1). In short, the price grows over a hundred times between what is paid to a coca farmer and the retail value of a kilo of cocaine in one of its end markets. This not only reflects the traditional gap between the production stage and final consumption, but it also gives a clear picture of the great price *distortion*³ caused by various market structures and incentives cre-

Taking as a parameter that the production of one kilogram of cocaine in Peru requires 220 kilograms of coca leaf at a price of US\$3.30 per kilogram. http://www.unodc.org/documents/wdr/WDR_2010/4.1_Statistical_annex_Production.pdf

Taking as a parameter that the production of one kilogram of cocaine in Bolivia requires 256 kilograms of coca leaf at a price of US\$6.40 per kilogram. http://www.unodc.org/documents/wdr/WDR_2010/4.1_Statistical_annex_Production.pdf

³ Market distortion exists when prices are higher or lower than normal and if quantities produced, bought and sold are also higher or lower than normal volumes, i.e. the levels that would be seen in a competitive market. Also, market distortions lead to dominant positions that undermine competition, such as in the cases of monopolistic markets, oligopolies, monopsonies, cartels and other cases of imbalances such as the bilateral labor market. http://trabajos-contabilidad.blogspot.com/2009/07/

ated in illegal markets by the prohibition of the cultivation of the coca leaf and its transformation into cocaine.

COUNTRY	USD/KG COCA*	COCA EQUIVALENT/KG COCAINE**	USD/KG CO- CAINE***	USD/GR RETAIL COCAINE ****	USD/KG RETAIL COCAINE
Bolivia	6,4*	256~	2.333•		
Peru	3,3**	220~ ~	1.025•		
Colombia	1,3***		2.468••		
Mexico			3.500		
U.S.A.			31.000	170	170.000
Europe			41.000	250	250.000

Table 1. Comparative prices in the coca-cocaine production chain

At this point, it is necessary to highlight two key elements when considering the distortion of prices: 1) the perverse incentives for the development of highly profitable illegal markets; and 2) existing market structures for the drug.

Regarding the first, the illegal market phenomenon arises in the face of government control, usually when demand for a penalized product such as a drug is so high that it creates sufficient incentives for actors throughout the production chain to violate laws to gain higher profits, while consumers are willing to pay higher prices for a drug that is banned or restricted. This is to say that there is more demand than supply, and this supply is not sold freely because of legal prohibitions or because producers have the option to sell at a better price in a parallel market (of which the illegal market is one).

 ^{*} Unodc, 2011.

^{**} Unodc, 2012a.

^{***} Unodc, 2012b.

http://www.unodc.org/documents/wdr/WDR_2010/4.1_Statistical_annex_Production.pdf.

http://www.unodc.org/documents/wdr/WDR_2010/4.1_Statistical_annex_Production.pdf.

[•] Unodc. World Drug Report, varios años; y Unodc, 2011 y 2012a.

^{••} Unodc, 2012b.

^a Unodc. 2012. http://www.unodc.org/documents/data-and-analysis/WDR2012/WDR_2012_web_small.pdf Source: Prepared by the authors.

distorsiones-en-los-mercados.html. Moreover, price distortion is shown by the presence of a product at different prices in the same market, a situation almost always caused by lack of transparency in the market. http://www.economia48.com/spa/d/distorsion-de-precios/distorsion-de-precios.htm

In context of prohibition or restriction, markets drive the emergence of actors who market products illegally, whether they are drugs, weapons or anything else not permitted by law.

In those conditions, it is typical to see "illegal markets" that are nothing but a market response to prohibitions via state interference; these markets are usually ignored by the authorities responsible for controlling them, who are often aware that the market has at its power forces greater than those of public order.

In relation to the second element, while the current policies that penalize drug production and consumption create sufficient incentives for the development of illegal markets, existing structures further distort the price of the raw material and the final product. The problem underlying this distortion is not only economic (specifically microeconomic), but the distortion is also so strong that it explains the level of crime around the production, trafficking and sale of drugs and their precursors in illegal markets.

In many places, the criminal element has organized into cartels responsible for the purchase of raw materials, their processing and the marketing of the illegal derivatives. At the beginning of the chain, the cartel-type organization⁴ creates monopsonistic or oligopsonistic⁵ markets that, for example, force producers to provide coca at prices well below its market price; at the end of the chain, they create monopolies, generally geographical, that raise the final price. In other cases, such as in Bolivia, it is the producers of the raw material who create the cartels.

These market structures are very similar to chained monopolies, which distort the market by an amount large enough to offset the transaction costs associated with illegality and criminality. These criminal organizations and their market strategies

⁴ Regardless of the organizational structure and operation of the cartel; that is, either with the monolithic and vertical structures of the 1980s, or flat and decentralized as one sees now. For a more detailed description of organized crime in Bolivia, see Campero, 2011.

A monopsony is a situation of market failure that occurs when there is a single consumer, instead of several. This consumer, being the only one, has a special control over the price of the goods, as producers have to adapt in some way to the buyer's demands in terms of price and quantity. This allows consumers to get the products at a lower price than if they were in a competitive market. For its part, the oligopsony is a situation of imperfect competition that arises in a market where there are several buyers, but a small number who have power and control over the prices and quantities of a product. In this situation, the benefits go to the buyers (in most cases, these buyers are intermediaries), but not the producers, whose situation deteriorates because they do not receive a fair price for the products they produce.

are driven indirectly by the state prohibitions, bans easily overcome by the economic and criminal power of such cartels.⁶

Taking into account the above considerations, and from a market analysis approach, it is reasonable to isolate the raw material producers and the final consumers from these market distortions that have been created by the illegal markets. Put another way, to minimize or eliminate the perverse incentives for the development and prevalence of illegal markets and their consequent effects on crime, it is advisable to eliminate back end and front end market distortions, thereby achieving prices closer to the equilibrium proposed by microeconomic theory.

Finally, markets linked to the production and marketing of cocaine are dynamic, in the sense that supply and demand are in constant motion for various reasons: first, the supply of coca leaf as the raw material in the cocaine drug trade changes depending on the speed and intensity of current coca eradication and interdiction policies. More successful control policies in Colombia, for example, led to the expansion of coca production and the development of the entire cocaine production chain in Bolivia, in what is known as the balloon effect. Second, demand for cocaine at the aggregate level has remained relatively stable over time, but it has changed geographically. Thus, for example, while in the United States the demand has decreased (UNODC, 2012), in Europe it is stable, and in some Latin American markets (such as Brazil and Argentina), Africa (for example, Guinea-Bussau), and Oceania (e.g. Australia), consumption of cocaine and its derivatives (crack) has increased.⁷

Similarly, while the cocaine in the United States is mainly supplied by Colombia, the European market has offset a decline in the supply of Colombian cocaine with drugs produced in Peru and Bolivia. All of this gives a clear idea of the capacity and speed of adjustment of the market agents linked to the drug trade.

⁶ In countries that are essentially raw material producers, the presence of the cartels is undeniable because they join the primary links with the rest of the chain. While Bolivia's central government denies the presence of cartels and chooses to refer to "local family clans with international links," it is undeniable that this international coordination is the brains that strategically plan the activities undertaken in Bolivia.

This data is of utmost importance and must be taken into account when considering alternative formulas, because it shows how current drug policy is regressive, in the sense that it allocates the largest amount of resources to prevent the flow of drugs to markets in developed countries, where there is more capacity to prevent and control their use.

Market structures of coca production in Peru, Colombia and Bolivia

As has been noted, while policies that penalize the cultivation, production and consumption of drugs create sufficient incentives for the development of illegal markets, existing market structures further distort the prices of the raw material and final product.

Consequently, it is necessary to emphasize that the characteristics of each country determine the type of incentives for illegality as well as the characteristics of the price distortions in the production of raw materials and final products.

In Peru, for example, there is a coca market that is relatively controlled by the Empresa Nacional de la Coca (National Coca Company, or ENACO SA),⁸ which operates as a legal market under a monopsony regulatory framework, i.e. as the sole buyer of coca leaf production, it determines the producer price, one that will not be so high as to encourage growth in the supply of coca leaf.

The drug cartels in turn create incentives to divert part of that production of coca leaf by offering a price only slightly above that paid by the state company. The result of these two effects is a price below the theoretical equilibrium point one would get via a direct or near direct connection with producers.

In the case of Colombia, the illegality of coca cultivation, in addition to the inability of the state to be present and control the territories where drugs are produced, generate ideal conditions for organized crime groups to act as cartels connected directly with growers.

Figure 1 illustrates some characteristics of market distortion and their impact on the coca leaf economy in situations with monopsonistic (oligopsonic) features, such as the markets in Peru and Colombia.

P * is the theoretical equilibrium price; Pm is the price received by producers of coca leaf; and the distance between the ME and Pm price reflects the size of the price distortion at this link of the cocaine chain. The distortion should be understood as the difference between the price paid for the raw material to the agricultural pro-

⁸ ENACO SA produces cocaine of 92% purity and exports 300 kilograms annually to international pharmaceutical companies. According to its website, the annual demand of these organizations is more than one ton. http://www.enaco.com.pe/

⁹ While the price paid by ENACO is US\$1.90 per kilogram of dry coca leaf, traffickers pay on average US\$3.30 (UNODC, 2012a).

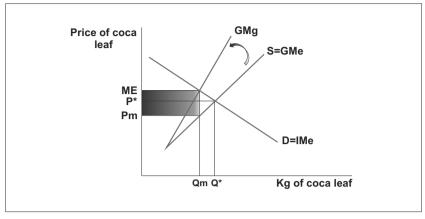


Figure 1. Microeconomic features of the coca leaf markets in Peru and Colombia

Source: Prepared by the authors.

ducer (Pm) and the price the monopsony or oligopsony would be willing to pay if it had to compete with other raw material buyers.

The monopsony or oligopsony has the power to set the market price of their raw material, a "privilege" that would not exist if there were multiple, and strong, buyers of coca leaf. The monopsony holds market power by defining the price of this raw material – coca leaf – below the equilibrium point.

If this first distortion were transferred to the final consumer, it would result in lower cocaine prices, but this does not happen because the drug trafficking chain has a kind of (regional) monopoly structure that exploits its power over end consumers by defining prices above the equilibrium, thereby generating a second price distortion.

The difference between the price of the raw material and the final market price for cocaine is large enough to finance all illegal activities related to organized crime.

In terms of Figure 1, this means that instead of paying the theoretical equilibrium price (P*), the cartel uses its monopsony or oligopsony power to pay a price equal to Pm to coca growers; nonetheless, it sells its product at a price equal to ME, because of the monopoly it exercises in end-use markets for cocaine. This profit is reflected in the shaded rectangle.

The low prices received by producers could discourage production, but this does not happen because the yield of coca leaf per hectare makes the business profitable on quantity more than on price.

There is another consideration. The function of coca leaf production (the supply curve) will always reflect the behavior of a normal good (a positively sloped curve

as in the graphs), showing that producers will only be willing to produce more at higher prices due to the costs associated with marginal increases in production (e.g., labor, materials and opportunity cost of land), or produce more at the same price if technological improvements (e.g., computer technology) make it more efficient.

In Bolivia, meanwhile, a different phenomenon occurs: the price of coca leaf is more than double that in the markets of Peru and Colombia, mainly for two reasons:

- 1. Coca leaf production and, consequently, supply is about 50% lower in Bolivia than in other producing countries.¹⁰ This means that the higher the supply the lower the market price, and vice versa.
- 2. The market structure is fairly different, in the sense that there is an upward pressure on the price as determined by oligopoly-type supply.¹¹

In Bolivia, all coca growers are unionized in very vertical structures that impose high barriers to entry for new players (see Campero, 2011). The supply of coca leaf is sold in two types of markets: 1) legal: Adepcoca in La Paz and Sacaba in Cochabamba; and 2) parallel or illegal.

Regardless of the market in which the coca leaf is sold, its price is affected by monopoly and oligopoly¹² decisions made by the trade unions in the country.¹³

^{10 31,000} hectares in Bolivia compared with 62,000 in Colombia and 61,200 in Peru in 2012 (UNODC, 2012).

¹¹ A monopoly is a situation of legal privilege or market failure, in which there is a producer (monopoly) who has great power and is the only one in a given industry that has a unique and differentiated product, resource, good or service. For there to be a monopoly, it is necessary that there are no substitutes in the market, i.e. there is no other good that can replace the particular product and, as such, it is the only alternative that the consumer has. It is often defined as a "market in which there is only one seller," but this definition would correspond more to the concept of *pure monopoly*. The monopoly controls the amount of output and price, but not simultaneously, since the choice of production or price determines the position of one relative to the other; that is, the monopoly could first determine the rate of production that maximizes his profits and then determine, through the use of the demand curve, the maximum price that can be charged to sell such production.

¹² An oligopoly is a market dominated by a small number of sellers or service providers. Because there are few participants in this type of market, each oligopoly agent is aware of the actions of others. The decisions of one company affect or influence the decisions of the others. Through their position, they exert market power that pushes prices higher and production lower. These companies maintain that power by collaborating with each other, thus avoiding competition.

¹³ While in Bolivia there are three types of trade unions involved in coca leaf production, depending on the geographical area (Yungas, Chapare, and other legal areas), they do not compete with each other to generate downward effects on the price of coca leaf, nor do they join together to

The effect of this structure, combined with the scale of supply versus demand, determines a final price that is substantially higher than in the markets of Peru and Colombia, as illustrated in Figure 2.

PM
P*
Pm

QM Qm
Q* Kg of coca leaf

Figure 2. Microeconomic features of the coca leaf market in Bolivia

Source: Prepared by the authors.

The theoretical interpretation of this particular market structure suggests that the monopoly, or oligopoly, exploits its market power, i.e. it has the ability to split the demand curve into average income (IMe) and marginal revenue (IMg), thus achieving a price of the raw material (coca leaf) equal to PM; the same happens at the point at which the two markets cross (monopoly and monopsony) via marginal revenue and marginal cost (CMg). It should be noted that the price PM one has in Bolivia is higher than the price Pm obtained in Peru and Colombia, and in turn higher that the theoretical equilibrium price of Pc.

It is reasonable to assume then that in both types of markets, Bolivia on the one hand and Peru and Colombia on the other, the distortion imposed by illegal market structures results in different prices from what would be a competitive market price (P*).

Almost all income that originates in those price differentials benefits organized crime organizations, which are illustrated by the shaded rectangles. In the case of

determine prices. Instead, each union consists of several coca growers and, by cartel logic, exercises its monopoly power in its area of influence, thereby determining prices that are high but very similar to the other unions. This market logic is facilitated by natural segmentation of coca leaf production, being that one of the unions (Yungas), due to its specific characteristics, produces coca leaf intended for traditional uses, while the other (Chapare) is geared more towards its use in the production of illegal derivatives.

a monopsony, the income is mostly generated in the later links in the chain: buy low, sell high (difference between Pm and ME); while for the monopoly the income comes in the first link of the chain: sell high (difference between P* and PM).

The importance of a correct price will be discussed later, but for now one can note that it has two implications: 1) a fair price for the producer; and 2) a reduction in the economic incentives that create monopsony or monopoly exploitation, depending on the country analyzed.

On the other hand, empirical evidence in the Bolivian case shows an upward trend in amount of coca leaf sold, which is mainly explained by the growth in demand.

Although an analysis of the behavior of retail cocaine demand is beyond the scope of this paper, it is reasonable to assume that there is forward displacement of the demand curve (or function) instead of movements along the curve, because cocaine demand is price inelastic¹⁴ (see below) and there is no evidence of a decline in the price of cocaine in the end market (UNODC, 2012).

Figure 3 illustrates the growth in demand over time, which permits one to see how the effect of the distortion of the market (through prices) increases in a context in which interdiction policies have failed to reduce the supply of coca leaf.¹⁵

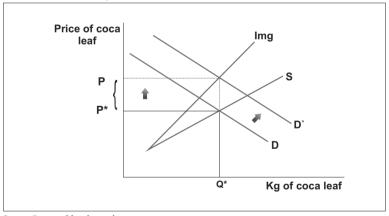


Figure 3. Evolution of demand for coca leaf

Source: Prepared by the authors.

¹⁴ The demand curve for cocaine is price inelastic, since a reduction in price does not translate into the equivalent increase in consumption (Loayza and Sugawara, 2012).

¹⁵ However, if the ban had been successful, it would only have caused an upward shift of the supply curves, increasing the upward pressure on (monopsonic) prices and thereby creating more incentives for the proliferation of illegal markets.

The bracket on the left side of the graph shows that the increase in demand in a context of interdiction generates greater price distortion in the presence of illegal markets. As an example, Figure 4 shows the demand effect in Bolivia in terms of the quantity of coca leaf produced and its price.

Microeconomic effects of eradication and interdiction policies for coca leaf production

The governments of the countries analyzed have a clear position regarding the need to control the production of coca leaf crops, in some cases, and surplus production, in others, in order to avoid becoming a center of production of illegal chemicals. While in the case of Bolivia there is a confrontational discourse towards anti-drug policies, and the Drug Enforcement Administration (DEA) and the Narcotics Affairs Section (NAS) of the U.S. Embassy were expelled (although the U.S. is still financially supporting eradication), what has changed is not the goal of eradication and interdiction, but rather who is responsible for managing it.

From the microeconomic point of view, these government efforts are increasing the unwanted and unpremeditated distortion already caused by monopolistic or monopsonic (or oligopolistic or oligopsonic) structures and therefore creating greater incentives for the prevalence of illegal markets, as illustrated in Figure 5.

The control of production changes the supply curve to the shape shown in the graph, limiting supply in the legal market to Q1: legal supply or maximum permit-

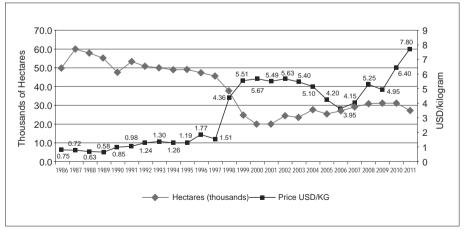


Figure 4. Evolution of price and production area for coca leaf in Bolivia, 1986-2011

Source: Prepared by the authors.

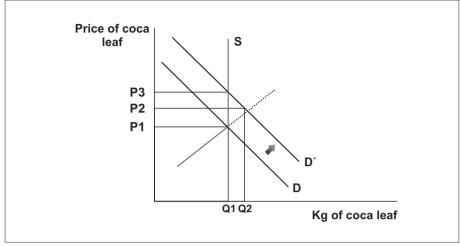


Figure 5. Microeconomics of eradication and interdiction of coca leaf production

Source: Prepared by the authors.

ted. However, the hoped for effect on the quantity of coca leaf produced and sold is unrealistic because the incentive of increased demand – that at the end of the chain is inelastic (demand for cocaine) – has the effect of increasing prices to levels higher (P3) than what an increase in demand would have had caused (P2) without the existence of controls on the supply, thereby generating more resources for the illegal markets that escape and corrupt the control systems.

Information on the number of hectares of coca leaf cultivated and their productivity shows, at least in the cases of Bolivia and Peru, an increasing trend since 2005, confirming previous studies (UNODC, 2010 and 2012a).

In conclusion, this analysis suggests: First, in a context of growing demand, the policies of criminalization of coca cultivation and cocaine production and marketing create important incentives for the emergence and proliferation of illegal markets and the creation of monopsony or oligopsony structures with price gaps attractive enough to fund criminal organizations and activities. Second, a power of price fixing on the side of raw material supply reduces, if not reverses, the monopolistic effect that cartels can exert further down in the chain.

Similarly, one notes the heterogeneity of the market structures of producing countries on which homogeneous recipes have and continue to be imposed, the result of which has been to significantly increase the resources available to organized crime.

DAMAGE ASSOCIATED WITH COCAINE USE

A drug is a chemical that influences our biological functions and whose effects can be benign, harmful or both, usually depending on the drug itself and the dose consumed (Kleiman, Caulkins and Hawken, 2011).

The statistics and research show various effects of drugs on humans, depending on at least three factors:

- 1. Changes in behavior: the risks that drug use can create for third parties; for example, driving under the influence of alcohol.
- 2. Addiction: the development of a pattern of behavior that is difficult to break or change even when the person realizes that this behavior is a problem.
- 3. Pharmacological risk: the relative harms that regular consumption of certain drugs can cause.

Combined, these three factors identify the various risks and problems that all drugs, legal or illegal, may pose to humans. And in this sense we must assume that, statistically, legal drugs are those that cause the most evident damage, as tobacco (4 million) and alcohol (2 million) lead to the deaths of more than 6 million people each year worldwide, whereas the other drugs are responsible for about 260,000 deaths annually.

Tobacco does not generate changes in behavior but it is highly addictive and exposes users to high risks of cardiovascular problems. In terms of alcohol, when it is consumed in moderation it has fewer negative health effects than other drugs, but its effects in terms of changes in behavior can have serious consequences for the lives of others. Heroin, meanwhile, is an example of a chemical that generates almost insurmountable addiction.

Nonetheless, despite these risks, legal and illegal drugs are produced and there is a universe of people who choose to consume them, mostly without their consumption developing problematic features.

To get their dose, the universe of illegal drug users usually must resort to illegal sellers and usually get very low quality products that have very negative effects on their health, due to the diversity of substances used to "cut" the drug. According

¹⁶ Cutting cocaine is the process of adulterating pure cocaine in order to multiply its volume before bringing it to market for retail sale. This process involves mixing high purity cocaine with other substances, usually of two types: 1) "inactive" cutting agents that serve to add weight, e.g. lactose,

to the data available, cocaine has no effect on behavior change, and both its addiction and pharmacological risks are based largely on studies of addicts who have used considerable amounts. In general, it is nearly impossible to find serious studies that present evidence on the use of very pure cocaine.

Recently, the Uruguayan Interior Ministry reported that the crack cocaine sold in its territory contained chemicals, "that are really poison. One example is the thallium that is used in the production of rat poison." In a Spanish case, it was found that "all the data from the laboratory analysis indicate different degrees of purity depending on the weight of the sample or the quantities the dealer manages" (Hidalgo, 2004).

This is not about judging how harmful cocaine is or is not to humans, but to emphasize the "forced" absence (Transnational Institute, 2003) of scientific evidence "unbiased" enough to issue opinions on the effects of consumption.

The Cocaine Initiative of the World Health Organization

In March 1995, the WHO and the United Nations Interregional Crime and Justice Research Institute (UNICRI) announced the publication of the results of a global study on cocaine, the Cocaine Project, with information from 22 cities and 19 countries on the use of the derivatives of coca leaves, their effects on users and the community, and government responses to the problem of cocaine. [...] The study was never published, despite being, "the largest study on cocaine use ever undertaken."

talc, borax, Mannitol (an Italian laxative) or any other product that looks like cocaine but has no noticeable immediate side effects; and 2) "active" cutting agents that compensate for the power loss in the adulteration process, e.g. stimulants (amphetamine powder) meant to offer a strong hit and anesthetics (Novocain or benzocaine) meant to mimic the characteristic drowsy mouth effect of real cocaine.

Overall, those who distribute the product in kilos normally mix with borax, lactose or Mannitol, ending up with a purity of between 85% and 80%; those who buy the kilos and sell by the ounce cut with amphetamines and some anesthetic derived from "coke," ending with a purity between 70% and 60%; those who purchase in ounces and sell in grams cut with whatever is at hand, including chalk or talcum or again with Novocain or procaine, substances that, being 70% more toxic than borax, Mannitol and lactose, also add solubility problems, making it dangerous for intravenous use, and end with only 30% to 40% purity. If it passes through the hands of another reseller, one ends up with 20% purity. As a result, the consumer who buys by the gram rarely gets beyond 50% purity. The average percentage in current street samples is between 20% and 40% at best. http://cocaina.narcononlm.info/enterate.html

Two months later, on 9 May 1995, in Commission B of the forty-eighth General Health Assembly, the destiny of these years of labor was determined by the intervention of the representative of the United States of America, Mr. Boyer, who expressed his government's concern with the results of this study, "which seem to make a case for the positive uses of cocaine, claiming that use of the coca leaf does not lead to noticeable damage to mental or physical health; that the positive health effects of coca leaf chewing might be transferable from traditional settings to other countries and cultures; and that coca production provides financial benefits to peasants."

The representative said that his government was considering suspending funding for WHO research if its activities did not reinforce proven drug control approaches. In reply, the representative of the Director General defended the study, claiming it was, "an important and objective analysis done by experts," which, "represented the views of the experts, and not the stated policy position of the WHO, and WHO's continuing policy, which was to uphold classifications established in the international conventions on narcotics and psychoactive substances." According to the representative, there was no intention to publish the study in its current form, as it might lead to "misunderstanding." The debate concluded with agreement on a peer review by "genuine experts."

[...] Over the course of almost two years, an intensive fax exchange took place whereby the PSA proposed names and NIDA answered by refusing each and every one of them. There has been no formal end to this 'Cocaine Project.' The majority of the participating scientists never heard what was done with their work. Some published parts of the study in their respective countries. (Trasnational Institute, 2003: 3).

DRUGS AND CRIME

Another important factor in the politics of drug control has to do with the unmistakable fact that it pushes drug users into illegality (Maris, 1999). On the demand side, one can argue that the increase in crime linked to the high prices of illegal substances is a product of the price distortion that prohibition creates and which has already been analyzed. On the supply side, there are the immense profits and social power that prohibition has transferred to organized crime, resulting in erosion of institutions, changes in social behavior and loss of state sovereignty.

The crimes associated with drug use in the illegal markets can be identified as not only those that are committed to maintain an addiction, but also those that occur as a result of the victimization of consumers, who cannot use their legal rights to

denounce and defend themselves because of the specific context of illegality in which they exist.

The crimes that are associated with production – and are financed by the huge tax-free income earned by organized crime groups involved in drug trafficking – have a greater impact in terms of infringement on the rights of third parties. As they penetrate and undermine state institutions, they skew the principle of universality with which these institutions should work. Similarly, they cause changes in social behavior, distorting the perception of values associated with working and enjoying a life inside the law by using the ability to obtain extraordinary income and accelerated social mobility as justifications for illegality. Finally, they reduce the sovereignty of producing states and those whose territories involuntarily become drug trafficking "bridges" to final consumption markets, both of which end up being equally affected in terms of social and institutional behavior.

Moreover, the possession of chemicals for personal consumption and microtrafficking is considered a criminal act and is punished with excessive penalties in the legal systems of most countries, which has led to prison overcrowding, high prison maintenance costs and accelerated family disintegration.

PARADIGM SHIFT: FROM PROHIBITION TO REGULATION

In terms of eliminating market distortions imposed by state prohibitions, one ought to think more in terms of a model like that of regulated competitive markets. The removal of prohibition and the introduction of regulation (with different levels of legality) involve the introduction of incentives that would allow: 1) better prices; 2) better conditions for the reduction of crime and the harm associated with poor product quality; and 3) better distribution of funds between organized crime and the states.

Now, with the understanding that this proposal incorporates the regulation of raw material (coca leaf) cultivation as well as cocaine production for personal consumption purposes and drug development, the following approaches span the entire coca-cocaine production chain.

PRICE SYSTEM FOR COCA LEAF IN A REGULATED MARKET

Having a better price level means eliminating price distortions of the raw material and finished products, thereby providing a more just income for coca leaf producers, reducing harm to consumers, and generating greater revenue for governments (and, consequently, less income for organized crime). The desired combined effect

of regulation should be to reduce the incentive to participate in illegal markets and related crime.

Consequently, a regulated pricing system is intended to increase price transparency in the production of the raw material (coca leaf) and keep prices level for the final product (cocaine and other products), incorporating taxes and fees in the process to divert resources from organized crime to the states.

Auction system

To eliminate price distortions during the production of raw material, i.e. during coca leaf cultivation, we propose using auctions as a mechanism that helps determine a better price level. An auction is defined as a market institution that has an explicit set of rules determining resource allocation, where prices are based on bids submitted by participants. Since the work of Vickrey (1961), auctions have been broken down into four general types.

Ascending, or English, auction

The most used, it is defined by the fact that participants bid so that the price is increased successively until there is only one buyer, who is awarded the right to the final price.

Descending, or Dutch, auction

This type of auction starts with a high price this is reduced until some participant is willing to accept the auctioneer's price, or until it reaches the reserve price, i.e. the minimum accepted for sale.¹⁷ The winner pays the last announced price. This auction type is useful when it is important to auction goods quickly, and a sale never requires more than one bid.¹⁸ It is the ideal type for wholesale markets, perishable products and rapid demand products like flowers.

Sealed first-price auction

This auction has two characteristics that contrast with the English auction: 1) at the time of submitting bids, participants did not know the bids of other participants; and

¹⁷ This price covers not only production costs, but also incorporates a profit.

¹⁸ Theoretically, the strategy and results of the Dutch auction bid is equal to that of a sealed first-price auction; nonetheless, the evidence indicates that the Dutch auction sometimes ends with lower sale prices.

2) each participant may submit only one offer. The deals are presented in a sealed envelope. The product is awarded to the highest bidder, so the final price is the best offer.

Sealed second-price auction, or Vickrey auction

Same as the previous type, with the difference that the winning price is not the highest one, but the second highest bid.

These four basic auction formats also permit, depending on the specific product, many variants, such as the inclusion of a minimum price which may be published or not; the imposition of fees for the right to accept; or set times for the submission of offers, among others.

Among these models, it is interesting to think of the Dutch auction as the best marketing tool for the coca leaf, taking into account that it permits one to: 1) achieve prices closer to those of a theoretical market equilibrium; and 2) reduce speculation on rising prices.¹⁹

A legal and public coca leaf auction could help to: 1) reduce the size of the illegal coca economy, thereby discouraging excess supply; and 2) reduce crime associated with the production of illegal derivatives and the smuggling of precursors.

The expectation of legality of coca leaf production based on rules and the use of market mechanisms such as auctions would help reduce price distortions generated by monopolistic (oligopolistic) and monopsonic (oligopsonic) behavior, with the goal of reducing the resources generated by the cocaine economy for organized crime.

For these effects to occur, at least two conditions must be met:

1. All auction participants are legal actors – registered, accredited and transparent – regardless of the final destination of the coca leaf (for instance, the illicit production of derivatives).²⁰

¹⁹ The perverse incentives behind the speculation may come in part from the government itself, which, in this proposal, is involved in the outcome of the auction. In other words, if the auction is English style, for example, both the government that receives taxes and the auctioneer who receives an administration fee are tempted to maximize the final price of the auction because the taxes and fees are based on this price.

²⁰ The main incentive for all parties to be willing to participate in legal markets is that there are no ex post audits of the use of the coca leaf acquired. Consequently, the incentive of legality in the purchase of raw material (coca leaf) will significantly reduce illegal markets and generate government revenues that currently do not exist.

2. The effect on the market price achieved at the auction of the raw material is transferred along the production chain to the consumer of the final product (cocaine).

The auction process implies that the state must fulfill two important functions: 1) administering a proper and lawful auction system for coca leaf; and 2) ensuring the preservation and transfer of improved pricing of the final product to the consumer.

One part of adequate and proper government administration of a Dutch auction is to ensure:

- The transparency of actors.
- 2. Respect for auction rules.
- 3. Complete information about supplied and demanded volumes and product quality.
- 4. A guarantee of the quality of the product auctioned/allotted.²¹

Registering system and quality certification

The acquisition of coca leaf from an auction system and its subsequent transformation makes the buying and selling process less complicated than one would think, especially considering that the regulations must provide guarantees for all parties involved, thereby limiting risks for an activity that is currently penalized and run by criminal networks.

Cases such as those developed in Peru by the Empresa Nacional de la Coca (National Coca Company; see Footnote 8, above), which produces legal coca leaf derivatives (e.g. herbal teas, and others) and cocaine destined for the global production of medicines, or in India, Turkey and Spain, where legal poppy production is destined for global production of opiate medications, allow one to imagine a registration and certification process as posed below based on the application of proven methodologies.

²¹ One of the effects of the use of auctions will be the natural segmentation of coca plots according to the quality and, consequently, price. For example, one that has certified organic production without the use of chemicals will tend to get better prices than those that don't have such qualifications. This market pressure will tend to generate production processes that increase the quality of the auctioned product in order to achieve differentiation and better prices.

Legality and transparency of actors and their transactions

The registration of the actors involved in coca leaf cultivation will allow for transparent information and generate the necessary incentives of legality to reduce the diversion of product to illegal markets. Consequently, it offers: 1) legal and registered actors in the production chain; 2) transparent processes and transactions in the commercialization of intermediate and final products; and 3) statistical records of production, sales, pricing and values, among others.

Quality of the product sold and consumed

The implementation of certification processes for coca leaf plots is intended to segment production by quality, in two ways:

- At the beginning of the supply chain: This has to do with cultivation practices that, regardless of the product's final destination, must protect ecosystems and prevent gradual and consistent degradation. The use of suitable soil, sustainable agricultural practices (e.g. crop rotation and techniques resistant to climate change), organic fertilizers and pesticides, and appropriate species selection, among others, are factors that contribute to better leaf quality and protect human health and the environment.
- At the end of the supply chain: When the raw material can be segmented by quality, industrial processing practices will give better end products. Because of its effects on health and market behavior, it is important to improve both the quality of coca leaf employed for traditional uses as well as the purity of cocaine used further down the chain.

Consequently, prices will be defined by the cost of production plus whatever value-added features each batch of coca leaf has (e.g. the use of techniques adapted to climate change, leaf species, organic certification, etc.); these features will demand higher values because of market demand. In this sense, the market will feature coca leaves of various quality levels and, therefore, various prices, which will be defined by transparent costs and product quality, and not by speculation or market domination by criminal agents.

This is yet another argument in favor of the idea that stakeholders along the entire supply chain of coca leaf and its derivatives (including drugs), should be regulated and should carry out their activities in scenarios (markets) that are transparent and safe for human health and the environment.

A REGULATED MARKET FOR THE PRODUCTION AND SALE OF COCAINE

Based on international experience with the legal production of cocaine (Peru) and opium (India, Turkey and Spain), one can propose that cocaine should be produced by laboratories (either public, mixed or private) that are duly registered and accredited with quality and sanitary certifications. These laboratories must legally be enabled to participate in coca leaf auctions and to buy regulated chemical supplies/ precursors.

Legally produced cocaine may have two final destinations: to meet the demand of the global pharmaceutical industry for the production of drugs; or, to meet personal consumer demand, whether the consumers are registered or not,²² via certified pharmacies and on the basis of a daily maximum amount/dose.

Both processes – the production and the sale of retail cocaine – will be considered non-special procedures that should be regulated under national legal and tax frameworks, thereby becoming a source of government revenue.

The regimen of selling cocaine between countries will only be allowed for pharmaceutical uses and should be regulated in the same way that the legal pharmaceutical trade in cocaine and opium is handled today.

Precautions regarding the regulation of production

Barriers to entry

The constraints that are imposed on a participant in the coca leaf and cocaine markets should be designed so that they are not such strong barriers to entry that they encourage parallel markets. In that sense, the requirements for records, auctions, legally established laboratories and pharmacies, quality controls, tax payment and registered transaction volumes, among others, are socially desirable barriers to entry until such time that they force a trade off.

If the actors interested in participating in formal markets for coca leaf or cocaine production perceive that the demands imposed by government institutions are very expensive, for example, by creating incremental costs or significant reductions in benefits, they could lose their interest and seek ways to avoid or evade the legal obligations and formal channels of market participation.

²² This proposal does not enter into the discussion about the requirement (or not) for a consumer registry, which depends on the political will and the laws of each country.

Barriers can be so large that new market participants – legal laboratories, for example – could be encouraged to choose illegality by seeking to buy raw materials outside established markets by offering a more attractive price to coca growers that the auction system provides. Avoiding this *trade off* depends on ensuring that the auction price is as close as possible to the potential price (or cost) on the parallel market, so that the cost of illegality is greater than the legal benefit.

Put another way, the maximum cost of the barrier to entry should be set so the final price paid by the legal laboratory is equal to or slightly less than the price on a potential parallel market, according to the following model:

If,

$$CTmp = Pcoca + B$$

Then:

$$CTmp \le (1 + \alpha)Pcoca + P$$

If and only if,

Where:

CTmp = total cost of the raw material for the legal laboratory.

Pcoca = maximum price set by the auction.

B = cost of the barriers to entry for the local market as paid by buyers.

 α = factor of price increase in the parallel market price.

P = penalty costs for engaging in illegal activities.

Cg = government costs for monitoring and prosecution of illegal activity.

At the limit, B should be equal to 0 if the cost of control is equal to the penalty.

To the extent that the conditions indicated are met, laboratories participating in the auctions as buyers of raw materials, and industries that use the coca leaf for other products (such as pharmaceuticals, food, beverages, and personal hygiene products), should be duly established legal organizations for the production of cocaine and other derivatives.

Possible prevalence of illegal markets

The above supports the thesis that illegal markets arise from the imposition of prohibitions, restrictions and penalties in a context of an inelastic demand at a price that

finances unscrupulous and criminal activities not necessarily connected with actors in the first link of the production chain, i.e. the coca leaf growers.

One might ask then whether the illegality and criminality present in illegal markets are reduced or eliminated in a transparent and legal (but regulated) market. In principle one could answer affirmatively, but markets tend to be imperfect and the desired equilibrium points and all the positive effects identified in the previous paragraphs are not achieved automatically. In the proposed case based on Dutch auctions, for example, one can identify various potential failures and their consequences.

The prevalence of criminal actors connected with drug cartels can create a parallel demand for raw materials (coca leaf) and strongly encourage producers to sell their product in a different market than the auctions organized and administered by the state. The parallel market may do nothing more than offer a higher price – even a few pennies more – than the auction system.

The prevalence of these criminal groups and their practices can only be explained from the vantage point of end consumer demand for the drug. That is to say, if there are failures in end-user markets for cocaine, they encourage illegal activities by labs, dealers and coca growers, back along the supply chain to coca leaf production.

Faults in the final consumer market are manifested by excess demand: the drug supply is less than the demand, and the prices are unnecessarily high.

Herein lies the importance of a global drug policy that ensures the regulation of the production chain with the same criteria of transparency, legality and quality for each and every activity on the chain. This challenge can be resolved by avoiding unnecessary restrictions and redundant controls that significantly raise transaction costs and distort prices via very high taxes.

Transparency and information

Since the demand for drugs tends to be price inelastic, prohibitions imposed by governments only have a moderate effect on consumption. Therefore, it is very reasonable to assume that the volumes produced and consumed today are fairly close to those that one would see in a decriminalized market.

Prohibitionist policies can only hope for the correct operation of the restrictive measures imposed on the market, because it is not possible to know with certainty the volume of drug production and sales that is passing through illegal markets. The legal character of an overt public market will offer governments and specialized organizations more reliable statistical information.

Reducing the levels of lawlessness in the markets through lifting the prohibitions that exist today will make it possible to verify and statistically track crop areas and drug production amounts. Having that information offers a variety of advantages, including the ability to know the exact size of the problem (drug use is a public health problem); the ability to measure and monitor the economy of coca and cocaine; and making the stakeholders and their activities visible and transparent.

Restructuring the economy of the coca-cocaine supply chain

Upon regulating the coca-cocaine supply chain, a re-composition of its economy is expected and desirable, and would allow: 1) the redistribution of the current economic surpluses in the chain; and 2) the reallocation of public resources to related public policies.

Attracting new resources for the state

The regulation of coca cultivation and cocaine production opens a window of opportunity for generating revenue via royalties, regulatory fees, and direct and indirect taxes. The increase in information captured in a production process made more transparent though regulation will allow these taxes to be incorporated into the final consumer price, as well as at different points along the chain, without increasing or decreasing the final price of cocaine.

Fixing tax rates, royalties and regulatory fees should be subject of further analysis and differentiated by country. Nonetheless, they should be used to: 1) reduce income earned by organized crime; 2) fund national policies related to the cocacocaine chain; and 3) properly administer the inelasticity of demand, so as to not create incentives for the continued existence or growth of illegal markets.

Today, governments receive virtually no income derived from the coca-cocaine chain. If this proposal (see Table 2) were realized, the income could be used to finance or co-finance the implementation of harm reduction, prevention and public health treatment policies, as well as environmental mitigation and organized crime prosecution, among others.

Reallocation of resources

From the point of view of the reallocation of resources, one should think in terms of what purpose the strategy of intervention and state pubic spending will assign to the income gained from the regulation of the coca-cocaine chain. Table 3 presents some initial ideas.

Table 2. Tax collection opportunities in the coca-cocaine chain

OBJECTIVE	LINK IN SUPPLY CHAIN	FISCAL TOOL	IMPACT
Maximize resources earned by the state	Coca leaf cultivation	Royalties or taxes	New state resources
	Coca leaf commercialization (auctions)	Indirect taxes + Regulatory tax	New state resources
	Cocaine production	Direct taxes + Regulatory tax	New state resources
	Personal consumption	Indirect taxes	New state resources

Source: Prepared by the authors.

Table 3. Potential uses of new state resources

OBJECTIVE	LINK IN SUPPLY CHAIN	FISCAL TOOL		PURPOSE
Reallocate resources		Royalties or taxes	1	Programs for the preservation and recovery of farmland affected by coca cultivation.
	Coca leaf cultivation		2	Production systems that are certified, efficient, and resilient to the effects of climate change.
			3	Agricultural development funds.
	Coca leaf	Indirect taxes	1	Undetermined fiscal spending.
	commercialization	+ Regulatory tax	2	Market regulation.
		Direct taxes + Regulatory tax	1	Market regulation.
	Cocaine production		2	Harm reduction and public health programs.
			3	Undetermined fiscal spending.
	Consumption	Indirect taxes	1	Harm reduction and public health programs.
			2	Undetermined fiscal spending.

Source: Prepared by the authors.

GUARANTEES AND BENEFITS OF A REGULATED MARKET

Prohibition policies have created perverse incentives for the formation of illegal markets and the payment of enormous profits to organized crime organizations. Govern-

ments cannot regulate or correct market structures as they are now, which have to be accepted as market failures due to the inherent illegality established by the policy framework of the War on Drugs. Consequently, the paradigm shift should be geared to eliminate these distortions and regulate these market failures.

From the point of view of market analysis, this will only be possible through regulating the coca-cocaine chain, i.e. the cultivation of the coca leaf, its commercialization, cocaine production, and distribution to final consumers. In this context, regulation would guarantee certain conditions of price and product quality, as well as the capture of income by the state along the entire production chain.

It is expected then that policies different from the current ones, in terms of regulation of the coca-cocaine chain, will allow medium-term effects such as: 1) the development and restructuring of the involved actors; 2) the gradual reduction of organized crime; and 3) a new coca-cocaine supply chain economy that will offer a similar product volume (albeit one that is legal and known) and be regulated and monitored by the state.

THE ACTORS

Those linked to the first links in the production chain – i.e. coca growers – will undergo a restructuring owing to the considerable impact of the "incentives for legality" involved in the regulation of the chain. That is to say that the focus will move from the subject of the *cocalero* (coca grower) to the object *coca*, following new rules of certified production diversified by quality and cultivation characteristics.

The government organizations currently responsible for combating drugs will have to be reorganized to adapt to a new paradigm of regulation of the coca-cocaine production chain.

On the other hand, the regulation of the chain will bring new actors to the fore-front, including, 1) organizations responsible for coca leaf auctions in the commercialization stage; 2) certified laboratories responsible for the production of coca leaf derivatives, including cocaine; 3) certified pharmacies for individual cocaine sales; 4) an organization or organizations responsible for wholesale cocaine sales to the global pharmaceutical industry; and 5) governmental organizations required to meet the objectives of regulation.

ORGANIZED CRIME LINKED TO THE PRODUCTION, TRAFFICKING AND DISTRIBUTION OF COCAINE

The organized crime groups involved in drug smuggling and related illegal activities exist because of the previously analyzed incentives created by the prohibition of the cultivation, processing, trafficking and sale of drugs that have been declared illegal. As such, regulating these activities and making visible and accepted those involved in the chain (growers, producers, retailers, laboratories, pharmacies and consumers) will reduce existing incentives for these organizations and their criminal activities. One can therefore expect a reduction in their number or, in any case, in the volume of their activities, to economically and socially better levels.

This, of course, is an unwanted change for these organizations, and it is likely that they will redirect their widely diversified activities in order to maintain their present (very high) levels of income. It is also likely that in the short-term they will use all of their economic, social and political relationships to prevent or hinder the proposed paradigm shift.

A NEW COCA-COCAINE SUPPLY CHAIN ECONOMY

It is estimated that in 2010 about 230 million people, or 5% of the world's adult population, consumed an illegal drug at least once. In the case of cocaine, there are between 13.3 million and 19.7 million global consumers, who generate, according to estimates from the United Nations Office on Drugs and Crime (UNODC), about US\$85 billion (UNODC, 2012: 60).23

If the incentives of harm reduction that are expected under the new paradigm of regulation of the coca-cocaine chain – i.e. better quality and reduced victimization - have the desired effect, in conservative terms one might expect at least half of the

[&]quot;The economic dimension of international markets for opiates and cocaine is relatively well documented. According to UNODC estimates, the total retail cocaine market is worth about \$85 billion dollars, and the opiate market is about approximately \$68 billion (2009 figures). In 2003, the total illicit drug market value was estimated at \$320 billion, or 0.9% of world GDP. In light of the 2003 estimates, the largest markets - in terms of its value calculated on the basis of retail sales - were North America (44% of the total) and Europe (33%), followed by Asia, Oceania, Africa and South America. Although a new breakdown has not been made since that date, the partial data available indicate that the proportions may have declined in North America and increased in the other regions." (UNODC, 2012: 87). The text of this note is taken from the Spanish version of the World Drug Report (editor's note).

consumers to change their preference to "legality" in the retail purchase of cocaine. That is to say, if the coca-cocaine chain were to be regulated worldwide, one might expect the reorientation of at least half of the resources currently captured by organized crime, or some US\$40 billion a year, to government coffers in various countries.

CRITICAL ASPECTS OF REGULATION

For the proposed regulation to be successful, it is essential that it is open and transparent. As such, there must be consensus on the matter, so that the national and international regulatory agencies are independent of market participants as they define responsibilities and ensure transparency and equity.

The relations between actors along the production chain must also be transparent and oriented according to costs, and the taxes and limitations should be explicit. The new actors (legal laboratories responsible for processing coca into cocaine, for example) should have access to distribution and sales channels such as the auction system proposed for the production of coca leaf. In this new scenario, the agencies in charge should have the authority and capacity to regulate industry behavior.

Regulation always comes about in the face of an absent or failed market. Presumably, if the market worked without problems, there would be no better regulation than the market itself: it would determine quantities, assign prices, impose quality limits, and reward and expel those who take part in it. The state is expected, in turn, to guarantee order and safety, ensure that contracts will be enforced and, in some asymmetric markets, protect the consumer.

But to design good regulations for any type of market, and even more so for the drug market, is not a simple task. The regulations must be clear and prevent the deformation of these markets, facilitate the execution of transparent and lawful transactions, and promote investment that generates net social value. Their performance should be clear and stable, and the participants should be able to trust the rules and institutions. By regulating the activities and markets linked to cocaine, market forces cause international capital flows, so the state in its role as regulator should supervise them too.

It turns out, however, that regulation usually incorporates some unknowns and uncertainties, which make up what is known as "regulatory risk." Other risks include the politicization of decisions, cooptation by special interest groups, and bureaucratization, among others. Together, these risks can reach very significant levels, which can bias the transparent and regulated market being developed to eliminate incentives for illegal and criminal activities.

Regulation should ensure the rights and interests of the majority of market participants and not favor special interests. For a legally established laboratory to participate in a transparent manner and with faith in a market today stigmatized by crime and censured socially, it must have clear rules, clear investment guarantees, legal security and equal opportunities.

Despite regulators' good intentions and behavior, the task of configuring and reproducing markets can produce unintended negative effects. Regulation is always a delicate balance between freedom and the imposition of burdens and limitations, done in the name of defending the market while ensuring net social benefits. Regulation is like a precision machine that requires checks, cleanings and periodic changes, with the necessary adjustments made by a good regulator.

Nonetheless, the regulation of coca and cocaine should not only seek to reproduce the conditions or benefits that can be found in an ideal market without distortions, but also must provide other equally or more important guarantees, such as the legality and transparency of participants and transactions; and the quality of the auctioned and consumed product.

CONCLUSIONS AND RECOMMENDATIONS

Microeconomic analysis of the functioning of coca leaf markets in coca producing countries shows the structural differences between them and allows one to infer the need to work on drug policies that are differentiated by supply chain stage and national needs, and not according to a homogeneous and universal logic, as was done before.

A clear example of these differences is the first expected effect from eliminating price distortions at the coca leaf cultivation stage, being that with the advent of regulation one would expect increased prices for growers in Peru and Colombia and lower prices in Bolivia.

It is also possible to identify extensive unilateral experience in the regulation or deregulation of drug markets, the implementation of public health systems, and the decriminalization of possession and personal use of certain drugs. The successes and failures of these experiences should be systematized, being they serve as inputs that feed the policy process for a new paradigm to address issues arising from the production and consumption of drugs.

In this sense, it is necessary to evaluate and systematize the experiences of the Netherlands, Portugal, Spain, India, Turkey, Peru, Bolivia, Uruguay, Canada and the United States, which inspired some of the proposals in this chapter. These experiences have served as the basis for the development of the new paradigm presented in these pages.

Analysis has permitted us to see that to devise a new paradigm one must redefine the problems associated with drugs and put aside the policies that have been predominant for decades. These have focused on reducing production and consumption and, as the Latin American experience has shown, have very high human, social and environmental costs, and involve inherent incentives to violence. It makes more sense, as we have seen, to fix the market distortions created by the prohibitionist policies and focus interventions on harm reduction, via less harmful drugs and reduced consumer victimization (problems today caused by the illegality of drug purchasing). Income generated by the coca-cocaine chain should be redistributed so that the state can capture most of that income, taking care in the process not to exhaust the tax collection effects as illustrated by the Laffer curve.²⁴ Finally, public spending strategies should be formulated to be appropriate and consistent with the problems associated with drugs.

Another conclusion allows us to perceive the positive results of regulation in terms of the transparency associated with its implementation, i.e. the currently non-existent ability to clearly identify the actors involved in the chain, as well as information on the actual costs associated with the entire chain that processes coca into cocaine and other derivatives.

One can also infer the possibility that organized crime organizations and their activities will tend to shrink toward economically and socially optimal levels. However, it is necessary to bear in mind that, as highly diversified criminal business organizations, in the short term they will try to maintain their income levels through other illicit activities to which they are linked. That is to say, regulating the cocacocaine chain could generate problems in other crimes such as human trafficking, arms trafficking and so on.

A sixth closing impression is that it is essential to continue promoting and expanding an international debate that makes it possible to analyze and publicly discuss alternatives to the current policy. Consequently, the proposed guidelines are not meant to be perfect and must be deepened, taking into account, however, that much of what we have proposed has been implemented unilaterally in one way or another in various countries.

²⁴ The Laffer curve represents the relationship between tax revenues and tax rates, showing how tax revenue varies by changing tax rates. It shows that increasing tax rates does not always mean an increase in tax revenue. Its main feature is that it shows that if a tax rate is raised when it is already high enough, tax income may end up decreasing.

We conclude by reiterating that regulation is not perfect and that the implementation of new drug policies aimed at market regulation demands, as a necessary condition, the participation of all actors involved in the supply chain. Otherwise, it will generate asymmetries and incentives for the development of illegal markets and the prevalence of organized crime. In this sense, as regulation provides transparency, possible negative effects could clearly be associated with consumer markets that do not participate in a transparent way with the regulations. From their spot at the final link in the chain, they could transmit distortions back up the chain that allow for the growth of illegal markets and the transfer of income to organized crime. In this sense, partial or unilateral implementation of public policies in certain countries may appear to be progress, but it is necessary to note that the outcomes and impacts seen will be much smaller and, in some cases, impossible to achieve.

Finally, if we had to reduce what is happening today in the world's coca-cocaine chain to a simple equation, it could be the following:

$$McD(P) = QP + QC + QD(CD + VC) + QRCO$$

Where:

McD(P): World with drugs under a prohibitionist model.

QP: Current amount of drug production.

QC: Current number of drug users, both problematic and non-problematic.

QD: Current harm level.

CD: Quality level of drugs available for users in the street (via dealers).

VC: Victimization of consumers/violence associated with buying drugs in the street.

QRCO: Current amount of resources derived from the drug supply chain that goes to organized crime.

The proposed regulation of the coca-cocaine chain aims to achieve the following results in the equation:

$$McD(R) = \overline{QP} + \overline{QC} + \overline{\sqrt{QD}} (\uparrow CD + \overline{\sqrt{VC}}) + \overline{QR} (\downarrow CO + \uparrow GOB)$$

Where:

McD(R): World with regulated drugs.

QP: We assume that drug production will remain constant, as there will be no intervention in this stage.

QC: We assume that the number of drug users will remain constant, as there will be no intervention in this stage.

- QD: We assume a reduction of damage because of a) an increase in the quality of cocaine (CD) due to its controlled production in laboratories; and b) less victimization of consumers (VC), who now can access their drugs in the pharmacy system.
- QR: We assume that the resources generated by the coca-cocaine chain do not change; however, they are redistributed in terms of their destination, reducing the amount captured by organized crime (OC) and increasing the income of resources to the states (GOB).

If one must choose between the two realities, it is preferable to start implementing the regulation of the drug supply chain than to maintain unchanged the costly failure of the War on Drugs so that, at the very least, the errors of the current prohibitionist model will not continue to be counted in terms of human lives.

REFERENCES

- Campero, J.C. 2011. "Crimen organizado (vinculado al narcotráfico) en Bolivia". In Catalina Niño (ed.). *Crimen organizado y gobernanza en la región andina: cooperar o fracasar*. Ildis, Programa de Cooperación en Seguridad Regional. Quito.
- HARDINGHAUS, N. 1989. "Droga y crecimiento económico: el narcotráfico en las cuentas nacionales". *Nueva Sociedad*, 102.
- HIDALGO, E. 2004. "Análisis: pureza de la cocaína en España". Cáñamo: La Revista de la Cultura del Cannabis, 83.
- KLEIMAN, M., CAULKINS, J. AND HAWKEN, A. 2011. *Drugs and Drug Policy: What Everyone Needs to Know.* Oxford University Press. New York.
- LOAYZA, N. AND SUGAWARA, N. 2012. Would liberalization lead to epidemic cocaine consumption? World Bank. Washington.
- Maris, C.W. 1999. "The Disasters of War: American Repression versus Dutch Tolerance in Drug Policy". *Journal of Drug Issues*, 29 (3).
- Trasnational Institute. 2003. "Coca, cocaína y las convenciones internacionales". Informe sobre política de drogas del TNI. No. 5, April. Available at: http://www.tni.org/archives/brief5s.pdf>
- UNODC. 2012. World Drug Report. United Nations. New York.
- . 2012a. *Perú. Monitoreo de cultivos de coca 2011*. UNODC-Comisión Nacional para el Desarrollo y Vida sin Drogas (DEVIDA). Vienna.
- ———. 2012b. Colombia. Monitoreos de cultivos de coca. UNODC. Bogotá.

- ---. 2011. Estado Plurinacional de Bolivia. Monitoreos de cultivos de coca 2010. UNODC. Vienna.
- —. 2009. World Drug Report. United Nations. New York.
- VICKREY, W. 1961. "Counterspeculation, Auctions, and Competitive Sealed Tenders". Journal of Finance, 16 (1).

Annex Bolivia Case Study

NATIONAL LEGAL FRAMEWORK

STATE CONSTITUTION

In Bolivia, the rules on coca leaf production begin in the state Constitution itself (CPE, 2009), which in Article 384 states:

The state protects the native and ancestral coca as cultural patrimony, a renewable natural resource for biodiversity in Bolivia and a tool for social cohesion; in its natural state, it is not a narcotic. The revaluation, production, commercialization and industrialization shall be regulated by law.

REGULATORY SCHEME FOR COCA AND CONTROLLED SUBSTANCES

The spirit expressed in the Constitution is consistent with the provisions of Articles 1 to 4 of Law No. 1008 of 1988 (coca and controlled substances regimen), which considers coca a "natural product" (Article 1); whose cultivation is "an agricultural-cultural activity traditionally oriented towards lawful consumption, medical use and rituals of the Andean peoples" (Article 2); establishes differences between "coca in its natural state, which produces no harmful effects to human health," and that which is used to produce cocaine, which itself has harmful effects on health and, "is used criminally" (Article 3); and determines that coca's "consumption and fair use" is intended for "social and cultural practices (...) under traditional forms (...) [and] medicinal and ritual uses" (Article 4).

In both bodies of law, the cultural and social values associated with the production and consumption of legal coca leaf are clearly present; this is a legacy of government of President Evo Morales (2006-2009, 2009 -), who is also a coca farmer and president of the six federations of coca growers of Cochabamba. This explains why the 2009 Constitution, issued during his first presidency, addresses its revaluation, production, commercialization and industrialization.

In the same vein – but without the political baggage of the CPE – Article 5 of Law 1008 defines the possibility of other forms of legal use of the coca leaf apart from social, cultural or ritual uses, with the understanding that they should not be

harmful to one's health nor cause drug or substance abuse; in other words, it opens the possibility of industrialization for legal uses.

Nonetheless, Article 6 establishes the difference between necessary production, "which covers the demand for use and consumption," and excess production: "That which exceeds those needs." Article 9 defines the traditional production area, the activities that can be undertaken, and the limits of both. Article 10, meanwhile, does the same with excess production, and establishes plans for reducing, replacing and developing it. That is to say, on the basis of certain population and geographical parameters, the Law identifies three production areas (Article 8) and a maximum number of hectares (12,000, Article 29) that can meet the demand for legal consumption of coca leaf in all its forms.

Article 12 discusses the producer of coca leaf and the characteristics he must have and prohibits the cultivation on land that is leased or belongs to a third party.

Article 17 defines the regulatory authorities in the land registry; 18 discusses means of reducing coca crops by methods that do not conflict with the environment; and 19 invests in the executive branch the knowledge of "origin and destination of the production" and the responsibility to "define the routes and means of transport for the transfer [of coca] to the legal markets of consumption" and to oversee the system of controls. Article 20 deposits in the hands of the executive the determination of the "characteristics and operational procedures for the legal market...the marketing systems, wholesale and retail, that ensure legitimate destinations for the production."

In Chapter III, Articles 21-31 define the alternative development scheme and the replacement of coca crops. Articles 35-44 of the same Chapter regulate the production, marketing and use of controlled substances, as well as the obligations of those involved in it. They also address the "ban on possession or storage" (35); importation and commercialization (36); trafficking and consumption (37); authorization to import (38); manufacturing, processing and sale (39); import and export reports (40); obligations for carriers (41); supply registries (42); currency and letters of credit (43); and, finally, the regulation of domestic production of precursors.

^{1 &}quot;A small legal coca producer is defined as a farmer in the zones a) and b) of Article 8, who personally works and produces on a plot of his own, who works at the level of subsistence, and who, among his defining characteristics, receives the main part of his income from coca" (Article 12).

Law 1008 of 1988 further establishes the criminal and penal regimen linked to crimes and offenses and their respective penalties. In terms of the object of our analysis, Article 48 speaks about trafficking and sanctions, and 49 defines the decriminalization of personal consumption in small quantities.

REGULATION OF THE LAW OF COCA AND CONTROLLED SUBSTANCES

Supreme Decree 22099 of 28 December 1988 regulating Law 1008 (the coca and controlled substances act) specifies the public organizations that have responsibility for the stages of production, circulation and sale of coca leaf, as well as for the development of alternative and substitute crops. Similarly, it defines the prohibitions and controls for the import, export, distribution and marketing of controlled substances, as well as offenses and penalties and the responsibilities of the courts and police.

REGULATION OF THE CIRCULATION AND COMMERCIALIZATION OF COCA LEAF IN ITS NATURAL STATE

Ministerial Resolution 112 of June 16, 2006 regulates the procedure and actors involved in the circulation of coca leaf from the production centers to the legal markets, as well as the process of marketing and circulation to its final destination.

As we have noted, in Bolivia there is a legal framework that regulates the production of coca leaf; still, it is a work in progress. Consequently, there should be no procedural or administrative obstacles to making public policy more effective and technologically advanced, unless there is a lack of political will.

THE COCA-COCAINE SUPPLY CHAIN IN BOLIVIA

The production process which begins with the cultivation of coca leaf and continues through its transformation into cocaine – a drug, like marijuana, that has been declared illegal by the international community – is complex and reflects the characteristics of the legal framework that regulates it, as well as the political culture and the degree of institutional strength of the territory in which it is carried out. In the case of this production process in Bolivia, Figure 1 shows the links present in the coca-cocaine production chain.

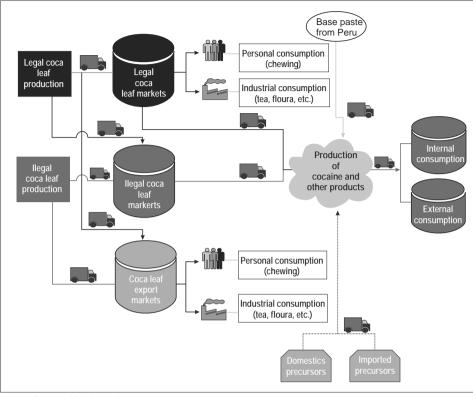


Figure 1. Links in the coca-cocaine production chain

Source: Prepared by the authors.

COCA LEAF PRODUCTION

The process begins with the planting of coca bushes, a regulated activity in terms of the land area where it is permitted² (a supply constraint of the type identified in Figure 5). In Bolivia, there are two types of production: legal, which follows and is defined by legal norms; and illegal, which is found outside the territorial limits established by law.

Coca leaf producers are accredited by their unions and registered in an official government database.

² According to Law 1008, 12,000 hectares are permitted. Nonetheless, since 2007 and by supreme decree (a standard that falls under the mentioned law), the central government increased this area to 20,000 hectares. In 2011, United Nations reports found a production area of over 31,000 hectares.

TRANSPORTATION OF COCA LEAF TO MARKET

The transport of coca leaf is the responsibility of the producers, who must be licensed to carry out such activity in accordance with Ministerial Resolution 112 of 2006, which regulates the circulation and marketing of coca leaf in its natural state.

The legislation establishes the existence of two legal markets for the sale of coca leaf to wholesalers and retailers, one in the city of La Paz and one in Cochabamba. The Dirección General de la Hoja de Coca e Industrialización (General Directorate of Coca Leaf and Industrialization, or DIGCOIN) establishes routes to markets and controls the amount transported from the point of production to the legal market, based on statements from the producers and verification in the destination market.

However, according to the United Nations Office on Drugs and Crime (UNODC)³, about 70% of the production is diverted and sold directly to the illegal market for drug production and exportation – legal and illegal – principally to Argentina, which is considered the world's largest market for its traditional use (chewing).

COMMERCIALIZATION OF COCA LEAF

Retail markets

By rule (Article 4 of paragraph II of Ministerial Resolution 112), the commercialization of coca leaf in its natural state must be done by producers in the legal markets established for this purpose.

Leaf buyers, as legally established organizations and institutions, must apply to the legal markets for the amount required for their legal consumption via a request or contract. Industrial companies (pharmaceutical and other similar entities), as well as legally established exporters, request an administrative resolution from DIGCOIN authorizing the purchase of coca leaf on the legal market for the volume required for their activity.

DIGCOIN also oversees transportation from the legal markets to the end retail outlets, and is responsible for final verification of the cargo delivered. In case there is no checkpoint at the place of final sale, the producer/seller must verify the cargo to the relevant formal (mayor/police) or informal (union/community) authorities, and get a verification seal.

³ Página 7. 2011. De 31.000 ha de coca, 20 mil se desvían al narcotráfico. http://www.paginasiete. bo/2011-11-08/Nacional/Destacados/8Seg00208-11-11-P720111108MAR.aspx. La Razón. 2011. El 93,5% de coca del chapare no pasa por el mercado legal. http://www2.la-razon.com/version.php? ArticleId=137489&EditionId=2652.

Bartering and personal consumption

Ministerial Resolution 112 of 2006 allows producers to use from 1 to 150 pounds of coca leaf in its natural state for purposes of barter inside the national borders, at fairs or through direct exchange with peasant producers, artisans and other legal consumers. Direct sales for personal use in quantities of 1 to 15 pounds is exempt from authorization.

Permitted legal uses of coca leaf

Buyers of coca leaf in its natural state must prove one of the following legal uses: 1) acullico (coca leaf chewing) and other traditional uses; 2) ritual and religious uses, 3) medicinal and food uses; 4) therapeutic uses; 5) export subject to regulation; 6) raw material for industrialization, processing and marketing, in accordance with special regulations; and 7) raw material for pharmaceutical and other accredited industries, in accordance with standards, studies and investigations.

PRODUCTION OF DRUGS FROM COCA LEAF⁴

The foremost illicit destination of coca leaf in its natural state is the production of base paste; the second, cocaine made with Bolivian and Peruvian base paste. This illicit transformation of coca leaf into cocaine involves the incorporation of chemicals (precursors), imported or of Bolivian origin, that are also subject to regulation and audit.

Supreme decree 22099 of 28 December 1988 and 25846 of 14 July 2000 establish the regulatory procedures for legal organizations or individuals who produce, import, export and market chemicals (precursors) used in the production of drugs based on coca leaf.

The last Bolivia link in this activity is the transportation of drugs for both domestic consumption and for export over Bolivia's borders with Argentina, Brazil, Chile, Paraguay and Peru, both for consumption in those countries and for re-export to markets in Europe, Africa and Asia.⁵

For a more detailed version of the structure of organized crime linked to the production of cocaine in Bolivia, see Campero, 2011.

Although there are press releases that speak of the transportation of cocaine from Bolivia to supply Colombian cartels and subsequent traffic to the US market, there is no evidence that this is so.

PROPOSED REGULATION OF THE COCA LEAF PRODUCTION STAGE

PRODUCTION

We propose the promotion of competition in the market for coca leaf production through the use of technologies that allow for the regulation of its commercialization.

Some of the expected results are:

- An initial increase in production through the incorporation of a greater number of economic agents in the cultivation of the coca leaf.
- The break up of the oligopoly of production in the hands of coca grower unions.
- Market segmentation of coca leaf based on quality and productivity.
- ♦ The segmentation and reduction of prices in the medium term.
- ♦ An increase in state revenue.
- Controlled and transparent commercialization.

Initial aspects

The trend of the last two and half decades suggests that until 2006 there was an inverse relationship between the number of hectares cultivated and the price of coca leaf. This means that a greater number of hectares produced more coca supply and therefore lower prices, and vice versa. Starting that year, there was an oligopolistic failure in the market (see Figure 2).

The value of coca leaf production has also grown steadily in the past eight years, rising in 2010 to a value of over US\$310 million, according to official statistics⁶ based on legal market prices (see Figure 3).

By dividing this value by the number of coca leaf producers, 72,700 in 2010, each producer received an annual income of US\$4,264. In other words, 137% more than the mean per capita income that year in Bolivia, which was US\$1,800.

⁶ Because the coca-cocaine supply chain is an underground (illegal) activity, the values and the statistics that are gathered for the national accounts are undercounted. Consequently, some authors identify the need for multipliers depending on the degree of informality in the economy to be studied, especially for those variables that determine the amounts of income that illicit activities generate. In the case of Bolivia, with levels of informality in its economy greater than 65%, it is estimated that, to determine the revenue generated by the coca-cocaine supply chain, multipliers of up to 5x could be used. See, for example, Hardinghaus, 1989.

Finally, it should be noted that for a decade the productivity of coca crops has been increasing, due to the incorporation of modern irrigation technologies (spray)⁷ and the use of chemical fertilizers, both legal and illegal, like urea,⁸ ammonia and others (see Figure 4).

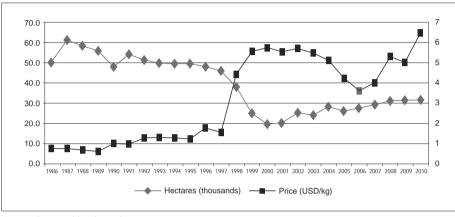


Figure 2. Production and price of coca leaf, 1986-2010

Source: Prepared by the authors.

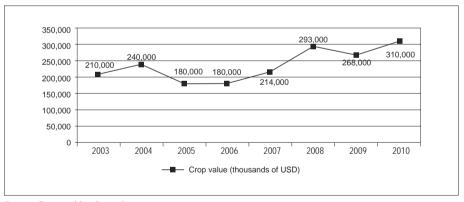


Figure 3. Production value of coca leaf, 2003-2010 (thousands of USD)

Source: Prepared by the authors.

⁷ Sprinkler irrigation is an irrigation method in which water reaches the plants in the form of localized "rain." http://en.wikipedia.org/wiki/Irrigation#Sprinkler

⁸ Urea as a fertilizer has the advantage of providing a high nitrogen content, which is essential in the metabolism of the plant as it relates directly to the amount of stems and leaves, which absorb light for photosynthesis. http://es.wikipedia.org/wiki/Urea

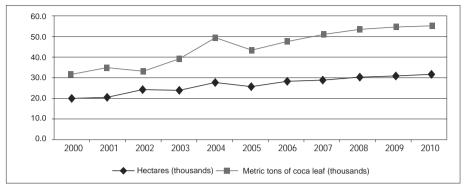


Figure 4. Area and production of coca leaf, 2000-2010

Source: Prepared by the authors.

Promoting competition in production

The elimination of the oligopoly of coca leaf production may be accompanied by some restrictions (regulations) in terms of geography, land use and environmental sustainability; similarly, other regulations would include registration of the activity and its practitioners.

Geographical restrictions

The ability to plant coca leaves would be open to all climatically suitable areas of the country, except for: 1) national parks; 2) forest reserves; 3) protected areas; and 4) urban areas with, for example, more than 50,000 or 100,000 inhabitants.

Land use restrictions

Coca leaf shall be grown in accordance with municipal plans for land use, i.e. in areas suitable for agricultural production.

Environmental restrictions

Coca should not be grown following the traditional model of monoculture, because this practice depletes the soil and leads to the expansion of the agricultural frontier through indiscriminate logging.

Consequently, it should use an agricultural planning process that allows for crop rotation, blended crops or other agricultural practices that not only reduce the impact on the soil, but also reduce the effects of wind and water erosion.

Registration of producers and production areas

The registry of coca leaf producers should not be handled by the producers themselves, as this creates a moral hazard⁹ (principal-agent) in which they are simultaneously the judge and the judged.

It is necessary to modify this mechanism by establishing, at the very least, biometric registration of the growers¹⁰ and geo-referenced identification of the production area to facilitate satellite monitoring.

Note that according to the current Bolivian law, producing coca leaf is not illegal, so there are incentives for producers to register and identify their plots. In fact, rural land registry in Bolivia started in the municipal government of Cochabamba, where coca leaf production is the main economic activity.

Tax measures

A *cato*¹¹ of coca production is informally considered to be the maximum allowable amount of land per family for the development of this activity in the zone of Cochabamba, and is subject to social control by the coca unions.

This land measurement can be used as a basis for determining the taxable base for a coca leaf production tax or an annual royalty for each *cato*.

A simple calculation allows one to identify the tax collection potential of a 1% levy on coca leaf production, which would lead to tax revenues that could exceed

⁹ A very simple definition of moral hazard is: "A problem that arises when a person, called the agent, performs a task on behalf of another, called the principal. If the principal cannot perfectly control the agent's conduct, the agent tends to work less than the principal considers desirable. Moral hazard is the tendency – the risk – that the agent may show improper or immoral behavior, and this risk increases when the control mechanisms do not exist or are weak." http://universidadbastiat. blogspot.com/2011/02/riesgo-moral-el-problema-agente.html

¹⁰ This type of registration has been extended to nearly all state services related to the pension system, human resource records, electoral processes, and the issuance of identity cards and driving licenses, among others. Consequently, its operation does not involve the incorporation of technology that is new or unknown to the country.

¹¹ A *cato* refers to a surface area of 1600 m2, the equivalent to a 40 x 40 plot. The agreement between President Evo Morales and the six federations of the Tropic of Cochabamba (of which, as noted, he is also chairman) establishes the *cato* as the maximum area per family so as to prevent indiscriminate growth of the production area. http://www.opinion.com.bo/opinion/articulos/2012/0709/noticias.php?id=63080

US\$3 million annually based on the current number of producers and amount of production. The calculation was done as follows:

- ♦ Producers: 72.700.
- ♦ Current hectares: 31,000.
- ♦ Current *catos*: 19,375, the result of dividing the total number of hectares in production by 1,600 m².
- ♦ Number of *catos* subject to taxation: 19,375.
- Production (2010): 55,800 metric tons. This is the result of multiplying the number of hectares by the average production for 2010 (1.8 tons/ha).
- ♦ Yield per *cato*: 2.88 metric tons. This is the result of dividing the total production by the number of *catos*.
- ♦ Price (USD/kg) of coca leaf: \$6.40.
- Value of production (in USD) subject to taxation: \$357 million. This is the result of multiplying the production by the average 2010 price.
- ♦ Tax collected in USD: \$3.57 million. This is the result of multiplying the production value by the tax rate (1%).¹²

CIRCULATION AND COMMERCIALIZATION

The circulation and commercialization of coca leaf in Bolivia could be organized according to the following proposals.

Harvest

The production potential of each *cato* is calculated based on historical productivity data for the production of coca leaf in each geographical area. This potential amount should be verified periodically (each year, for example) against the production recorded when producers sell in legal markets. Differences will be regulated on the basis of a reference band calculated based on the following permitted factors:

¹² United Nations crop monitoring in Bolivia determined that in 2011 the value of coca leaf production was US\$310 million, an amount that would imply a tax collection of US\$3.1 million if it were taxed at the rate used as an example for this calculation (1%).

- An amount equal to 5% of production for barter and sale to retailers for personal consumption.
- ♦ An amount equal to 5% of natural downward variation in production.

Transportation

In accordance with the provisions of current legislation, producers will be responsible for moving production to established legal markets. They will be able to move production in personal or leased vehicles that have a satellite tracking system authorized by the regulatory agency, thereby allowing routes, transit times and stops to be recorded and monitored in real time. This system will reduce discretion in the transport of coca leaf production and help to identify deviations of production to illegal markets.

Commercialization

Consistent with the overall proposal of the regulation model for the coca-cocaine chain, in terms of commercialization the following steps should be taken to geographically define legal markets and the buyers' registry.

Legal markets

- Establish the hectares and production volume for coca leaf by geographical area in order to determine the current geographical distribution of these markets.
- Set up legal coca leaf markets based on:
 - Either direct public administration or administration via contracts set in a bidding process.¹⁴
 - The reception of cargo identified by type of registered producer.

¹³ This type of system is being used by insurance companies to monitor, control and recover luxury vehicles, as well as by the national oil company (YPFB) to monitor and control vehicles transporting oil and natural gas derivatives (in order to minimize smuggling). It is also used by the Transportation Regulatory Authority to control the speeds of interstate buses. Access to the equipment is cheap – less than \$150 – and installation is subsidized and incorporated into the purchase price of the equipment.

¹⁴ It will be necessary to define whether the administration of legal markets for coca leaf is under municipal, provincial or national jurisdiction.

- The determination of the weight and load characteristics of the cargo received: for example, quality, humidity, geographic origin, variety, etc.
- Segmentation, storage and preparation for sale.
- ♦ The carrying out of periodic auctions (daily or weekly).

Buyers

As with the coca leaf producer registry, there must be a biometric registry of raw material buyers, which will include their industrial or commercial status; legal and geographical address; and monthly/yearly potential demand. Cross tabulations will be made to identify those who are also controlled chemical substance buyers.

As was noted during the microeconomic analysis of the supply chain, there will be no *ex post* verification processes of the use of the coca leaf acquired by buyers, with the aim of not creating incentives for the maintenance and growth of illegal coca leaf markets. Moreover, if organized crime organizations buy their raw material in legal markets, it meets the objective of redirecting resources to the government.

A contributing factor that will invigorate the implementation of the proposed measures is United Nations approval of the Bolivian application to decriminalize traditional uses of coca leaf inside its territory. To this one can add the efforts of the government of President Morales to get the countries of ALBA (the Bolivarian Alliance for the Peoples of Our America) to approve the export of coca leaf and its derivatives. The latter effort assumes that, if the restrictions on market opportunities within and outside the country were eliminated, demand in regional markets for coca leaf and processed products could grow significantly in the short term. Similarly, it would also legalize coca leaf exports, mainly to the Argentine market, ¹⁵ which today is largely done illegally.

PROPOSALS TO REGULATE THE PRODUCTION AND COMMERCIALIZATION OF CHEMICAL PRECURSORS

The production and commercialization of substances for the manufacture of drugs from coca leaves should include measures similar to those designed for the production and marketing of coca leaf. For example:

¹⁵ Northern Argentina is the world's largest market for personal consumption of coca leaf in traditional uses, mainly by chewing.

PRODUCTION

The regulations should also include biometric registration of producers and importers, their monthly and annual production, and their monthly and annual import volumes.

Transportation

Domestic transportation of imported and domestic chemicals shall be tracked by satellite.

COMMERCIALIZATION

There shall be biometric registration of buyers, including information on their industrial or commercial status, legal and geographic address, and monthly/yearly demand potential. Cross tabulations will be made to identify precursor buyers who also buy coca leaf.

REGULATORY PROPOSALS FOR COCAINE PRODUCTION

As seen in our microeconomic analysis of the coca-cocaine chain, regulated production of this drug can only function to its full potential if all actors in the chain – governmental, private and others, from the production of coca leaf to cocaine retail in consumer end markets – accept a new far-reaching international public policy and participate in the process of coordinated regulation.

Experiences such as that of Peru with its Empresa Nacional de la Coca (National Coca Company) offer unilateral policy options that can be followed.

INDUSTRIAL PRODUCTION

Bolivia could move forward with the creation of a public, private or mixed business oriented toward the transparent industrialization of coca leaf, taking advantage of the possible legalization of its current uses. As such, it could also take advantage of market opportunities for a new trade policy in the short and medium term. And by imitating Peru (see Footnote 8), it could enter the pharmaceutical market, which needs more than a ton of high quality cocaine annually for the manufacture of drugs and other derivatives.

PRODUCTION FOR PERSONAL USE

Today, Bolivian law does not punish personal cocaine use with imprisonment. In this sense, it might be feasible to contemplate a harm reduction and public health policy that allows for the reduction of criminality associated with use, and protects the health of problematic and non-problematic consumers by controlling drug quality and supports programs for the addiction treatment of problem users who want help.

The government could establish a chain of pharmacy-style cocaine outlets – public, private or mixed – that would:

- Reduce the criminalization of users.
- Include public health policies with voluntary medical detention measures for rehabilitative treatment.
- Reduce harmful health effects by removing chemicals and other substances added to personal use doses by illegal vendors during the "cut" (see footnote 16). That is, improve the oversight of the quality of drugs sold.
- Use direct or indirect taxes to generate public resources that should be used to finance public health policies.

Finally, access to cocaine for personal consumption should be regulated by a system that:

- Includes a biometric registration system for social, regular and addicted users. 16
- Packages the product in personal doses in such way that they are clearly identifiable for police inspection and other uses.
- Establishes a maximum annual production based on a conservative estimate of consumption.

¹⁶ Addiction can be understood as: "Drug use that develops into a bad habit, which results in a pattern of behavior that is difficult to break even when the person is fully aware that his behavior is a problem." Clinically it is referred to as, "a disorder of dependence or substance abuse or addiction." The proportion of consumers who develop an addiction varies depending on the type of drug used: for example, 10% for marijuana, about 30% for those who snort cocaine or inject heroin, and between 15% and 25% for alcohol consumption. Finally, there are social considerations that dictate that there are more or less chances for developing an addiction to a certain drug; alcohol is the the most socially accepted, and hence there is more repeated use of it than of cocaine and other drugs. See Kleiman, Caulkings and Hawken, 2011.

Because cocaine is not a "socially trained" drug, as in the case of marijuana, there are still social punishment considerations regarding its use; consequently, and on the basis of empirical evidence analyzed above (Loayza and Sugawara, 2012),17 decriminalization is not expected to substantially increase demand and consumption.

¹⁷ Furthermore, remember that cocaine demand is price inelastic, meaning that price changes do not significantly alter the quantity demanded.

Towards a Model for Regulating Drug Supply

Ricardo Vargas Meza

INTRODUCTION

This paper outlines a general framework for a drugs policy with a more flexible approach to prohibition, contrasting it with the known effects of the current criminalization of both users and producers. Furthermore, it provides an overview of the trade in cocaine and other naturally occurring substances in the markets of the United States and Western Europe, and the geopolitical implications of this trade. It goes on to examine the current regulatory models as structures from which the lessons learnt must be put to good effect, and questions the efficacy of these models in confronting the forbidden world of illegal psychoactive drugs. It then analyses what is currently known about the effects of the consumption of coca, cocaine and their derivatives — an analysis complicated by the lack of research on both these known effects and the potential alternatives to them. Next, it offers an overview of cannabis regulation, a policy formulated in countries like Holland, Portugal and Spain, and in some cities.

Finally, and in relation to drug trafficking, this paper offers some conceptual reflections in support of the proposal to regulate cocaine, on the basis that rigorous regulation of supply and demand tends to stifle the competitiveness of illegal drug-trafficking organizations, thereby contributing to the elimination of a link in the supply chain that is most problematic in political and macro-social terms. One of the most positive effects of any interstate arrangements for drug distribution would be the disappearance of the role played by "transit countries." The vast resources currently deployed to control the illegal movement of drugs by sea, air, land or river could instead be used to strengthen relevant institutions, underpinning public policies related to regulation and both bringing to light and addressing the negative effects of drug consumption on health and society, phenomena closely associated with the prohibition model.

WHAT IS THE PURPOSE OF A POLICY TO REGULATE THE SUPPLY OF DRUGS?

Our argument is founded on the premise that the purpose of drug regulation is neither to eliminate harmful consumption of, nor dependency on, psychoactive substances. We must accept too that prohibition does not guarantee a "world free of drugs" and that regulatory models, for their part, will not usher in a world free from the harm caused by these substances. Regulation and legal control of the illegal drug market can only reduce or eliminate the harm caused or exacerbated by prohibition – that is to say, by prohibitionist policies – and by the illicit nature of the markets (Rolles, 2012: 11).

In line with the available scientific knowledge, it is necessary to accept the principle that the consumption of all kinds of psychoactive substances, and the problems generated by dependency, arise from similar causes, with a vast range of influencing factors of a social, cultural, psychological, medical, legal, political and economic nature. The extent to which policy can influence these factors, including consumption itself, is limited.

Regulation, is this sense, is not the *alternative* to prohibition but part of a much broader process that must include other policies and actions, such as public health education, prevention and treatment, in addition to complementary policies with a socioeconomic dimension to attack poverty and social exclusion, to guarantee human rights and to reduce wealth inequality. Of crucial importance are the ways in which these policies impact on problem drug use and the violence and insecurity that accompanies the markets for these substances (Rolles, 2012: 12).

Another important factor is how society views the cultivation, trade and consumption of drugs, as well as how it perceives each substance individually – perceptions that are ultimately reflected in the legal status of each drug. The distinction between legal and illegal drugs is not one founded purely on objective criteria – such as addictiveness, for example. From a scientific perspective there is no rationale for considering illegal drugs in isolation. It is better, rather, to consider the consumption of illegal drugs as one aspect of the overall problem of dependency. (Office Fédéral de la Santé Publique, 2006: 29).

It is also important to note that regulation does not seek to eliminate all illegal markets and the problems associated with them. Black markets exist for almost all kinds of goods, including legal psychoactive substances such as alcohol, tobacco and prescription pharmaceuticals.

The following section contains brief descriptions of the three current models used to confront the issue of psychoactive drugs.¹

PROHIBITION/CRIMINALIZATION

This model is centered on the prohibition and criminalization of the cultivation, production, supply, possession and non-medical use of drugs, through punitive measures and usually in accordance with United Nations conventions. Penalties vary in both severity and intensity of application, and are often related to the volume of drugs involved. While possession may be decriminalized within the prohibitionist framework, production and distribution are treated altogether differently. According to Transform Drugs Policy Foundation,

. . . while exploration of these less punitive approaches to personal possession and use is allowed within the international legal framework, no form of legal production and supply of any drug prohibited under the conventions, or domestic law, can be explored for non-medical use in any way (Rolles, 2012: 20).

"The medical prescription model is the only real quasi-exception to this rigid rule." But it exists as a kind of special enclave, governed by its own exceptional rules. No flexibility exists outside of this niche to develop pilot programs or to test, investigate or explore any regulatory model of production and supply.

Under this model it can be seen, therefore, that prohibitionist policies are strictly applied to certain products, namely cocaine, heroin and (with qualifications) cannabis. The last of these is treated as a special case by some governments, such as the Spanish, whose medical laws authorize the use of cannabis in certain circumstances, allowing for the existence of a medical research project. Furthermore, under 1977's decree 2824, THC (tetrahydrocarbocannabinol) can be dispensed by pharmacies to people with a medical prescription (see Muñoz and Soto, 2001: 43).

Under the prohibition framework, the market is essentially controlled by illegal businesses, almost always operating in connivance with security forces and corrupt officials.

This is general summary of the three current models used to build policy frameworks relating to psychoactive substances. The development of a new model – the purpose of this paper – will be addressed later, based on a differentiated analysis of coca/cocaine and cannabis.

REGULATED MARKETS

Under this model, controls are set to regulate production and trade, as well as the product itself, supply managers and consumers. Some drugs and preparations continue to be prohibited. This mode of regulation is currently applied to prescription drugs, over-the-counter drugs, alcohol and tobacco. Market control is usually moderate to intense and is administered by government agencies at both the local and national level.

LEGALIZATION ON THE OPEN MARKET, AKA THE "SUPERMARKET MODEL"

In this category we find legal drugs that are available without restriction on the open market. Currently, these include products such as energy drinks. The market is controlled by private enterprises, with minimal regulation on the part of government agencies.

POLICY OPTIONS: TOWARDS THE REGULATION OF DRUGS

Having outlined the three contemporary prevailing models and the ways in which they differentiate between certain drugs, this paper assumes that it is not feasible to group all drugs under a single framework. The current practice – distinguishing between drugs on the basis of supposedly scientific evidence determining risk level – lacks coherence.² This can be seen in the contrast between the permissiveness shown towards alcohol and tobacco and the stigmatization and prohibition of marijuana.

Alcohol is by far the most abused drug, whose consumers outnumber those of all other illegal drugs combined. Of all substances, its abuse generates the greatest number of illnesses and deaths, and is linked to the greatest number of crimes (Kleiman, 2011: 127).

However, the starting points of this analysis and its proposals are the high social and public health costs incurred under the prevailing prohibitionist model. The highest costs are incurred under total prohibition. That said, total liberalization (the "supermarket" model) brings its own social costs, as shown in Figure 1, in which various impacts are plotted along the spectrum of possible drug management policies³.

² Only some countries have gathered scientific data on the risk levels of drugs. These findings are usually controversial. Nonetheless, Appendix 1 provides a list in which 20 psychoactive substances are classified according to their risk levels.

³ The diagram is taken from Transform Drug Policy Foundation, 2007: 21.

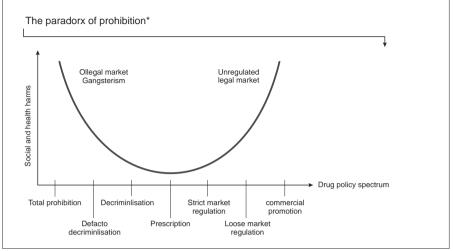


Figure 1. The paradox of prohibition

The model presented in the graph corresponds to a non-discriminatory approach to all substances; an approach which creates problematic outcomes. The graph also demonstrates that the total prohibition of a substance affects the markets for that substance, generating organized criminal structures that monopolize that drug's illegal trade. These two conditions have immediate health consequences, which is why they appear side by side on the vertical axis. Two scenarios serve to support the relevance of that relationship, based on more or less prohibitionist policies:

1. First, the non-discrimination of drugs according to risk levels established by scientific evidence, and, as a consequence of that, the existence of a legal and public policy framework that does not recognize those differences, leads to a situation in which a wide range of these substances are available via markets controlled by organized crime. As has been noted and by way of example, one of the aims of the current Uruguayan initiative of treating cannabis separately, both legally and in terms of public policy, is precisely that of regulating this substance. The initiative aims to prevent cannabis users from falling into the clutches of criminal gangs who will offer, or promote, by means of free samples, other psychoactive drugs that pose greater risks to the recreational user, thereby turning consumers of marijuana into users of more dangerous psychoactive substances.

As is widely known, there are lists that classify psychoactive substances according to the risks they pose. While some of these classifications remain open to debate, the lists are consistent in showing a clear differentiation between naturally oc-

^{*} With thanks to John Marks and Mark Haden.

curring substances. For example, in a classification drawn up in August 2006 to show the relative dangers of twenty psychoactive substances (see Appendix 1), heroin and cocaine were listed first and second respectively, while cannabis was listed in eleventh place. Thus it can be seen that the indiscriminate prohibition of substances, or the use of selective criteria based on cultural norms, as seen with alcohol (fifth place in terms of dangerousness) and tobacco (ninth place), have serious repercussions in terms of public health harms.

2. Second, by failing to protect users of less dangerous drugs, and by criminalizing people from the moment they use *any* psychoactive substance, the state rules out any possibility of intervention and becomes seen as an entity that is merely repressive in its attitude toward drug use. Thus the user and, to an even greater extent, the addict remain in the hands of criminal supply networks, increasing the risks to their health and, simultaneously, creating a scenario in which the state is less and less able to intervene with any effectiveness through public policies that address the needs of problem users.

These two points demonstrate that increased prohibition is closely associated with social harms and negative health impacts. Of course, if we examine critically the potential effects of a policy of extreme liberalization, we will observe that it too may have negative social and public health impacts. Nonetheless, the history of more flexible policies, such as the decriminalization of certain behaviors associated with the use of certain psychoactive substances, as contrasted with policies of prohibition, shows that demand operates as an independent variable. While it can be seen that harm reduction is not necessarily a factor associated with a drive towards reducing drug usage, more flexible policies do allow for a calmer and more reasonable dialogue aimed at prevention, in addition to any positive impacts they may have on the health of drug users.

These aspects of more flexible drug policies, and the eventual impacts they have on users, have been studied predominantly in relation to demand. The question is: Do more flexible policies lead to increased drug use? By looking at programs developed to address issues associated with health harms and risk reduction, we will be able to observe the contrasting effects of the two types of drug policy.

The first of these examples concerns Portugal, with its relatively recent anti-drugs strategy of decriminalization. The second is a comparative study of what is happening in Amsterdam and San Francisco, two cities that are, respectively, emblematic of liberalization and continued prohibition.

To take Portugal first: According to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), drug consumption in Portugal is, in general, below

the European average and considerably below that of its only European neighbor, Spain. In 2007, the proportion of Portuguese adolescents and young adults aged 15-34 that used cannabis stood at 6.7% – around half the European average, which was estimated at 12.1% in 2008. Polls of Portuguese adolescents aged 15-16 showed one of the lowest lifetime prevalence rates for cannabis in Western Europe (13%). As for cocaine consumption, the proportion of people aged 15-34 who reported having used the drug in the previous year stood at 1.2% in 2007. This compares with a 2008 estimate of 2.1% in the European Union and Norway. In terms of trends, school surveys and more general surveys show that cannabis consumption in Portugal remains stable, while cocaine consumption among young adults may be on the rise.

In contrast to these moderate levels of drug consumption in the general population, problem drug use and its associated harms are closer to, and at times in excess of, the European average. In 2005 the number of problem drug users in Portugal was close to 42,000, or around six in every 1,000 inhabitants between the ages of 15-64. Estimates of the number of drug-related deaths (i.e. overdoses) are currently under revision, but they would not be the first indication that the Portuguese rate is a little below the European average. On the other hand, the number of new HIV cases among drug users, 13.4 for every 1,000,000 inhabitants in 2009, is far in excess of the European average (2.85 cases for every 1,000,000, in 26 countries) and one of the highest rates in the Union, even though the trend in recent years has been one of clear decline (EMCDDA, 2011: 20).

A comparative analysis of Amsterdam and San Francisco provides our second example of contrasting drug policies. According to a study by Reinarman, Cohen and Kaal, the prevalence rate of people who had consumed cannabis 25 times or more during their lives was much higher in San Francisco than in Amsterdam – and the same was true in relation to the users of other illicit drugs. Statistics from this study show a lifetime prevalence rate for illicit drug use that is much lower in Amsterdam than in San Francisco. During the three months leading up to the interview, the prevalence of crack and opiate consumption was also significantly higher in San Francisco, while that of cocaine, amphetamine and ecstasy use showed little difference. Thus the abandonment rates, which is to say the decrease in lifetime prevalence rates, were somewhat higher during the last three months in San Francisco for cocaine, amphetamines and ecstasy; however, the abandonment rates in both cities were high (64%-98%) for all substances (Reinarman, Cohen y Kaal, 2004: 836).

This comparative study was expected to show that different drug policies have contrasting effects on both the longevity of cannabis use and the rate of its abandonment. Penalization is supposed to reduce availability, discourage use and provide incentives for users to quit smoking cannabis. Conversely, decriminalization is thought to increase availability, encourage consumption and reduce incentives to quit. We would, therefore, expect to find longer durations of usage and a smaller number of ex smokers among cannabis users in Amsterdam. The findings of this study suggest, however, that neither of these expectations were fulfilled. Of respondents in both cities who had used cannabis for between one and 38 years, 95% reported having used the drug for three or more years. The average duration of use is slightly longer in San Francisco (15 years) than in Amsterdam (12 years). However, this finding is principally due to the fact that the average age of respondents in the San Francisco sample (34) was higher than that of those in the Amsterdam sample (31) (Reinarman, Cohen & Kaal, 2004: 840).

Accepting the supposition that drug policies have a powerful influence on user behavior, the similarities between the effects of these two contrasting regimes should not have been as marked as they were. And indeed, the results do not support the belief that criminalization reduces cannabis consumption while decriminalization increases it. Furthermore, neither Dutch decriminalization nor San Francisco criminalization seem to be associated with, respectively, a greater or lesser consumption of other illicit drugs. In fact, to judge by the lifetime prevalence rate of the consumption of other illegal substances, the opposite may be the case.

This seems to support the trend shown in Figure 1 – that there is no evidence to contradict the belief that more flexible drug policies increase the possibilities for reducing health and social harms. Indeed, if we take into account the assertion made previously that legal flexibility creates conditions in which the state can better assist problem users, this would be a valid conclusion as regards positive spillover effects, which in turn strengthen the idea of harm reduction.

Thus if we place risks and social harms on the vertical axis, different levels of policy flexibility on the horizontal axis, and the prohibitionist model at the starting point of the vertical axis, we see that once policies begin to be modified within a continuum of regulation initiatives, social and health harms may tend to diminish. However, once we reach the extreme point of total liberalization, i.e. the indiscriminate application of the supermarket model, the situation may begin to worsen once again, in ways that are as dramatic and as difficult to manage as under the current prohibitionist model.

This is precisely one of the most important reasons why the Swiss drug policy is based on neither prohibition nor total liberalization – the endpoints of the curve – but on an intermediate model of harm reduction, accompanied by three other strategies – namely, prevention, treatment and law enforcement.

As can be seen, drug policy measures located on the spectrum between decriminalization and strict regulation aim for an optimal impact on risks, health harms and the entire social sphere as it relates to the drug market. It is in relation to this optimal policy range that existing regulation models should be judged.

In the following section we will study the most important features and trends pertaining to the illegal trade in naturally occurring substances. This will help us to outline criteria for a regulatory approach that affects this level of the chain, a level which interacts in complex ways with both production and consumption.

TRAFFICKING

We shall examine the problem of the trade in naturally occurring substances from two perspectives:

- 1. A description of the market for illicit substances, with particular reference to cocaine but with some discussion of other drugs.
- 2. Some references to new dynamics and trends displayed by the organized criminal networks responsible for transnational trafficking.

In terms of the market, data is drawn from three principal sources: the United Nations Office on Drugs and Crime (UNODC), the US State Department, and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). The exercise aims to compare this data in order to evaluate its consistency, and then to use it as the basis for an analysis of regulatory proposals. Illegal business structures can be viewed from two perspectives: 1) that of organized crime, which is closely associated with the creation and operation of illegal markets of a transnational character; and 2) that of mafia-style power structures, in particular those that are most resistant to the implementation of regulatory initiatives and which can be seen from different perspectives and scenarios.

AN OVERVIEW OF THE STRUCTURE OF THE ILLEGAL DRUGS MARKET

One of the most noteworthy features of the calculations presented by UNODC and the US State Department is the diffuse and erratic character of potential worldwide cocaine production. UNODC offers very broad margins for that potential, on account of the strong contrast that can be observed between productive potential, the high volume of seizures and the difficult calculations for effective demand in the principle markets. The organization justifies its method thus:

Due to the ongoing review of conversion factors, no point estimate of the level of cocaine manufacture could be provided for 2009 and 2010. Because of the uncertainty about the level of total potential cocaine manufacture and about the comparability of the estimates between countries, the 2009 and 2010 figures were estimated as ranges (842-1,111 and 788-1,060 tons respectively) (UNODC, 2012: 63, note for Table 15).

For its part, the EMCDDA presents, in its most recent report (2013), some estimates for European cocaine consumption: 124 tons for 2009, which is double the estimate for 1998 (63 tons). In the meantime, the United States has seen a reduction in consumption, from 267 tons in 1998 to 157 tons in 2009 (EMCDDA and Europol, 2013: 38). This implies that consumption in the two most important markets is in the order of 281 tons.

As for the volume of cocaine seized, this amounts to some 700 tons (732 in 2009), of which the majority (90%) is confiscated in the northern hemisphere. Colombia, the United States (principally shipments passing through the Caribbean and the Pacific) and Panama were the countries where 62% of the seizures took place. This suggests that the drug is almost as pure on arrival as it was when it left the production sites – in this case Colombia, whose contribution to the US market has been estimated at 95.5%, the proportion of the total confiscated in the latter country.

The total amount of cocaine seized in the United States – 163 tons in 2009, of which 156 tons were of Colombian origin – plus the 157 tons that were actually consumed, gives a total of 313 tons of Colombian cocaine in the US market. The State Department estimates that 290 metric tons of cocaine was produced in Colombia that year. That is to say that less was produced – in this case 23 tons – than was actually exported to the United States. Strictly speaking, we must also take into account the potential cocaine production in 2008: 280 tons, according to the State Department (US Department of State, Bureau for International Narcotics and Law Enforcement Affairs, 2012: 170).

Clearly, this calculation is erratic: there is a discrepancy of 33 tons. And this is before we factor in the contribution of Colombian cocaine to the markets of Western and Eastern Europe, Asia and Africa, in addition to the total seized not only in this producer country, but also in the group of nations through which the product moves en route to different international markets. The majority of the seizures executed by the United States occur beyond its frontiers, i.e. before the cocaine has been cut with other substances, which happens when it enters the U.S., where confiscations are minimal. In Colombia, the majority of confiscations take place at ports.

However, the argument that there is a discrepancy between the amount of cocaine leaving export points and the amount seized at transit and import points is fallacious. In general, purity decreases in retail markets, to the benefit of micro distributors. This is the exception to the search for greater added value implied by access to large markets. In general, payments in high-purity cocaine for services rendered on the routes to valuable markets, principally the United States and Canada, are those used for the retail markets in Mexico and Central America. In the case of cocaine destined for Europe via West Africa, the drug is cut and repackaged with other substances, in order to increase exponentially the quantity of product arriving in Europe's main entry points: principally Holland, Belgium and Spain.

This highlights a dominant characteristic of the political use of statistics – that it tends to show a reduction in the size of the market for psychoactive substances as a result of the implementation of a strategy based on force; this affects the quality of the analyses made on the basis of current information. Nevertheless, the estimate that annual cocaine production in the Andean region is in the range of 1,000 tons suggests a strong stabilization of that potential over the past decades.

CHANGES AND ADAPTATIONS IN PRODUCTION AND TRANSIT TECHNIQUES

One of the characteristics of current systems for the production and international circulation of controlled substances is the speed with which they can change, adapt and incorporate new techniques. In recent years, for example, we have seen:

- 1. A diversification in production sites for important raw materials used in the initial stages of cocaine preparation, such as potassium permanganate, which is used to produce coca paste and whose importation has been expanding beyond the traditional suppliers. According to the EMCDDA, new legal production sites for permanganate have been established in Latin America, allowing this substance to be shipped to Colombia, Peru and Bolivia via legal routes. This causes problems for those control schemes that assume a stable global supply for permanganate. (EMCDDA and Europol, 2013: 40).
- The high mobility of cocaine labs, which are installed at transit sites or at locations either within or close to the most important markets for psychoactive substances. There is evidence that this mobility is not only manifesting itself within producer countries, but also throughout export routes in different parts of Latin America. Crystallization labs, for example, have been found in Argentina, Chile, Ecuador, Venezuela, Brazil, Panama and Paraguay, as well as on some Caribbean islands and in Mexico. On a smaller scale, there is evidence of laboratories operating in Australia, Hong Kong, South Africa and even the United States. In Europe, various sources have recorded the discovery of laboratories (see Table 1).

COUNTRY	NO. OF LABORATORIES			(
	2008	2009	2010	OTHER SEIZURES (JANUARY 2011)
Greece	1	1		
Holland	4	1		
Spain	25	13	35	33 tons of cocaine precursors were seized in January 2011.

Table 1. Laboratories with different functions in the production of paste/base/cocaine in Europe that were dismantled between 2008 and 2010

Source: EMCDDA and Europol, 2013.

Finally, information from Europol has confirmed the existence of laboratories in Albania and Moldova.

As regards consumption, 62% of the highest prevalence rates in Europe are concentrated in the 15-34 age group. The countries with the highest demand are, in descending order: Spain, the United Kingdom, Italy, Ireland and Denmark. These five countries account for 1,700,000 users within that age group, out of a European total estimated at 2,700,000.

Increased demand in countries such as Ireland and Denmark suggests a market that is active and growing, with few signs of the stabilization processes seen in the United States. Cocaine is currently the third most sought-after substance in Europe, following cannabis resin and cannabis herb. On the other hand, emerging niche markets for cocaine consumption in Eastern Europe show signs of establishing themselves.

There is data to indicate the existence of emerging cocaine markets in sub-regions such as Eastern Europe, Southeast Asia and Oceania. While still small, these markets have potential for growth and may represent risk factors consistent with an increase in cocaine consumption. The trend of seizures in sub-regions not known to have numerous cocaine consumers suggests that drug smuggling into or through these sub-regions has attained greater importance. For example, while cocaine seizures in West-ern and Central Europe practically halved between 2005-6 and 2009-10, seizures in Eastern and Southeast Europe tripled. Factors that could be related to this include, on the one hand, an increase in demand and, on the other, a diversification of trafficking patterns. An even more remarkable increase in cocaine seizures has occurred in East Africa and Oceania, where the quantity seized in 2009-10 was four times greater than that seized in 2005-6, a trend replicated in East and Southeast Asia.

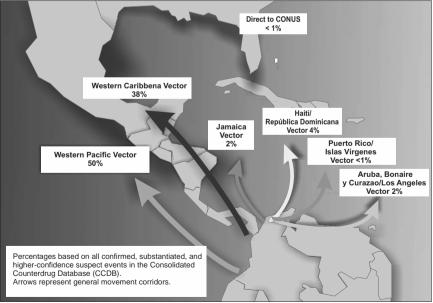
In terms of annual prevalence of consumption, the rate in Oceania is high in comparison with that of the countries of Southeast Asia (the Philippines, Indonesia and Thailand), where less than 0.1% of the adult population uses cocaine. However, there is no recent information available concerning cocaine consumption in many

Asian countries, including China and India. Despite the scarcity of information concerning Africa, UNODC has noted with concern that cocaine smuggling through West Africa may have a knock-on effect on other countries in the region, and that cocaine consumption, along with that of heroin, could become a considerable problem among drug addicts (UNODC, 2012: 57).

ROUTES

The United States and Europe continue to be the primary destinations for cocaine routes. To these two markets, which are the largest, a third is gradually being added: the South American market concentrated in the countries of the Southern Cone, which has shown signs of growth over the last decade.

The US market, meanwhile, has been affected by the relative decline of the Southwest border as a strategic entry point for cocaine, marking a shift from the trafficking strategy that prevailed during the 1990s and the early years of the new millennium. Indeed, up until 2006 the transportation route map still showed, taking the Caribbean and the Pacific vectors together, that the Southwest border accounted for 90% of all traffic into the United States (see Map 1).



Map 1. Vectors linking South America and the United States in the cocaine transportation zone, 2006

Source: National Drug Threat Assessment, 2006.

By 2010, new strategies and vectors had come into play and we can see from the outset that even though the Southwest cocaine shipment vector continues to be the most important, it is in a state of decline. This highlights the use of the northern vector, the Canadian frontier, where traffickers of Asian origin today control much of the two-way flow of contraband across the huge Canadian-US border (US Department of Justice, National Drug Intelligence Center, 2011: 15).

Indeed, if we look at Figure 2, which compares the proportions of various drugs seized on the Southwest border with those of the same drugs seized on the other borders, we can see that in the case of cocaine almost two thirds of the seizures were executed on the Southwest border, with the final third seized elsewhere.

One of the key characteristics of the organization for the transport of cocaine in large volumes to the Southwest border of the United States from the producing areas – principally Colombia and to a lesser extent, Peru – is the division of responsibility for moving shipments towards the points of sale.

Indeed, the current structure shows that Colombians have moved their production to different locations in Central America, thereby seeking to expedite the movement of cocaine across the Southwest border of the United States. For the most part, these sites are in Guatemala and Panama. From Panama the drugs are moved over land or on boats of varying drafts, functions and flags, a process that increasingly involves Costa Rica, Honduras and, to a lesser extent, El Salvador and Nicaragua.

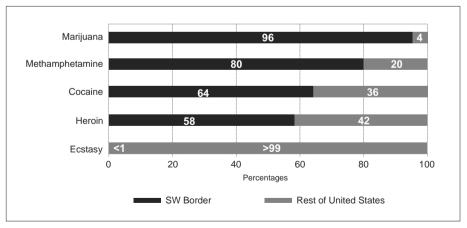


Figure 2. Drug seizures at the Southwest border compared with those in the rest of the United States, fiscal year 2010^(a)

(a) Totals include only seizures made at and between POEs. Seizures for "Rest of United States" include Seizures made in Puerto Rico and the U.S. Virgin Islands.

Source: El Paso Intelligence Center. National Seizure System.

The segmentation that characterizes the new dynamic of drug trafficking via the various vectors crossing the Southwest border of the United States generates advantages for the Colombian drug trafficking organizations in their "new" positions on the circuit. They guarantee themselves participation in a key and (thanks to the higher volume of product being moved) profitable phase of the process. At the same time, by selecting routes that are less risky and therefore less costly to secure, they reduce both the risks and the security costs involved in moving drugs across the Mexican border. One of the features of present-day law enforcement is the strong increase in the interdiction capabilities of US counter-narcotic authorities, which have doubled since 2000, a deployment that remained relatively stable up until the middle of the first decade of the third millennium, in spite of a slight decline in the total number of seizures (see Table 2).

That said, the fact that Mexico shares a border with the US, added to its high level of institutional corruption, the weakness of its justice system and the growing regional power of illegal Mexican groups – a power derived from their capacity to use violence to control various routes from the Central American isthmus, the most important zone for cocaine shipments – has created a scenario that offers comparative advantages for drug traffickers in that country. This has led to a situation in which Mexicans control most cocaine shipments en route to local markets in the United States, and have diversified their smuggling operations so as to control the movement and much of the distribution of heroin and methamphetamine produced in Mexico. They also handle large quantities of dollars in cash, in order to launder it.

It is a striking fact that, in contrast to what has been seen in relation to cocaine, the number of heroin seizures on the southwestern border has grown substantially, from 449 kilos in 2006 to 905 kilos in 2010. This suggests an increase in the volume

BORDER AREA	2006	2007	2008	2009	2010
Southwest border**	27,361	24,78	17,459	18,737	17,83
Northern border	2	<1	<1	18	23
Rest of United States	42,198	33,177	28,547	29,629	26,21
Total	69,561	57,957	46,006	48,384	44,063

Table 2. United States: total cocaine seizures*, in kilos, fiscal years 2006-2010

^{*}Includes seizures in the US and its territories.

^{**} Seizures on the Southwest border include those made by federal, state and local authorities at and between entry points along the Mexico-US. frontier, as well as those executed within 150 miles of the border.

Source: US Department of Justice, National Drug Intelligence Center, 2011.

of heroin flowing from Mexico to the US market (US Department of Justice, National Drug Intelligence Center, 2011: 50).

For its part, UNODC has recorded a much greater number of heroin seizures, confirming the aforementioned trend in relation to the United States. According to its 2012 report on North America, the amount of heroin seized in the United States increased almost 50%, from 2.4 tons in 2009 to an unprecedented 3.5 tons in 2010. South America (Colombia in particularly) was the source of heroin arriving in the United States from countries other than Mexico. In 2010, 1.7 tons were seized in Colombia, an unprecedented quantity in that country and more than double what had been seized in 2009. In Ecuador, heroin seizures spiked to 853 kilos in 2010, a near fivefold increase over 2009 (177 tons). Mexico witnessed a small increase: from 283 kilos in 2009 to 374 kilos in 2010. Finally, despite an increase in 2008 and 2009, heroin seizures in Canada declined considerably thereafter, from 213 kilos in 2009 to 98 kilos in 2010 (UNODC, 2012: 41).

According to the US State Department, the campaign launched in Mexico by President Felipe Calderón (2006-2012) against organized drug trafficking groups led to an increase in other kinds of criminal activity, such as kidnapping, extortion, human trafficking and domestic drug trafficking. All of which combined to generate, according to the same source, a 20% spike in lethal violence in 2011. The number of violent deaths, many of which can be linked to conflicts surrounding the drug trade, jumped from 11,583 in 2010 to 13,000 in 2011 (Executive Office of the President of the United States-Office of National Drug Control Policy, 2012: 318). Despite the marked decrease in violent deaths in Ciudad Juárez, a significant increase has been seen in the states of Nuevo León, Tamaulipas, Veracruz and Guerrero. As we have noted, Washington considers Mexico to be the United States' biggest supplier of heroin, marijuana and methamphetamine. The country is also both source and destination for laundered money, and it is estimated that 64,000 of the 94,000 weapons seized there in the last five years were smuggled into the country from the United States (Executive Office of the President of the United States-Office of National Drug Control Policy, 2012: 319).

Mexican institutional weakness is reflected too in the relatively poor performance of the anti-drugs authorities in terms of seizures. In 2000, 23 metric tons were seized; this rose to 30 tons in 2005, only to fall abruptly to a mere six tons in 2011 – a paradoxical situation when one considers the volume of cocaine that is repeatedly said to be passing across the Mexican borders (Executive Office of the President of the United States-Office of National Drug Control Policy, 2012: 319). The costs incurred by Mexican criminal gangs controlling the frontier routes become clearer when analyzed in the context of route segmentation. Losses incurred from

seizures in the US-Mexico border region are greater in terms of their added value - based on risk - than losses sustained from seizures at earlier points on the route, prior to the arrival of the shipments in this region. A kilo of coca paste in Colombia or Peru is worth US\$950, rising to US\$1,430 when converted to coca base. As cocaine proper, the drug leaves Colombia or Peru with a value of US\$2,300 per kilo. After arriving in Guatemala, that same kilo costs around US\$6,000. Finally, upon arriving at Mexico's northern border, it acquires a value of around US\$15,000.4

Losses incurred near access points within the United States are even greater: once it crosses into US territory, a kilo of cocaine is worth US\$25,000.5 That is to say, the value added to a kilo of cocaine when it crosses the border hovers around \$10,000. Beyond Guatemala, a good proportion of the losses in US-bound shipments are assumed, in general, by Mexican organizations. This has led to Colombian gangs consolidating strategic corridors at intermediate points, where the drugs have a lower added value by virtue of their location at this point in the chain. As such, drug interdictions at points close to the Colombian border represent a less significant loss for Colombian organizations, which at the same time retain the comparative advantage of controlling a high percentage of the production areas. These operations can be re-established very quickly, enabling a fast turnover of new production zones in strategically located points on the international trafficking routes.

This process is the same almost everywhere in the Chocó bio-geographical region, facilitating transport via the Pacific or along routes that pass close to the Sierra Nevada de Santa Marta, near the Caribbean Sea. It explains the rise in production in the Paramillo Massif and the Serranía de San Lucas, facilitating shipments via the Caribbean, principally through the Gulf of Morrosquillo. This route leads to the southwestern border of the United States, and to the Caribbean islands, including San Andrés, which has acquired great importance on this maritime route along which flows an estimated 10% of the total cocaine destined for the US market. This cocaine ends up in shipments landing in Florida, among other entry points.

It is very difficult to establish the percentage of Peruvian cocaine in this traffic, and it is likely that Peru is playing a greater role in the markets of Asia, Oceania and South America, and in parts of Europe.

Data from Mexico for 2012 taken from "La frontera y el precio de las drogas," in El Economista, 14 October 2012, Mexico.

Once in New York or Seattle, the price rises to US\$32,000. On US streets, a kilo of pure cocaine retails for around US\$120,000.

Bolivia, meanwhile, is more closely associated with cocaine circulating throughout the Southern Cone (principally Brazil and Argentina), and with the market for "paco," a type of crack cocaine that is in high demand in deprived, principally urban areas of Buenos Aires, Montevideo and the south of Brazil.⁶

There are two explanations for the increase in the trafficking and consumption of cocaine and its derivatives in South America. The first is the rise in domestic demand, principally in Argentina and Chile, as can be seen in Figure 3, which draws on data from the 2011 UNODC report. The second is the recent relative growth of the route to West Africa via Brazil, reflecting what has been dubbed the transatlantic character of the cocaine economy, with important consequences for the link between drugs and security.

Indeed, in the external sphere, the US anti-drugs policy continues to emphasize the transnational character of the drugs threat, to which can be added UNODC's characterization of cocaine as a transatlantic market that threatens the stability of various African countries, in whose jurisdictions have appeared criminal structures that facilitate the movement of cocaine to different parts of Europe. This development is compromising governance and stability in countries such as Guinea Bissau, Cape Verde, Mauritania, Sierra Leone, Gambia, Senegal, Ghana and Nigeria, for

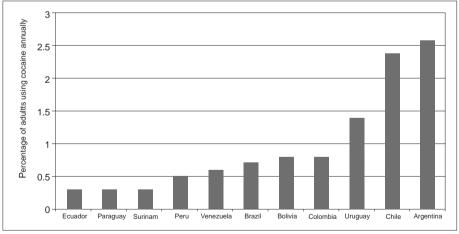


Figure 3. Annual prevalence for cocaine use in South America (most recent data)

Source: UNODC Delta.

⁶ See also: Transnational Institute (TNI). 2006. "El paco bajo la lupa. El mercado de la pasta básica de cocaína en el Cono Sur". Drogas y Conflicto. Documentos de Debate. 14 October

which, according to UNODC, Venezuela, with the greatest number of criminal connections (principally via air and sea), is largely responsible.

We must also take note of the role of Brazil. According to UNODC, 55% of the flights transporting cocaine to West Africa from South America originate in this country. On the other hand, it should also be noted that, as part of that route, the Antilles, in the Caribbean Sea, is responsible for 24% of the flights. To this must be added UNODC's statement that "the bulk of the trafficking towards Europe still seems to be in the hands of Colombian organized crime groups, forging alliances with various criminal groups operating in Europe" (UNODC, 2011: 46).

A characteristic of the transatlantic cocaine route is the high level of fragmentation and shifting alliances within the smuggling networks. These networks comprise groups of Europeans whose core operatives come from the Western Balkans (Serbs, Montenegrins and Croats), as well as groups of Italians, Bulgarians and Spaniards who are developing strong initiatives in the cocaine markets of South America and West Africa. In the latter region we find groups whose members include nationals from Colombia, Argentina, Bolivia, Brazil, Peru and Venezuela. These groups control the route to Europe that passes through West Africa (EMCDDA and Europol, 2013: 47 and 48).

In West Africa, there are also smuggling networks that conduct trafficking via airmail shipments, and in North Africa, groups of Moroccans with experience of the cannabis resin route who have connections with the Spanish and Dutch markets.

Attempts to justify and legitimate security measures in terms of decisions taken at the national state level are less and less likely to be accepted in countries such as Brazil, where such security measures are clearly ineffective at combating transnational criminal activities. This presents dilemmas related to the risks faced by the institutions of democratic states, and also supports the idea that the classic notion of state sovereignty has become increasingly tenuous, above all in relation to security.

By recognizing both the existence of "transversal spaces", such as the one generated by drug trafficking through its transnational dynamics, and the limited means at the disposal of nation states to control these spaces (as can be seen in relation to today's illegal drugs market), we can map out a reasoned, multi-pronged strategy that will substitute the geopolitics of security for the geopolitics of drugs. The components are not new; what matters is the transversal space that exists in the gap between state sovereignty and international global cooperation (Osorio Machado, 2010).

New phenomena emerging in the countries of the southern hemisphere point in the same direction. An example is Colombia, which has, at the urging of the United States, reclaimed its privileged position, both regionally and globally, in the realm of security issues (principally those relating to drugs). Furthermore, Colombia has proclaimed its own apparent "successful experience" in the war against drugs as a legitimate model for export.

In fact, Colombia's alleged 95% share of the United States cocaine market; its important share of the EU cocaine market, as recognized by UNODC; the influence of Colombian drug smugglers on criminal structures throughout Central and South America; the flourishing investment market for laundered money in Colombia, principally in land and, it appears, in mining; the exercise of important influence within political parties and local, regional and national law enforcement agencies, including the agency responsible for public drug policies, the Narcotics National Directorate (Dirección Nacional de Estupefacientes, or DNE); the failure of policies designed to ensure the forfeiture of goods acquired through drug trafficking – all these factors, among others, provide evidence that drug trafficking in Colombia continues to exert great influence and power over diverse aspects of the country's social, political, economic and cultural life.

CONCLUSIONS: THE NEW DYNAMICS OF DRUG TRAFFICKING

Seen as a whole, global drug trafficking has been affected by the fragmentation of organized crime structures, along with a consolidation of these groups into network structures whose characteristic is the mix of nationals from different countries working together to guarantee control of routes within a markedly transnational operational framework.

The establishment of new routes leads to a considerable increase in the number and diversity of illegal actors participating in the multiple activities required to sustain these routes. This strengthens illegal enterprises, enabling them, in conjunction with other activities, to challenge what should be the state's monopoly on the use of force; to extract tribute; to deepen existing corruption; and to undermine governance.

Groups controlling certain well-established routes are diversifying the products they traffic in. For example, Moroccan groups who control hashish smuggling routes are now involved in the movement of cocaine through North Africa. Albanians who smuggle heroin through the Balkans are increasing their involvement in the trade of cocaine and synthetic drugs to Western Europe. Mixed groups of Albanians and Turks are working with Italian organized crime to service the peninsula's heroin markets. Organized crime groups from Bulgaria and Romania, once supplied by Turkish groups, are now self sufficient, with their own routes that are connected to supply

routes within Europe. Networks from West Africa are increasingly involved in the heroin markets of Western Europe, a sector in which Nigerians and Francophone Africans are also participating. These last-named groups are achieving success by diversifying their trade to include substances such as cocaine, heroin, cannabis herb and ecstasy. (EMCDDA and Europol, 2013: 33).

A similar process of product diversification can be seen in the case of Mexican groups identified as the suppliers of heroin, cocaine, cannabis herb and synthetic drugs to the United States in particular.

Another Mexican trend, as identified by the State Department, is the diversification of income sources to include those from other criminal activities, such as kidnapping, extortion, people trafficking and arms smuggling. In Colombia, adding to the extortion that mainly takes place in urban centers, there seems to have been a concentration of illegal structures connected with the illegal mining boom and the lumber trade.⁷ Given that the Colombian government is proposing a sustained initiative to destroy illicit crops, through aerial spraying and manual eradication, alternative activities (illegal mining, security services, etc.) are seen as increasingly attractive ways to launder income from the drugs trade. This may explain the reduction in illicit crops in some parts of the country.

In qualitative terms, this explanation should lead us to view the reduction of illicit crops in Colombia in relative terms. This reduction could be attributed to the development of other lines of illegal activity, and by no means to the supposed success of eradication initiatives, the latter achieving little beyond a temporary deterrent caused by the interruption of regular coca production cycles, and their transfer to other areas.8

By way of example, members of Colombian intelligence agencies conducting operations to detect illicit crops in the municipalities of Nechí and El Bagre, in Antioquia's Lower Cauca region and on the border with Montecristo, uncovered a proliferation of illegal gold mining camps installed in makeshift tents on riverbanks. As well as laborers, they found evidence of increased use of machinery such as backhoe loaders, electricity generators and high-power compressors. According to the information provided, previous years had seen the discovery of camps in the Nechí River basin, but on this occasion camps were discovered close to almost all of the region's rivers. Interview with a member of an intelligence group engaged in illicit crop detection under condition of anonymity. Bogota, January 2013.

Similar effects have been seen in Putumayo Department, which has seen a decline in illicit coca cultivation and high community participation in the speculative and commercial financial pyramid scheme managed by DMG (an acronym for the name of its founder, David Murcia Guzmán) Grupo Holding SA. DMG paid interest in the order of 50% to 100% three or four months after a

The proposed regulatory model is founded on the need to bring drug users under institutional protection, primarily in terms of public health; it also seeks to break the competitiveness of organized crime by eliminating the added value generated by high-risk illegal activities.

THE DYNAMICS OF MAFIA CONTROL IN COLOMBIA

In Colombia, the regional consolidation processes of mafia structures are distinct from organized crime structures per se, in that they respond to more complex political and cultural influences in the regional and national context, and in the overall structure of the state. As such, criminal activities act to strengthen regional powers, which oscillate between legality and illegality and impact the powers of the national state.

Strategies designed to combat organized crime almost always target criminal structures as both criminal enterprises and in conspiracies to commit crimes, including drug trafficking. They do not, however, recognize the existence of powers of more far-reaching pretensions, which shape the social scene both politically and economically and exercise territorial control through sharply defined local and regional support structures. It is along these lines that the dynamics of mafia control have developed in various parts of Colombia, as well as in countries such as Guatemala. In Colombia, for instance, the prioritization of the counterinsurgency war according to a paramilitary model, in which actions against the civil population – actions that would be unacceptable under international humanitarian law – are permitted, has had the effect of maximizing the strategic role of drug trafficking in relation to the armed conflict, facilitating the territorial expansion of state-supported vigilante violence. This has had a number of effects, on a number of levels. Let us consider this case in more detail.

The history of paramilitary violence in Colombia goes back to the end of the 1970s and the beginning of the 1980s. Originally, a chunk of the profits from the marijuana trade was invested in land acquired by traffickers, the Medellín

cash investment – money that was collected as savings by companies operating as fronts for DMG. Resources that would previously have been used for investments in illicit crops or to finance legal trade or savings schemes for the population were invested in this business, which was supported by savers (who thought it was legitimate) until the national government decided to declare this practice illegal and order the capture of its manager. Murcia was detained on 19 November 2008, in the preliminary stage of his trial, and then extradited to the United States on 5 January 2010, on charges of money laundering.

groups prominent among them. There is evidence that this phenomenon was most pronounced in the following zones: the interior colonization region of Magdalena Medio in Antioquia, around Puerto Berrío, Yondó, Puerto Wilches and Puerto Nare, where it exacerbated the process of land concentration, weakening the local rural economies and accelerating the dynamics of forced displacement into the regional municipalities; the north of Magdalena Medio Bolivarense, including the municipalities of Rioviejo, Regidor and El Peñón; and the La Mojana region.

In the majority of these areas, this process lead to the strengthening of infrastructures for exportation to the United States, principally of cocaine, and above all to the creation of infrastructures and services for the use of air travel.

By 1981 the paramilitary justice model, which had evolved into a system of targeted assassinations dubbed Death to Kidnappers (Muerte a Secuestradores, or MAS) was no longer simply a paramilitary security operation (first launched in the wake of the Marta Ochoa kidnapping) but an initiative with a much broader set of aims, including the following:

- It incorporated itself into the paramilitary counterinsurgency armed conflict.
- It instigated the murder of peasants and the seizure of their land.
- It instigated the systematic assassination of politicians who were unwilling to cooperate with local and regional powers in the process of growth and consolidation.
- It covered its tracks through the murder of journalists investigating the connections between drug trafficking and state security agencies.

Through MAS, and in coordination with members of the armed forces, Magdalena Medio witnessed a wave of violence against peasants, the aim of which was to implement land dispossessions within the context of a strategy of strengthening the paramilitary counterinsurgency struggle, a strategy that only became public knowledge at the national level in 1983.9

The narco-paramilitary model took shape between 1982 and 1986. The rural areas of Magdalena Medio offered refuge for drug traffickers (who were begin-

[&]quot;(...) the narco paramilitaries of Magdalena Medio had nothing to do with the peasant self-defense movements of old, except in the sense that they were an offensive army, created in order to impose a socioeconomic order that could count on the support of renowned politicians, senior army figures, businessmen and the most powerful drug traffickers" (Duzán, 2010: 105).

ning their war against the Colombian state) during their struggle against extradition to the United States. In 1983, a report commissioned by the government concerning paramilitary justice groups (MAS) and drug trafficking in Arauca Department and Magdalena Medio concluded that of the 163 people involved, 60 were active members of the armed forces.

The 1984 assassination of Justice Minister Rodrigo Lara Bonilla marks the beginning of the war against the state waged by groups of drug traffickers led by Pablo Escobar, with the participation of regional elites. This helped strengthen ties between these groups and the armed forces, in accordance with the counterinsurgency strategic doctrine. The same period saw the first surge in land dispossessions – mostly affecting peasants – by drug traffickers nationwide, a process closely connected with the laundering of money through land purchases in Magdalena Medio, which began in 1984.

Counterinsurgent violence under the narco-paramilitary model emerges from the outset, and involves, repeatedly and systematically, commanders of the regional armed forces. The early violence was selective, and formed part of a strategy devised within alliances of illegal groups then on the rise, in which were found politicians, regional elites linked to the concentration of land ownership, and members of state security agencies. This led to the emergence of state-sponsored protection violence, to the benefit of drug traffickers.

It was in this context that the relationship between political leaders in Magdalena Medio and the Medellin group broke down, in the wake of the war against the state declared by the Medellin cartel, led by Pablo Escobar. His death, on 2 December, 1993, put an end to the ambivalent relationship of confrontation/protection between the state and groups connected to the business, and consolidated the spread of state-sponsored protection violence.

Between 1986 and 1990, the narco-paramilitary model expanded across vast portions of the country, particularly along the Caribbean coast and into the Orinoquia Region. 1989 saw the birth of the Peasant Self-Defense Group of Córdoba and Urabá (Autodefensas Campesinas de Córdoba y Urabá, or ACCU), which then spread nationally with the creation of the United Self-Defence Forces of Colombia (Autodefensas Unidas de Colombia, or AUC) in 1997. These movements aimed to coordinate a multi-faceted process of violent land expropriations, and to control territories through the use of paramilitary force, wresting power from the state apparatus. This led to a recommencement of the process of forced displacement of peasants, further increasing the concentration of land ownership and multiplying the number of locations that could serve as

exit points for illegal drug exportation as a result of improved control of border crossings and Caribbean and Pacific coastal areas.

Territorial control based on the formation of private armies and the interaction between traditional regional elites and the flow of drug trafficking money had a decisive impact on land displacement and political dynamics, expanding the regions in which drug trafficking leaders could seek refuge; consolidating a working relationship with sectors and branches within the armed forces and police; rearranging territories through violent land concentration initiatives; redefining local protection security for drug trafficking; and multiplying exponentially export routes for illegal drugs.

The corollary to these dynamics has been the strengthening of structures that exert mafia-style control of territories, affecting political power at the local and regional level by providing services related to social and security control, neutralizing threats to the status quo and providing resources to sustain political support at the national level.

In general, therefore, we can observe a broadening level of participation in organized illegal groups at the transnational level, and new dynamics in the way these groups operate. These groups are difficult to control, with even the demise of some high-profile figures doing little to seriously threaten the continuation of their illegal activities.

MODELS FOR REGULATING DRUG SUPPLY

There are currently five models used for regulating drug supply, none of which is used in relation to illegal substances. Drawing various lessons from this critical mass, this proposal seeks to include illegal drugs within the various regulation models, in order to diminish harms and risks and guarantee availability. The current models for regulation are (Rolles, 2012: 9):

- 1. Management of psychoactive substances through medical prescriptions.
- Access to substances through their sale in pharmacies.
- 3. Licensed sales.
- 4. Availability in licensed premises.
- 5. Availability from unlicensed providers, in exceptional cases.

THE MEDICAL PRESCRIPTION MODEL

This model has legal backing, legitimacy and a supervisory structure, and benefits from an institutional public health framework that is important from a regulatory perspective. As regards illicit substances, this is a legal model that has been applied to cannabis in some US states, where prohibition has been modified on the basis of scientific evidence. This is due to a recognition of the medicinal qualities of cannabis, and of its effectiveness as a treatment for various diseases, including terminal ones.

In the case of heroin, medical prescription becomes particularly important in the treatment of highly dependent users, whose lives would be in danger were abstinence models to be followed. The same can be said of methadone substitution programs and other harm-reduction alternatives that aim to improve quality of life for addicts. Furthermore, there is a history – still poorly documented – of opiate registration programs in many Eastern and Middle Eastern countries:

Users were registered and managed in Iran until 1953, and then again in the early 1970s (similar programs are now being cautiously re-introduced); comparable systems also existed in Pakistan and India—where remnants still function—and in Bangladesh, Indonesia, Thailand and elsewhere (Rolles, 2012: 25).

Research on cocaine remains deficient, reflected in the lack of supply programs for addicts and the continued lack of a methadone equivalent for cocaine.

PHARMACY MODEL

As with the previous model, this one works within a legal regulatory framework that sets restrictions according to certain criteria, such as age of buyer, level of intoxication, quantities requested and potential misuse of substances. Pharmacists are trained to offer advice, support and basic medical information.

In the United Kingdom, pharmacists are involved in the management of drug programs, supervising on site the consumption of substitute substances such as methadone, a process that can help prevent this kind of substance from being diverted to the illicit market. Even though pharmacies are not currently authorized to sell drugs for non-medical use, they could be authorized to manage the availability of currently illicit drugs. Qualified personnel working in such pharmacies would serve a supporting role, guaranteeing restrictions of sale, providing information on harm reduction, safer use and treatments, and offering general advice and support to users.

LICENSED SALES

This is equivalent to the role played by wholesale companies responsible for distribution to stores and sales outlets. Drawing on the experiences of tobacco and alcohol sales and distribution, this model is governed by provisions that include restrictions in distribution to certain places and buyers, and the establishment of regulations to create local, regional or national enforcement authorities.

LICENSED PREMISES

This model draws on the experience of alcohol sales in public venues such as bars, which must be registered with the authorities and must enforce restrictions according to criteria such as age of users, hours of opening and levels of intoxication. These venues are, in turn, subject to urban planning procedures, such as tightly controlled consumption zones overseen by municipalities, which may also offer harm reduction services and regulation of behavior that may affect third parties. Dutch "coffee shops," in which the personal consumption of cannabis is permitted, are examples of venues that conform to this model. However, the regulation of coffee shops is somewhat incoherent: supply to these venues remains illicit, an inconsistency that further regulation might seek to resolve. This situation increases the involvement of criminal organizations, generating a true "black hole" in the supply chain. Regulatory initiatives currently under discussion in countries like Uruguay and US states such as Washington and California, among others, seek to integrate suppliers into the regulatory framework, thereby eliminating the aforementioned anomaly.

UNLICENSED SALES

This model covers the sale of low-risk psychoactive substances, such as coffee and coca tea. No license is required to sell these substances, with regulation focusing instead on such issues as product description, packaging, expiry dates, etc.

THE NON-MEDICAL USE OF COCA/COCAINE AND DERIVATIVES: SCENARIOS AND MANAGEMENT

Substances derived from coca leaf come in various shapes and forms, each of which can be accorded a different level of risk:

- Chewable coca leaf and coca tea, which function as mild stimulants in various cultural contexts and whose risk level is minimal.
- Cocaine powder, which, amid growing controversy, has been as classified as moderate risk.
- The most impure forms, ranging from cocaine paste to crack, which are classified as high risk.

There exist, however, political pressures that ignore scientific evidence and call into question the most innocuous uses of coca leaf. This can be seen in the current conventions of the United Nations, in which this substance is listed, against all evidence, as one of those that can facilitate and generate cocaine dependency. Another fiercely debated point is the classification of cocaine powder as a substance with a high health risk, in support of which is disseminated information that assigns a high risk even to the occasional use of cocaine. However, according to "The cocaine project," a WHO/UNICRI report from 1995 – which following pressure from the United States government, was censored and barely circulated – that risk is actually low. According to the WHO report, the use of drugs is not homogeneous but should rather be characterized as a spectrum of consumption types whose dimensions are related: 1) experimental use; 2) occasional; 3) specific to situations; 4) intensive use; and 5) compulsive/dysfunctional. The most common types are experimental and occasional use; compulsive/dysfunctional uses are less common.

There are likewise detailed market studies demonstrating the relationship between occasional and problem use and how this correlates with the volumes of cocaine demanded. This diversity of scenarios on the demand side is associated with a historical process related to user profiles and the way that demand cycles for psychoactive substances are generated and consolidated over long periods. Known in academic circles as the epidemic theory of user behavior, it has been a very useful tool for detailing and analyzing the locations of greatest consumption.

Figures 4 and 5 show the paradox between the relatively small population of compulsive users, who demand a significant volume of cocaine, and the larger number of experimental and occasional users, who use a much smaller amount of drugs than those with high levels of dependency (see Everingham and Rydel, 1994).

¹⁰ For more on this, see Téllez Mosquera y Cote Menéndez (2005: 10-26), which reviews the relevant literature.

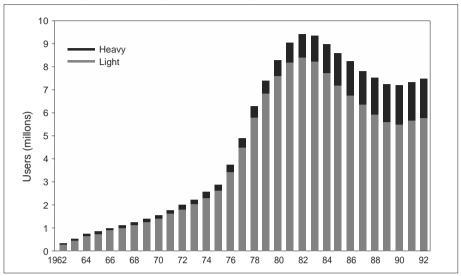
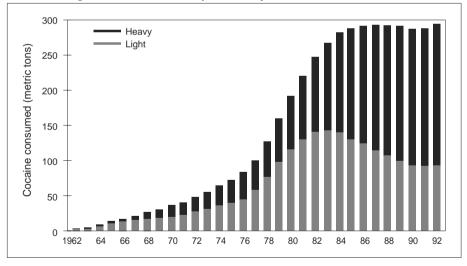


Figure 4. Modeled prevalence: Heavy users vs. occasional users





These graphs also show that experimental users fluctuate in and out of, and, in general, leave the group of occasional users, whereas compulsive consumers maintain their habit over a long period, during which the amount of drugs they use becomes steadily greater.

The contrast between the two graphs is significant: the trend can be seen in the epidemiological boom of the mid 1970s, which led to a period of important growth in the number of cocaine users that continued into the early 1980s.

As can be seen, the trend between 1974 and 1982 was one of exponential growth. The latter year marked simultaneously the beginning of a decline in the total number of users and the dawning of a new phenomenon: the permanence of, and, temporarily, the relative increase in the number of, heavy users, i.e. those whose demand for cocaine is regular and sustained, as shown in Figure 6. This is related to significant processes of addiction, and is where the epidemiological character of demand is most strongly marked. This, in other words, is the type of user who can be analyzed and targeted.

The trend of older users consuming high volumes of cocaine was recently reaffirmed by the National Institute on Drugs Abuse (NIDA), which noted a general increase in drug usage among individuals aged 50 and over (see Figure 6).

However, this trend must be seen in its proper context, one in which, against the backdrop of a growing debate about the "war on cocaine", the total number of users in the United States is declining while the population of so-called "heavy" users stabilizes, on the basis of a greater demand in volume terms. In order to establish

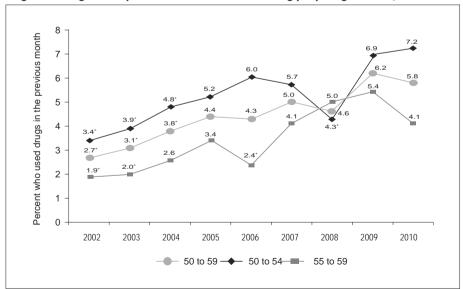


Figure 6. Drug consumption in the United States among people aged 50-60, 2002-2010

Source: National Institute on Drugs Abuse, October 2012.

specific regulatory mechanisms, it is essential to identify what is happening in terms of demand trends for each drug (Everingham and Ryder, 1994: 18).

Despite being old, the data shown in Figures 4 and 5 enables us to infer that the annual volume of cocaine demanded by heavy users is three times greater than that demanded by occasional users, despite the fact that the latter outnumber the former eight to one. The stabilization in the volume of cocaine demanded in the later years included in those graphs is related to the steady exit from the market of heavy users, including those who grow old and die, and reflects the epidemiological character of demand behavior rather than the supposed success of policy.

That same epidemiological character of demand may explain why, despite a stabilization of prices between June 2008 and December 2009, and even a drop in July 2010 (see Figure 7), the United States has not experienced another exponential rise in the demand for cocaine (see Figure 8).

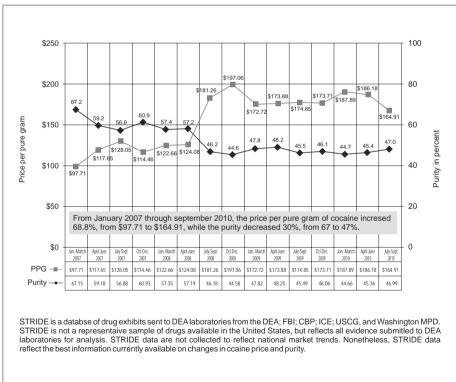


Figure 7. Price and purity of cocaine, January 2007-September 2010

Source: Drug Enforcement Administration. System to Retrieve Information from Drug Evidence (STRIDE), November 2010.

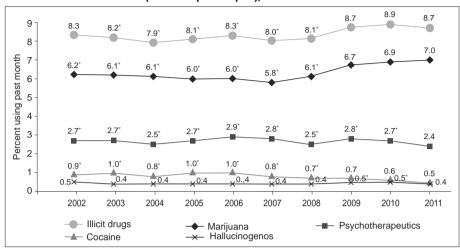


Figure 8. Use of drugs in the United States among people aged over 12 in the last month (in the respective poll), 2002-2011

Source: NIDA, October 2012.

In respect to this paradoxical situation, Peter Reuter, a researcher for the Rand Corporation, notes that:

for many analysts this decline in the number of regular users is surprising, since the prices of both cocaine and heroin have fallen sharply [see Figure 5] [...] nonetheless, the decline in the number of habitual users is consistent with the epidemic nature of the consumption of addictive substances [...] In an epidemic, the initiation rate (infection) in any particular area increases vertiginously when new and highly contagious drug users "infect" their friends and peers. But in the cases of heroin, cocaine and crack, at least, long-term users are not especially contagious. In fact, they are more socially isolated than new users, and, being aware of the risks of prolonged consumption, they may not wish to expose others to their habit [...] In the next stage of the outbreak the initiation rate diminishes rapidly as the most vulnerable elements in the population are reduced, since there are fewer non users, and since some non users have developed an immunity as a result of acquiring a better understanding of the effects of drugs. (Reuter, 2006: 81).

In terms of the current behavior of cocaine demand, three fundamental aspects must be recognized. First, that the situation owes more to the cyclical trends of epidemic behavior than it does to the impact of law enforcement policies on supply. Second, that there is no evidence that said actions have a multiplicative effect on prices (see, for example, Caulkins and Reuter, 2010). Third, that the epidemic approach hinges on biological processes and sociocultural circumstances that im-

pact on epidemic factors, and which, in general, have a behavioral arc of boom, fall, stabilization. This approach provides evidence related to demand behavior and consumption markets (see Caulkins, Gragnani, Feichtinger and Tragler, n.d.).

These three aspects offer consistent support for a change of strategy, which would focus on the protagonists of the epidemic phenomenon rather than on a uniform treatment of psychoactive drug users and their relationships with producers and traffickers. This would be the cornerstone of a regulatory policy. Despite the money and resources allocated to law enforcement strategies, the evidence shows that once drug markets are established and consolidated, principally in relation to habitual users, policy impact is minimal. Indeed, the huge budgets allocated over decades to eliminate these markets have achieved little, except to show that prevention is more effective. (Caulkins and Reuter, 2010).

As a consequence, and given the problems inherent in developing harm reduction programs and clear regulatory support structures related to cocaine consumption, the challenge must be framed in terms of a recognition of the wide range of scenarios in which cocaine demand plays a part, and not in terms of a homogeneous model. The aforementioned WHO study drew attention to this situation in the mid 1990s:

It is not possible to describe an "average cocaine user." An enormous variety was found in the type of people who use cocaine, the amount of drug used, the frequency of use, the duration and intensity of use, the reasons for using and any associated problems they experience (WHO/UNICRI, "The cocaine Project", 1995, cited by Transform Drugs Policy Foundation, 2012: 143).

LOWER-PURITY PSYCHOACTIVE SUBSTANCES DERIVED FROM COCA

These low-purity varieties include bazuco and crack, considered high risk owing to the toxic chemicals used both in their production and in the preparations used for retail distribution.

Researchers in the field define bazuco (also known as paco in South America) as a white or brownish substance, semi solid or solid, which is obtained during the intermediate stages of the cocaine salt refining process and which may contain impurities such as methanol, ether, acetone, permanganate potassium, other coca alkaloids, benzoic acid, kerosene, alkaline substances, sulfuric or hydrochloric acid, among a wide variety of other substances added to boost volume.

Bazuco is a byproduct of the cocaine salt production process and is obtained during the second stage of the refinement of coca paste to cocaine base, through a simple process. In its commercial forms, it can be encountered as a dyed white or raw brown paste. Because of its impurities and adulterants it is cheaper than cocaine hydrochloride and therefore its use is most widespread among poorer consumers (Téllez and Cote, 2005: 12).

In general (and in contrast to heroin, the harm reduction management of which is predicated on the drug's administration as part of a medical program in high-risk situations), no research has been done in support of delivery programs under medical supervision for cocaine and its more dangerous derivatives, such as crack and cocaine paste.

For its part, crack is the common name given to a cocaine derivative obtained by boiling cocaine hydrochloride in a solution of baking soda until the water evaporates. The term "crack" is an onomatopoeia, suggestive of the noise made by this drug's "rocks" when they are heated, a process which causes the cocaine to evaporate from the base substance, in which it is mixed with baking soda. Users have various slang terms for crack rocks, including "stones" and "pebbles." The drug is sometimes erroneously confused with bazuco or paco. Crack has a high degree of impurity but it is its insolubility in water – it is not a cocaine salt – that makes its consumption via nasal or intravenous methods impossible; it must therefore be absorbed via the lungs. Once inhaled, it enters the bloodstream rapidly, inducing in the user feelings of euphoria, panic and insomnia – and the need to repeat the experience. Owing to the speed of its effects and to its low price, crack became very popular in the 1980s, since when it has been smoked using a variety of methods: in a glass pipe; with cigarette ash on a can punched with holes; in a crystal dropper; rolled up in a dirty joint or "primo" (in which it is mixed with marijuana), and so on. Another piece of apparatus used to consume crack is a metallic tube, either a radio antenna or something similar, into which a kind of wire is inserted, transforming it into an improvised pipe. This method of "smoking from a tube" is principally used by impoverished addicts. 11

Harm reduction programs for crack have hitherto been limited to the provision of safe kits for its use, as regulated, for example, under Canadian legislation (see Canada HIV/AIDS Legal Network, 2008).

The lack of baseline studies that could identify alternatives to the high-risk consumption of crack or bazuco – along the lines of methadone programs for heroin users, which aim to reduce harms caused by the use of syringes— currently hinders the development of robust regulatory models. We can, however, define the key challenge – which is to confront the situation in which drug users are left in the hands of

¹¹ Information obtained from www.usdoj.gov/ndic/pubs3/3978/3978p_spanish.pdf

criminal organizations, under the prohibition model. The aim must be to reduce the profits that these organizations can make and to limit the harms caused by substance abuse, harms which are exacerbated by the practice of adulteration (reduction in quality), the purpose of which is to reduce costs and boost revenues.

Lack of information is, therefore, the principal obstacle that must be surmounted in relation to the three types of naturally occurring psychoactive substances – namely, cannabis, coca leaf and heroin. There are, however, some alternative proposals that seek to fill in the gaps left by the paucity of research into cocaine and less pure coca derivatives:

- 1. The anthropologist Anthony Henman argues that a truly beneficial industrialization of coca leaf would aim to convert the consumer of cocaine into a consumer of coca, offering products that both provide the desired effect and respect the complex composition of the entire leaf. Hitherto, one of the great failures of coca leaf industrialization projects has been precisely to repeat the historic error of treating cocaine in isolation, imagining that industrial methods, using chemical solvents, could produce a coca extract that encapsulated all the qualities of the leaf. The great virtue of coca is that it is a natural product; that is what distinguishes it from the refined alkaloid. "Industrialization," then, need not be synonymous with chemical transformation but with a treatment of the leaf to make it more storable; more acceptable to people who don't know how, or who don't wish, to p'ijchar or chew12; and, above all, more easily absorbed, always bearing in mind that the objective is to "re-educate" the demand for cocaine, a demand that already exists... This would be an effective tool for public policies that are guided by the principles of harm reduction, and a way to offer the user a healthy and efficient way to ingest the properties of coca.
- 2. The second proposal is for the development of less costly substitute products from coca leaf, which would allow the addict population access to bazuco and crack in far less damaging and risky conditions. One striking characteristic of the cocaine markets outside the Andean region is that only the most potent and dangerous versions of the drug are available. If less powerful preparations existed

¹² Bolivian word deriving from the Aymara which means "to chew." The Peruvian equivalent is chacchar, which derives from the Quechua word chakchay. In these cultures, coca leaves are mixed with llipta, which is the ash obtained from quinoa, tobacco, corn or any other plant rich in alkaline substances, to which salt may be added. The act of chacchar or p'ijchar is ritualistic or social in the Andean communities of Peru and Bolivia, in magical-religious or social contexts. Colombian indigenous communities use the word mambear to denote the act of chewing coca leaf.

in these markets, users would probably shy away from the more risky ones, in the same way that alcohol drinkers returned to beer and wine in the aftermath of Prohibition in the United States, (Rolles, 2012: 149).

This proposal falls under the framework of harm reduction and also forms part of baseline research initiatives concerning potential substitutes for cocaine obtained from coca leaf and its less addictive derivatives. As such, it would be incorporated into new therapeutic procedures managed by pharmacies, and its delivery for recreational consumption would have as its guiding light the cultural uses of coca leaf, as proposed by Henman. It would not, strictly speaking, be marketed as a new product with commercial aims, a situation which can in itself be problematic.

BASIC REGULATORY MODEL

Cocaine

In principle, it would have two elements: powdered cocaine hydrochloride would be available to licensed users within a retail sales model managed by specialized pharmacists or, in very specific circumstances, doctors (who would write prescriptions); and supply would be completely controlled by the state, or by some state-authorized body.

PROPOSALS FOR THE MANAGEMENT OF CANNABIS

For a comprehensive view of cannabis regulation we need to acknowledge the three uses of the drug to which production is oriented: personal or collective recreational use; industrial production of hemp fiber; and, finally, therapeutic use. For each use there is a different type of production, associated with supply control models and the modes of access enjoyed by the user or users (see Table 3).

Self-cultivation or "home growing" is a recurring practice in which growers are legally permitted to cultivate a predetermined number of plants (the number depends on whether the cultivation occurs indoors or outdoor). Clubs are groups formed to practice self-cultivation, using cooperative methods approved by local authorities. As regards personal use, it is possible too that commercial production could be geared toward consumption in public spaces, along the lines of the Dutch model, and that this system would eventually come under the aegis of agricultural authorities.

Martín Barriuso has proposed that, irrespective of whether the production model is self-cultivation or commercial, there should be a special registry in which the

TYPE OF PRODUCTION	REGULATION OF TRADE AND/OR SUPPLY	DISTRIBUTION
Self-cultivation. Regulation via permission to grow a certain number of plants for personal or collective use (club/cooperative).	1. Private spaces and personal registration.	1. Personal use only.
Policy framework: cannabis culture.	2. Spaces registered with authorities as production sites for non-profit collectives.	2. Cooperatives and clubs must be registered with the authorities, including spaces for collective use.
Agroindustrial*.	Public spaces, e.g. coffee shops. Dutch model.	Sale with alcohol-like restrictions: adults only, limited hours, etc.
Agroindustrial.	Agrarian authority must issue permission for its production/registration.	Regulation, with possible denomination of origin and fibre quality.
Special management of cultivation for medical ends.	Registration with health authority. Ecological certification.	Pharmacies, with medical prescription.
	Self-cultivation. Regulation via permission to grow a certain number of plants for personal or collective use (club/cooperative). Policy framework: cannabis culture. Agroindustrial*. Special management of cultivation for medical	Self-cultivation. Regulation via permission to grow a certain number of plants for personal or collective use (club/cooperative). Policy framework: cannabis culture. Public spaces, e.g. coffee shops. Dutch model. Agroindustrial. Agrarian authority must issue permission for its production/registration. Special management of cultivation for medical

Table 3. Access to cannabis: Purposes, production and regulation

Source: compiled by the author on the basis of experiences in the autonomous Basque and Catalan communities in Spain, the Amsterdam experience, and the recommendations published in 2002 by the Canadian Senate's Special Committee on Illegal Drugs. See bibliography for references.

purpose is specified, whether it be personal use, industrial or therapeutic. Each type of use would fall under a particular regime. Hemp fiber, for example, would belong to one related to textile production. Cultivation for therapeutic use would fall under a regime covering medicinal plants, while personal use would be governed under the framework of non-medicinal drug consumption. All three would have their respective oversight bodies (Barriuso, 2005: 158).

The regulation of self-cultivation carries important implications, such as the formal status of clubs, private consumption, and when to establish commercial crops for public sale.

A European Commission ruling on a question from an Italian legislator regarding the decision by Spanish judicial authorities to punish a group of self-cultivators for having planted cannabis in Spain enables us to glimpse two contrasting areas in regard to cannabis production. The first relates to self-cultivation, which falls

^{*} The policy of permissiveness governing the sale of personal doses of cannabis in Amsterdam is inconsistent in regard to regulation of the supply of the substance to retailers. This has been called the "black hole" or "back door" of the coffee shop experience.

under the jurisdiction of national legislatures and is governed by laws pertaining to production for private consumption; the second relates to commercial crops, which have a potential transnational significance, bringing them under international controls. This situation can be compared to the Dutch experience, in which the issue of supplying coffee shops has not been resolved with sufficient clarity. Leaving aside any impacts - positive or negative - on drug addiction, several difficulties have been observed in connection with the Dutch model. One of these is so-called "cannabis tourism," which has generated controversy in the areas bordering districts where coffee shops are permitted to operate. Such difficulties could be overcome by increasing tolerance toward personal use, enabling greater control over the chain of problems that may result from cultivation directed toward consumption in public spaces. It should be emphasized that from the retail distribution point of view, Dutch municipalities have experienced no public health issues stemming from the permissiveness model, since the intoxication provoked by cannabis is far less toxic, incapacitating and addictive than that provoked by alcohol, stimulants, tranquilizers or pain killers, a conclusion reached by two official studies: the Hulsman Report of 1971 and the Baan Report of 1972, both of which found that the effects of cannabis upon the user depended on the environment in which the drug is offered, sold and consumed (Muñoz and Soto, 2001: 55).

The control of commercially cultivated cannabis used in textile production or for therapeutic purposes, whether using cannabis itself or THC, has a precedent in the control currently exercised by the European wine industry. This could act as a reference point, since it concerns the control of legally established areas in the common European space. Under common regional agreements, vineyards in the EU are subject to stringent record-keeping requirements and to periodic inspections.¹³

Note, by way of example, the kind of sanctions imposed when vineyards fail to apply correct control measures: "Spain, sanctioned for allowing illegal vineyards": "This Tuesday the Court of Justice of the European Union (CJEC) ratified a sanction of 55 million euros imposed on Spain by the Commission in 2008, for permitting illegal vineyards, which were detected during inspections by EU officials in La Rioja, Castilla León, Castilla-La Mancha and Extremadura. The ruling rejects the appeal lodged by Spain against this sanction, and confirms that "the absence of systematic controls on the part of the Spanish authorities" meant that "illegal plots, whose owners had applied neither for regularization nor inscription in the vineyard register" could circumvent "any control." "The obligation to establish an effective system of control and surveillance required that the member state in question established control models that would facilitate the detection of such irregularities through systematic checks on the ground using not only reference charts but also on-site inspections," the Court stated. Finally, the ruling also dismissed the plea lodged by Spain, which was based on the violation of procedural guarantees and the violation of the

Framework agreements between countries for the therapeutic or industrial uses of cannabis will contribute to more rigorous control procedures, in the contexts of both production and commercialization. Such control procedures would also help prevent illegal diversion and could be yet further strengthened through the complementary policies of protection of self-cultivation and prohibition of sale in public places.

As for therapeutic uses of cannabis, administrative action at any link in the chain production planning, importation, exportation, distribution under an advanced license scheme – is underpinned by the existence of scientific research projects working toward the development of clinical trials, thereby providing a legal framework for the execution of the aforementioned activities. In the case of THC14 for therapeutic purposes, some jurisdictions (such as the Spanish) offer a greater degree of latitude for this type of research, exceeding that offered to cannabis itself or to its resin.

As we have repeatedly reiterated, the Dutch experience is interesting in the way it applies to occasional users, though its great problem is not to have resolved the difficulties relating to the supply to retailers.

CONCEPTS AND FOUNDATIONS FOR A PROPOSAL TO REGULATE INTERNATIONAL AVAILABILITY

In light of the aforementioned elements integral to a regulatory strategy, it is clear that few countries have the expertise or conditions needed to develop production

principle of proportionality. Spain had already been fined 33.3 million euros in 2006 for allowing illegal vineyard plantations, but this decision was not appealed." See http://www.europapress.es/ castilla-lamancha/noticia-justicia-europea-sanciona-espana-permitir-vinedos-ilegales-varias-regiones-ellas-lm-20120131115007.html

¹⁴ Tetrahydrocannabinol (THC), also known as delta-9-tetrahydrocannabinol (Δ9-THC), is the principal psychoactive constituent found in cannabis plants. It was isolated for the first time in 1964 by Yechiel Gaoni and Raphael Mechoulam of the Weizmann Institute of Science in Rejovot, Israel. In its purest form, THC is a glassy solid at low temperatures that becomes viscous and sticky when heated. It is barely soluble in water but dissolves easily in most organic solvents, particularly lipids and alcohols. Its pharmacological effects result from its interaction with the cannibinol specific receptors in the brain and throughout the body. Given that the body does not naturally produce cannibinoids, scientific research began to focus on identifying the natural substance that binds with these receptors, which led to the discovery of ananadamide and other substances implicated in this process. Probably it is its affinity for lipophilic substances that makes THC adhere to the (principally neuronal) cell membranes. For more information, see http://es.wikipedia.org/wiki/ Tetrahidrocannabinol.

processes for the most popular psychoactive substances. (This is most true in terms of cocaine and heroin, which is why we can observe more changes occurring in respect to cannabis.) Thus the current situation in which many countries act as transit points must disappear, or at least diminish significantly, eradicating the use of territory and routes that prohibition helps generate as a perverse result of its strategies This must be achieved without ignoring the conditions that favor the criminalization of territorial control in many countries, for reasons both political and social.

According to this control model, which calls for state intervention via strong institutional mechanisms that facilitate the efficient development of the proposed regulatory models, countries which today act as transit points could focus on tackling the problems associated with internal demand, through supply agreements with producer countries.

With these kinds of international agreements, illegal trafficking in coca/cocaine would disappear, assuming that each state has in place an institutional structure to facilitate the regulation to which cocaine would be submitted.

The decline in prices under a regulatory scenario is surprising: according to experts, a gram of cocaine with a purity of 63% would drop from US\$66, its current price under prohibition, to US\$2.78; and a gram of heroin with a purity of 55% would drop from US\$140 to US\$3 (Caulkins and Lee, 2012: 112), an outcome that would collapse the business and force the imposition of a tax levy to guarantee supply.¹⁵

In order to calculate the volumes required for a distribution mechanism overseen by public health agencies, user registration is, at first glance, indispensable. But for that be achieved, it is equally important to have resolved the question of alternatives to the problematic uses of cocaine and its less pure derivatives; responding, for example, to the two initiatives outlined in this proposal – using preparations based on coca leaf or producing less potent and cheaper varieties of cocaine – so as to guarantee broad access based on regulatory models that incorporate medical prescriptions and pharmacy retail.

The disappearance of the role played by transit countries would mean the huge resources currently allocated to the control of illegal trafficking by air, sea, land and river would lose their raison d'être and could instead be devoted to the institutional strengthening needed to guarantee efficient regulation.

¹⁵ See Caulkins and Lee for literature references and details on taxes.

A regulatory policy would also be reflected in a reduction of costs currently incurred as a result of violence associated with illegal drug markets. Both costs and overcrowding in the penitentiary system would be reduced, and further savings would be seen in the justice system and because of the reduction in drug-related corruption on the part of civil and law enforcement officials in both producer and transit countries.

This is a transnational problem that requires inter-state solutions. This is illustrated by those initiatives that aim to only partially control the chain of illegal drugs, or to apply local solutions to a transnational problem, and which either have great difficulties or are shown to be unworkable.

To illustrate the case further, let us take as an example the March 2012 initiative of Guatemalan president Otto Pérez Molina (2012-), two of whose four proposals are "to decriminalize drug trafficking and, secondly, to ensure that consumer countries pay at least half the value of narcotics seized in Central American nations. 16

The decriminalization of drug trafficking would leave intact the organizational structure of the illegal circuit and have no impact upon the system itself, which would continue to supply those markets where there is greatest demand. According to its proposed policy, the Guatemalan state would in practice be favoring drug trafficking through the continuation of anti-drug prohibitionist policies - to the extent that the endpoints of the chain (cultivation and consumption) would be left untouched. As we know, the role of Guatemala in the drugs circuit is largely limited to that of a transit country, albeit one which could contribute conceptually and purposefully to a change of focus in the current strategy, owing to the economic, social and political consequences that have occurred there.

The second proposal is a contradiction of the first, since while the first proposal acts to decriminalize trafficking, the second presupposes – and may even encourage – the continuation of prohibition by raising the possibility that third parties would pay for seized drugs. This could have all kinds of unintended consequences, and is based on the false assumption that drug seizures influence the size and structure of the market. Quite apart from their lack of coherence and rigor, both proposals are limited by being partial initiatives that can only impact trafficking and are not designed to have any effect on the chain's transnational operations. In contrast, this paper proposes, first and foremost, a global policy framework incorporating inter-state agreements between countries implicated in the various operations of the illegal drug circuit.

¹⁶ See, "Presidente Guatemala plantea cuatro rutas para combatir narcotráfico," in La Prensa Gráfica, El Salvador, 24 March 2012.

Secondly, and related to the previous point, this paper acknowledges that the various stages of the illegal circuit have clear differences that demand specific types of implementation of the regulatory model. Initiatives related to distribution models intersect in turn with the types of psychoactive substances and with the results of research into programs for harm and risk reduction.

The most that can be expected of partial initiatives is that they emulate models such as the Dutch or Swiss, which are assisted by the possibilities offered by conventions on the flexible management of issues arising from problem drug use.

Bigger problems, such as those faced by Latin American countries in relation to cultivation, production and distribution, should compel initiatives that address the entirety of the chain, while avoiding the serious inconsistencies found in proposals such as Pérez Molina's.

One of the characteristics of the proposals and new approaches now being developed in Latin America is precisely that they are trying to address all links in the illegal substances chain, from production to consumption, under a comprehensive drug policy framework. This engenders transparency and debate, and proposals for each level, including production and transit from origin countries to consumers (including those in transit points).

A different approach is driving the initiatives of the United States government, which has begun to more clearly distinguish policies related to use – under the leadership of the Office on National Drug Control Policy (ONDCP) – from policies related to the problems caused by trafficking and organized crime. As regards drug consumption, the ONDCP has aligned itself with policies that aim to steer a middle path between the criminalization of addicts on the one hand and legalization on the other. The director of this agency, Gil Kerlikowske, has endorsed the words of Colombian President Juan Manuel Santos (2010–), who declared that "we have the obligation to see if we're doing the best that we can do, or are there other alternatives that can be much more efficient?... One side can be all the consumers go to jail. On the other extreme is legalization. On the middle ground, we may have more practical policies..." According to Kerlikowske:

(...) we could not agree more strongly with this "Third Way," middle ground approach to drug policy in the Americas. When implementing drug policies we must rely on science, not dogma. We must rely on research, not ideology. That is why the President's drug policy we released three weeks ago outlines specific alternatives and actions to take that are compassionate, effective - and most importantly - grounded in science (The White House, Office of the National Drug Control Policy, 2012: 2).

From the above we can detect a shift in the policy discourse, principally in regard to problems associated with consumption. According to Keith Humphreys, an adviser to President Barack Obama (2009-2012; 2013-), this shift is towards a model that emphasizes therapy, and away from one that emphasizes the criminalization of users (Humphreys, 2011: 99).

There have in fact already been some changes, including one in regard to a federal law of 1980 that dictated mandatory (i.e. not subject to a judge's discretion) prison sentences for anyone caught in possession of five grams of crack; such cases caused the prison population to grow exponentially. President Obama changed this situation by eliminating this mandatory sentence for possession of small quantities of this powerful cocaine derivative.

Nonetheless, US policy continues to be defined by its strong stigmatization of drug users and of addicts in particular. This supports a conceptual framework under which certain types of behavior are adjudged to be "normal" and "functional" while others are automatically categorized as "irregular" and "dysfunctional." Users of illegal drugs - which are controlled by law enforcement and therefore associated with criminality - tend to be lumped together under the second pair of characteristics, ignoring the fact that the prohibition model itself is responsible for creating insecure environments.

Furthermore, the Office of National Drug Control Policy is now handling the phenomenon of organized crime less in the context of the overall anti-drugs strategy and more as a problem of illegal structures that threaten national security and have "diversified their portfolio" to include other types of criminal activity, including human trafficking, kidnapping, extortion, intellectual property theft, and so on (The White House, Office of the National Drug Control Policy, 2012: 2 and 3).

Thus in addition to its comprehensive approach, a regulatory policy must break the competitiveness of the illegal drug markets, neutralizing and disincentivizing organized crime structures, including those organizations that make money from the illegal drug economy.

The ONDCP proposals outline the following aims:

- 1. To strengthen criminal justice institutions not only police, but prosecutors, judges, prisons and probation services.
- To strengthen the tools for information collection, analysis, protection of informants and the use of wiretaps, all of which are fundamental to the success of criminal investigations and prosecutions.

- 3. To pursue extraditions, which are helpful for information gathering and for breaking up illegal crime organizations.
- 4. To seize substances and chemical precursors part of the process, along with eradication and alternative development programs, by which drug availability can be reduced.
- 5. To supply technical training to people from both producer and transit countries.

All this within the framework of agreements and multilateral provisions that are already in force.

In sum: public health-oriented addiction management, and the strengthening of traditional and typical law enforcement mechanisms.

As such, this lays out a new framework for the debate over anti-drug strategies; one that turns, according to these formulations, on the contrast between ONDCP-type adjustments and the regulation of the cultivation, production, supply and demand of drugs.

In relation to the perception and handling of problems associated with production and trafficking, European Union strategies are comparable to those of the United States, in that they continue to emphasize *reduction of demand* and *reduction of supply*. In the context of the former, together with prevention and treatment policies, it has become possible to develop heterodox harm reduction programs, which represent very important contributions to a management strategy grounded on the recognition of the rights of addicts.

Nonetheless, under the concept of supply reduction there is a "black box" whose contents are imprecisely inventoried and which has in practice generated an approach similar to Washington's, linked in a general way with the "war on organized crime." And it is right here that we find one of the core features of the new debate being pushed by several Latin American countries.

Throughout this paper, it has been shown that many southern countries are also facing growing costs associated with the implementation of so-called *supply reduction*. And we say "southern" because we are not only talking about producer countries, but also about others in Latin America and Africa where trafficking is growing exponentially, and where the use of illegal psychoactive substances is exacerbating complex phenomena that cannot be reduced to a problem of "organized crime."

Law enforcement actions related to production and transit do not form part of the analysis of the implementation of the current prevailing strategy. In regard to some cases this analysis continues to be anachronistic, by focusing on impacts on price, purity, availability and the perception of market insecurity. This paper has emphasized the chain costs in transit countries (where the phenomenon of the "balloon effect" is being felt) and the expansion of large criminal enterprises across vast tracts of Latin America and Africa.

Current research seeks to analyze the impacts of the use of force in combating entrenched illegal drug markets. For example, the network of researchers from the International Centre for Science in Drug Policy have systematized a representative sample of English-language studies based on comparative analyzes of law enforcement as a strategy in contrasting scenarios. These studies, which were submitted to rigorous review, show that interventions that aim to disrupt markets through the application of force are ineffective in terms of reducing violence attributed to drug trafficking organizations. Indeed, it has been found that such interventions stimulate levels of homicidal violence, and that the methods used to dismantle these organizations have the unintended consequence of increasing the overall level of violence (see International Centre for Science in Drug Policy, 2010).

This type of analysis should appear high on the agenda of countries affected collaterally by the use of force - not merely countries with entrenched drug markets but also those whose territories are being used for new drug trafficking routes. These types of effects have not hitherto been part of the criteria used to evaluate strategies. Nevertheless, they must now be placed at the core of dialogues between Latin American countries and their northern counterparts, in order to address the problems of entrenched drug markets and the presence of epidemic factors in the emergence, growth or stabilization of demand.

The implementation of supply reduction strategies in transit countries must be accompanied by initiatives that aim to generate a critical mass concerning the real dangers of cocaine and its more potent derivatives, such as crack, bazuco, paco, etc. 17 Such initiatives must offer targeted solutions to the problems caused by addiction to these drugs. This critical mass is a strategic support that will be important in terms of several potential scenarios, among them the legalization of cannabis and the opening of a debate on ways to confront the problem of cocaine – a problem that is central to the future of Latin American drug policies.

¹⁷ The lack of scientific evidence related to the care of bazuco addicts has given rise to "trial and error" initiatives, such as the one proposed in Bogota in early March 2013 which suggested supplying marijuana to socially disadvantaged bazuco addicts. For a journalistic analysis, see "Marihuana, ¿la receta contra el bazuco?" El Espectador, 3 March 2013. http://www.elespectador.com/noticias/ bogota/articulo-407916-marihuana-receta-contra-el-bazuco.

This scenario is by no means straightforward. While initiatives to legalize marijuana – a drug that for some analysts represents no more than 2%-4% of the revenue of the Mexican criminal gangs that smuggle it – have been welcomed, there is serious resistance among the population to any comparable strategies for cocaine. It is estimated that a different policy, such as regulation, would count on the support of less than 10% the US population. In the medium term this suggests that winning a majority in Congress – 51 out of 100 senators and 218 out of 435 representatives – would be next to impossible (Humphreys, 2012: 96-97).

To this must be added the stabilization – or, if you will, analyzed in the context of a longer periodic assessment, the decline – of cocaine demand, as a result of the cyclical epidemic process described by Jonathan Caulkins and Peter Reuter. ¹⁸ This has created the impression that the problem in its current shape and form will tend to diminish in the medium to long term.

Another issue is the responsibility and multilateral institutional capacity of Latin American countries to rise to this challenge. While drug policies were given space on the agenda at the 2012 Summit of the Americas, which took place in Cartagena on 14 and 15 April, such policies are all too rarely incorporated into the development of national policies; countries such as Brazil, Venezuela, the ALBA nations and the majority of Central American countries are reluctant to give the issue a high priority. Currently, the initiative is driven by developments in Colombia, Guatemala, Mexico and Uruguay. The other countries are spectators in the process, persevering with worn out formulas (Peru) or addressing the problem in terms of very specific interest biases (Bolivia). This situation is reflected in the lack of progress in discussions on the issue in forums such as UNASUR. Nonetheless, there is an agenda that must be addressed – one that contains questions which, if answered, would have strategic value for the region:

What are the implications for Latin America of the increasingly transnational illegal drugs economy, whose reach stretches far beyond the so-called producer countries?¹⁹

¹⁸ See bibliography for papers by these authors, which explain in detail the theory of epidemic behavior in the demand for psychoactive substances in the United States.

[&]quot;Transnationalization" also refers, among other things, to: the installation of processing laboratories in so-called "transit countries"; the manufacture of precursors for cocaine production as part of the growing practice of import substitution; provision of security services on routes feeding the transatlantic trade, in addition to the never sufficiently disclosed money laundering processes.

- Is it right to continue the strategy of militarizing borders and treating the drugs trade as a security issue, as proposed by the United States and supported by important regional actors such as Brazil?
- Who would lead, and in the context of which institutional mechanisms, a dialogue with North America and Europe on the problem of the economic, political and social costs incurred through the implementation of the supply reduction strategy? This is exactly the context in which regulation initiatives should be discussed, discounting useless models such as so-called "shared responsibility," which are asymmetric in terms of the homicidal violence associated with law enforcement actions.
- What kind of agreements should be reached to facilitate the management of assets seized from drug trafficking organizations in the region, if we take into account the large sums of money laundered in Latin America and the growing influence of leading drug traffickers in neighboring countries? For example, Colombian drug barons have invested considerable sums in Brazil, Venezuela, Panama, Chile and Argentina, among other countries. A related question is: What are the opportunities for civil society's participation in the deliberative process concerning what should be done with these resources?

Last but not least, there is this crucial aspect of the regional approach: Are the countries in the region willing to take on the growing links between drug trafficking (and organized crime in general) and national political structures, which has been achieved through the exercising of territorial control, with profound consequences for these states' institutional mechanisms? Or will they continue to keep this situation hidden from view, thanks to the multiple perks enjoyed by political classes on account of their criminalization?. The resolution of questions of this kind would bring some serious content to the frustrating multilateral gaps that have emerged and which continue to engender bureaucratic processes that do nothing to achieve the results Latin American civil society is hoping for.

REFERENCES

Abraham, Manja D., Peter Cohen, Roelf-Jan van Til and Mariëlle A. L. de WINTER, 1999. Licit and Illicit Drug Use in the Netherlands, 1997. CEDRO Centrum voor Drugsonderzoek, Universiteit van Amsterdam. Amsterdam.

Abreu, Sergio, Brad Hittle, Kimberly Covington, Peter Hakim and Ray Walser, 2012. "Should Governments sell street drugs to their citizens?" Interamerican Dialogue. Latin America Advisor.

- Barriuso, Martín, 2005. "Propuesta de modelo legal para el cannabis en el estado español." Eguzkilore. Cuaderno del Instituto Vasco de Criminología. 19. San Sebastián.
- CANADA HIV/AIDS LEGAL NETWORK. 2008. "Distributing safer crack use kit in Canada."
- Canada. Parlament. Sénat. Comité spécial sur les drogues illicites. 2003. Le cannabis: rapport du Comité spécial du Sénat sur les drogues illicites. Version abrégée. Les Presses de l'Université de Montreal, Montreal,
- CAULKINS, JONATHAN P. AND PETER REUTER. 2010. "How Drug Enforcement Affects Drug Prices." Crime and Justice: A Review of Research. 39.
- Caulkins, Jonathan P., Alessandra Gragnani, Gustav Feichtinger and Gernot TRAGLER. n.d. "High and Low Frequency oscillations in Drug Epidemics." Mimeo.
- Caulkins, Jonathan and Michael Lee. 2012. "Legalizing Drugs in the US: A solution to Mexico's Problem for which Mexico Should not Wait." In Ernesto Zedillo and Haynie Wheeler (eds.). Rethinking the War on Drugs Trough the US-Mexico *Prism.* Yale Center for the Study of Globalization.
- CITY OF AMSTERDAM, COMMUNICATIONS DEPARTMENT. 1997. "The Amsterdam drug policy."
- Duzán, María Jimena. 2010. Mi viaje al infierno. Editorial Norma. Bogotá.
- European Monitoring Centre for Drugs and Drug Addiction. 2011. Drug Policy Profiles: Portugal. European Monitoring Centre for Drugs and Drug Addiction. Lisbon.
- EUROPEAN MONITORING CENTRE FOR DRUGS AND DRUG ADDICTION AND EUROPOL. 2013. EU Drug Markets Report. A Strategic Analysis. European Monitoring Centre for Drugs and Drug Addiction-Europol. Lisbon, The Hague.
- EVERINGHAM, SUSAN S. AND C. PETER RYDEl. 1994. Modeling the demand for cocaine. RAND. Santa Monica, CA.
- EXECUTIVE OFFICE OF THE PRESIDENT OF THE UNITED STATES-OFFICE OF NATIONAL Drug Control Policy. 2012. National Drug Control Strategy. Executive Office of the President of the United States. Washington.
- FEDERACIÓN DE ASOCIACIONES CANNÁBICAS, n.d. "Clubes sociales de cannabis: una experiencia de normalización en marcha."
- HENMAN, ANTHONY RICHARD, n.d. "Coca buena/cocaína mala: más allá de una falsa dicotomía". Mimeo.

- INTERNATIONAL CENTRE FOR SCIENCE IN DRUG POLICY. 2010. Effect of Drug Law Enforcement on Drug-Related Violence: Evidence from a Scientific Review. International Centre for Science in Drug Policy. Vancouver.
- KLEIMAN, MARK A. R. 2012. "Targeting Drug-Trafficking Violence in Mexico: An Orthogonal Approach." In Ernesto Zedillo and Haynie Wheeler (eds.). Rethinking the War on Drugs Trough the US-Mexico Prism. Yale Center for the Study of Globalization. New Haven.
- Markez, Ińaki, Mónica Polo, Cristina Merino and Carlos Romera. 2002. Cannabis: de la salud y del derecho. Acerca de los usos, normativas, estudios e iniciativas para su normalización. Observatorio Vasco de Drogodependencias. Vitoria-Gasteiz.
- Muńoz Sánchez, Juan and Susana Soto Navarro. 2001. "El uso terapéutico del cannabis y la creación de establecimientos para su adquisición y consumo." Revista de Derecho Penal y Criminología. Segunda época. 7.
- NIDA, NATIONAL INSTITUTE ON DRUG ABUSE. 2012. "Tendencias nacionales." In Drug Facts.
- —. 2010. "Cocaine: Abuse and Adiction. 2010". Resarch Report Series. 7.
- OFFICE FÉDÉRAL DE LA SANTÉ PUBLIQUE (OFSP). 2006. La politique suisse en matière de drogue. Trosième programme de mesures de la Confédération en vue de réduire les problèmes de drogue (ProMeDro III) 2006-2011. Federal Office of Public Health. Berne.
- REINARMAN, CRAIG, PETER D. A. COHEN AND HENDRIEN L. KAAL. 2004. "The Limited Relevance of Drug Policy: Cannabis in Amsterdam and in San Francisco." American Journal of Public Health. 94 (5).
- REUTER, PETER. 2006. "Sobre la coherencia de la política de Estados Unidos hacia Colombia." In Álvaro Camacho (ed.). Narcotráfico: Europa, Estados Unidos, América Latina. Universidad de los Andes-Ceso. Bogotá.
- Rolles, Steve. 2012. Después de la guerra contra las drogas: una propuesta para la regulación. Transform Drug Policy Foundation. Bristol.
- Sous-commission Drogue de la Commission fédéral des stupéfiants. 1996. Scénarios pour une politique de la drogue. Secretariat, Federal Office of Public Health. Berne.
- STEVENS, ALEX, MIKE TRACE AND DAVE BEWLEY-TAYLOR. 2005. "Reducing Drug Related Crime: An Overview of the Global Evidence." The Beckley Foundation Drug Policy Programme. Oxford, UK.

- TÉLLEZ, JAIRO AND MIGUEL COTE. 2005. "Efectos toxicológicos y neuropsiquiátricos producidos por el consumo de cocaína." Revista de la Facultad de Medicina. 53 (1). January-March.
- THE WHITE HOUSE, OFFICE OF THE NATIONAL DRUG CONTROL POLICY. 2012. "Remarks by director Kerlikowske before the Inter American Drug Abuse Control Commission." Washington. May 9.
- Transform Drug Policy Foundation. 2007. After the war on drugs. Tools for the Debate. Transform Drug Policy Foundation. Bristol.
- Transnational Institute (TNI). 2006. "El paco bajo la lupa. El mercado de la pasta básica de cocaína en el Cono Sur." Drogas y Conflicto. Documentos de Debate. 14. October
- US DEPARTMENT OF JUSTICE. NATIONAL DRUG INTELLIGENCE CENTER. 2011. The National Drug Threat Assessment. 2011. US Department of Justice. Washington.
- —. 2007. The National Drug Threat Assessment. 2006. U. S. Department of Justice. Washington.
- US Department of State. Bureau for International Narcotics and Law En-FORCEMENT AFFAIRS. 2012. International Narcotics Control Strategy Report. Volume I. Drug and Chemical Control. US Department of State. Washington.
- UNODC. 2010. Crime and Instability, case studies of transnational threats. UNODC. New York.
- ———. 2012. Informe mundial sobre las drogas 2012. United Nations-UNODC. New York.
- ———. 2012a. Criminalité Organisee et Instabilité en Afrique Central. Une évaluation des menaces. UNODC. Vienna
- —. 2012b. Misuse of Licit Trade for Opiate Trafficking in Western and Central Asia. A Threat Assessment. UNODC.
- -. 2011. "The transatlantic cocaine market." Research Paper.
- WHO/UNICRI. 1995. "The cocaine Project," 1995.

Press references

- El Economista. "La frontera y el precio de las drogas." México, 14 October 2012.
- El Espectador. "Marihuana, ;la receta contra el bazuco?" Bogotá, 3 March 2013.

http://www.elespectador.com/noticias/bogota/articulo-407916-marihuanareceta-contra-el-bazuco.

La Nación. "Logran determinar qué es el paco." 4 September 2009.

La Prensa Gráfica. "Presidente Guatemala plantea cuatro rutas para combatir narcotráfico." El Salvador, 24 March 2012.

The Economist. "The case for legalization." 26 July 2001.

INTERNET SOURCES

www.europapress.es/.../noticia-justicia-europea-sanciona-espana-per... www.usdoj.gov/ndic/pubs3/3978/3978p_spanish.pdf

Appendix 1 An index ranking drugs according to risk1

DRUGS: THE REAL BUSINESS

This is the first classification based on scientific evidence concerning the harm to individuals and to society. It was conceived by government advisers but then ignored by ministers on account of its controversial findings (The Independent, Tuesday, 1 August 2006).

1. HEROIN (CLASS A)

- Origin: mostly from poppy fields in Afghanistan.
- Medical effect: analgesic derived from opium poppies. Can be injected to produce a "rush," or smoked. Users feel lethargic, but can experience severe cravings.
- No. of users in United Kingdom: 40,000
- Deaths in United Kingdom in 2004: 744
- Street value: £30-£100 per gram
- Mean harm score: 2.75/3

2. COCAINE (CLASS A)

- Origin: made from coca plants grown in Colombia and Bolivia.
- Medical effect: Stimulant produced from the coca leaf. Induces heightened state of alertness and confidence but increases heart rate, pulse and blood pressure, and users crave repeat doses of the drug.
- No. of users in United Kingdom: 800,000

This index was designed by UK government advisors using relevant data for this country, but it has not been factored into policy decisions on account of its controversial findings. Nonetheless, the classification may be useful to illustrate the discussion presented in the section: Policy options: towards the regulation of drugs.

Deaths in United Kingdom in 2004: 147

Street value: £30-£55 per gram

♦ Mean harm score: 2.25/3

3. BARBITURATES (CLASS B).

- Origin: synthetic drugs produced in the laboratory; once common in clubs and discos
- Medical effect: powerful sedatives. Widely prescribed as sleeping pills, but dangerous in cases of overdose. Now largely supplanted by safer drugs.
- No. of users in United Kingdom: very few
- Deaths in United Kingdom in 2004: 14
- Street value: £1-£2 per pill
- Mean harm score: 2.1/3

4. STREET METHADONE (CLASS A)

- Origin: synthetic drug, similar to heroin but less addictive.
- Medical effect: comparable to that of morphine and heroin. Used to wean addicts off those drugs, thanks to its less powerful effects. Street product can be contaminated.
- No. of users in United Kingdom: 20,000
- Deaths in United Kingdom in 2004: 200
- Street value: £2 per dose
- Mean harm score: 1.9/3

5. ALCOHOL (LEGAL)

- Origin: produced throughout the world, in many different forms.
- Medical effect: depresses the central nervous system. Used to reduce inhibitions and improve sociability. High doses can cause intoxication, coma and respiratory failure.
- No. of users in United Kingdom: the majority of adults

- ♦ Deaths in United Kingdom in 2004: 22,000
- ♦ Street value: £2.25 per half liter of lager beer.
- ♦ Mean harm score: 1.85/3

6. KETAMINE (CLASS C)

- Origin: anesthetic drug popular on the club and "rave" scene.
- Medical effect: intravenous anesthetic used for animals and humans; causes hallucinations when taken in pill form.
- ♦ No. of users in United Kingdom: unknown
- Deaths in United Kingdom in 2004: unknown
- ♦ Street value: £15-£50 per gram
- ♦ Mean harm score: 1.8/3

7. BENZODIAZEPINE (CLASS C)

- ♦ Origin: tranquilizer used to combat anxiety and insomnia.
- Medical effect: most prescribed tranquilizer. An efficient sedative which reduces anxiety but is very addictive.
- ♦ No. of users in United Kingdom: 160,000
- ♦ Deaths in United Kingdom in 2004: 206
- Street value: prescribed drug
- ♦ Mean harm score: 1.75/3

8. AMPHETAMINE (CLASS B)

- Origin: synthetic stimulant that can be snorted, mixed with drinks or injected.
- Medical effect: artificial drug that increases pulse rate and heightens alertness.
 Users may feel paranoid. A new form, methamphetamine, is addictive.
- ♦ No. of users in United Kingdom: 650,000
- ♦ Deaths in United Kingdom in 2004: 33
- ♦ Street value: £2-£10 per gram
- ♦ Mean harm score: 1.7/3

9. TOBACCO (LEGAL)

- Origin: the majority of leaves come from the Americas.
- Medical effect: contains nicotine, a highly addictive stimulant. Causes lung cancer and raises the risk of heart disease.
- No. of users in United Kingdom: 12,500,000
- Deaths in United Kingdom in 2004: 114,000
- Street value: £4.50 per pack
- Mean harm score: 1.65/3

10. BUPRENORPHINE (CLASS C)

- Origin: can be made in a laboratory
- Medical effect: a more expensive alternative to methadone used to wean addicts off heroin. Preferred by some addicts because it leaves them with a clearer head.
- No. of users in United Kingdom: unknown
- Deaths in United Kingdom in 2004: unknown
- Street value: unknown
- ♦ Mean harm score: 1.55/3

11. CANNABIS (CLASS C)

- Origin: an easy plant to cultivate in temperate climates.
- Medical effect: the leaves or resin can be smoked or ingested. It's relaxing, but the more potent strains can cause hallucinations and panic attacks.
- No. of users in United Kingdom: 3,000,000
- Deaths in United Kingdom in 2004: 16
- Street value: £40-£100 per ounce
- Mean harm score: 1.4/3

12. SOLVENTS (LEGAL)

- Origin: organic mixture found in glues, paints and lighter fluids.
- Medical effect: includes glues, gas lighters, some aerosols and paint thinners. Causes euphoria and loss of inhibitions, but may also provoke memory loss and death.
- ♦ No. of users in United Kingdom: unknown
- Deaths in United Kingdom in 2004: unknown
- ♦ Street value: unknown
- ♦ Mean harm score: 1.3/3

13. 4-MTA (CLASS A)

- Origin: derived from amphetamine, with similar effects to those provoked by ecstasy.
- Medical effect: similar to that of ecstasy. The pills are also known as "flatliners."
 It's a popular dance drug that causes feelings of euphoria.
- No. of users in United Kingdom: unknown
- ♦ Deaths in United Kingdom in 2004: unknown
- ♦ Street value: unknown
- ♦ Mean harm score: 1.30/3

14. LSD (CLASS A)

- Origin: synthetic hallucinogenic drug, popular in the 1960s
- Medical effect: artificial drug with powerful perception-altering effects, including hallucinations and loss of the sense of time. A "bad trip" can provoke anxiety.
- ♦ No. of users in United Kingdom: 70,000
- Deaths in United Kingdom in 2004: unknown
- ♦ Street value: £1-£5 per pill
- ♦ Mean harm score: 1.2/3.

15. METHYLPHENIDATE (CLASS B)

- Origin: medically similar to amphetamines.
- Medical effect: chemical name of Ritalin, a stimulant used to treat children with attention deficit disorder and hyperactivity, helping them to concentrate.
- No. of users in United Kingdom: unknown
- Deaths in United Kingdom in 2004: unknown
- Street value: unknown
- Mean harm score: 1.2/3.

16. ANABOLIC STEROIDS (CLASS C)

- Origin: hormones used by bodybuilders and athletes.
- Medical effect: synthetic drug with an effect similar to testosterone. Used by bodybuilders to boost muscle mass.
- No. of users in United Kingdom: 38,000
- Deaths in United Kingdom in 2004: unknown
- Street value: £7.99 per pill
- ♦ Mean harm score: 1.15/3.

17. GHB (CLASS C)

- Origin: synthetic drug, sold as liquid ecstasy.
- Medical effect: gamma-Hydroxybutyric acid, the "date rape" drug, is a tranquilizer and relaxant. It reduces inhibitions but can cause muscle stiffness and more serious side effects.
- No. of users in United Kingdom: very few
- Deaths in United Kingdom in 2004: 3
- Street value: £15 per bottle
- Mean harm score: 1.1/3.

18. ECSTASY (CLASS A)

- Origin: synthetic drug sold as pills; a popular dance drug.
- Medical effect: MDMA or similar chemical substances. Increases adrenaline and causes feelings of well-being but also anxiety and increased body temperature.
- No. of users in United Kingdom: 800,000
- Deaths in United Kingdom in 2004: 33
- Street value: £1-£5 per pill
- Mean harm score: 1.05/3.

19. AMYL NITRATE (LEGAL)

- Origin: liquid, commonly known as "popper"; inhaled.
- Medical effect: provokes a strong but short-lived burst of energy and well-being which subsides rapidly and can leave the user with a strong headache.
- No. of users in United Kingdom: 550,000
- Deaths in United Kingdom in 2004: unknown
- Street value: £2-£6 per 10 ml
- Mean harm score: 0.95/3.

20. KHAT (LEGAL)

- Origin: plants with green leaves, cultivated in South Africa.
- Medical effect: a natural stimulant, its leaves are chewed to provoke feelings of well-being and happiness. Popular in the Somali community.
- No. of users in United Kingdom: 40,000
- Deaths in United Kingdom in 2004: very few
- Street value: £4 per bunch
- Mean harm score: 0.80/3.

Proposals to Regulate the Retail Sale and Consumption of Plant-Based Drugs

Eduardo Vergara*

INTRODUCTION

This paper presents proposals to regulate the use and sale of small amounts of plant-based drugs. It also examines the current state of consumption and retail sale of these drugs around the world, with emphasis on Latin America, and in doing so reviews the current costs of the drug consumption and trafficking structure that exists in parallel to the legislative and regulatory state. In addition, it presents the potential benefits that regulation would offer, taking into account differences between countries and settings. It then reviews the main incentives for consumers and dealers, in order to better inform the cost-benefit analysis of possible public policies. The paper concludes with the presentation of general and specific proposals for regulating the consumption and retail sale of such drugs.

CURRENT STATUS OF CONVENTIONAL DRUG PARADIGMS: THE 'WAR ON DRUGS,' PROHIBITION, AND TODAY'S MARKETS

There is some international consensus that neither the drug war nor the prohibition model have met their goals of reducing consumption and trafficking-related violence. Although many view this as a failure, for others it is simply a sign that the real war on drugs has not yet begun. That said, there is almost complete consensus that drug policies have not yielded the expected results.

In spite of this consensus and relative progress, we have yet to see any concrete proposals on how to prevent these dynamics from continuing to generate poor results. For this reason, debates about the subject are dominated by superficial propos-

^{*} Special thanks to Zara Snapp for helping with this investigation, generating data, and contributing valuable ideas.

als that are either simplistic or mere dichotomies that are polarized over whether or not to legalize or decriminalize. Only in recent years has the debate over drug consumption dropped old assumptions in order to make way for a greater degree of evidence-based pragmatism.

In general terms, in the current debate one finds more solid, evidence-based arguments that ignore taboos and moral barriers; positions that cross political boundaries; and the participation of a variety of stakeholders including former heads of state, Members of Parliament, academics, experts, drug users and civil society representatives. This, however, is not enough. A problem this complex, characterized by effects on diverse sectors of society, requires a serious analysis that allows one to step back from dichotomies and polarization and put all the available tools on the table in order to facilitate scenario evaluation, decision making and the design and implementation of new public policies.

Drug policies focused on repression will go down as one of history's greatest public policy failures. In this context, it is necessary to present concrete proposals that provide options and minimize the uncertainties generated by this debate. The current instability is worrisome, notes Moisés Naim, who, referring to the drug policy debate, says that, "Governments around the world are fighting a new phenomenon with outdated tools, inadequate laws, inefficient bureaucratic agreements and inefficient strategies. Not surprisingly, the evidence shows that the governments are losing" (Naím, 2003). To his list we should add the insecurity to innovate and present bold proposals in scenarios usually dominated by fear.

The distance between international conventions, new proposals and reality is great. For example, in many countries characterized by strong rhetoric promoting their respect for human rights, one finds the greatest distance between that rhetoric, law enforcement and real respect for the people's rights. Whether it is the brutal way in which the drug war is waged against organized crime and drug trafficking, the archaic and inhumane rehabilitation techniques used in some countries, or the savage treatment received by users when they are arrested and imprisoned, we are faced with a stage full of contradictions between rhetoric and practice, something that often confuses those who do not address the issue in a multidisciplinary way.

It seems illogical that despite technological, military and scientific advances, no efficient alternatives have been developed to improve the field of drug policy. Moreover, it seems that members of organized crime have benefited the most from globalization and technological advances: globalization has increased their innovation, interactivity and development of illicit markets, while government strategies have not kept up. From the advent of communication tools such as cell phones in the 1990s

to the current use of social networking platforms that allow ever greater anonymity, these advances have become key elements that organized crime has used wisely. In a way, their ability to innovate and adapt to compete and survive is enviable.

The trafficking of drugs, weapons and even people, along with money laundering and piracy, are deeply interconnected by their illegality and dynamic nature. All these problems share common elements that facilitate the creation of proposals to control and regulate them, and to unify them along regulatory criteria. It almost sounds ironic, but it is possible to learn important lessons from illegality to later use inside the law. Moreover, the illicit markets mentioned above are very successful in financial and growth terms. It is estimated that the drug trade is over US\$300 billion per year, while the arms trade generates more than US\$1 billion (see UNODC, 2007: 169), and in the case of human trafficking, earnings reach US\$7 billion per year, making it the fastest growing business in the hands of organized crime.

These activities occur in places where one sees the greatest advances of the modern world. For organizations engaged in these businesses, geography and distance have ceased to be an impediment. Their administrative structures are dynamic, fragmented and less hierarchical, which allows for a mobility and speed of action that is virtually impossible to counter. In addition, their membership is characterized by being international and diverse. Joined by common goals and incentives, people of various nationalities make up action squads that can be anywhere in the world with little difficulty. The rules of the game are flexible and often are guided by the needs of the moment. Their ability to adapt means that momentary efficiency is given precedence over any kind of structured plans. All these features are almost diametrically opposite to those of the organizations that are trying to combat them, usually from a great distance. In addition, there are also regulatory factors that have benefited a range of illicit activities. The relationship between economic openness and the drug trafficking depends on multiple factors related to new opportunities for mobility, the increase in the movement of goods and the increase in the amount of cargo that is not inspected. Drug trafficking has taken advantage of the benefits offered by globalization in the best possible way.

Uncertainties in illegal markets are not very different from those that exist in legal ones. In both cases, they have to do with financing, production, sale, exchange, and regulation. While in legal trade the supply can be threatened by natural events,

¹ See evaluation studies based on UN statistics, such as "Creating crime, enriching criminals", from Count the Costs. http://www.countthecosts.org/seven-costs/creating-crime-enriching-criminals

labor actions, rule changes, etc., illegal trade can be affected by factors as diverse as increases in police actions or momentary disruptions of criminal networks, among others. But despite the limited damage these strategies have inflicted on criminal organizations, at no time have they managed to reduce drug use or diminish the power of those who sell drugs.

In both legal and illegal markets, external factors are capable of altering, directly or indirectly, the relative availability of a substance or product. In such uncertain scenarios, those who participate in the market are forced to develop alliances with other players to help minimize their uncertainty. In the case of illegal markets, alliances are responsible for later expansion. In other words, after weaving ties to other markets, the actors often find that these new markets are as profitable as their own, and subsequently tend to diversify their own product mix. This is how drug traffickers who form alliances with weapons dealers, for example, often end up captivated by this new market and decide to participate in it. Once this occurs, there are often multiple conflicts and, once they've concluded, the winners usually return with greater power. In this way, the legal repression of these markets has helped to strengthen a smaller group of actors and concentrate their power.

CONSUMPTION OF DRUGS UNDER LEGAL PROHIBITION

In 2000, 132 countries and territories said they had drug abuse problems. The highest consumption was of plant-based drugs, with cannabis used in 96% of countries; opioids in 87%; cocaine-like substances in 81%; and 75% reporting heroin use. The abuse of heroin and cocaine was more extensive than that of intermediate products – opium/morphine or coca leaf – which are usually consumed in places closer to production areas. Although cannabis is the most widely used drug in the world, according to the United Nations (UN), there are not many health or social problems associated with it.

The UN estimates that in the 1990's, 180 million people worldwide – 4.2% of the population fifteen years and older – used illicit drugs. This amount includes 144 million cannabis users; 29 million users of stimulants such as amphetamines; 14 million cocaine users; and 13 million opioid users, 9 million of whom were heroin addicts. During 2010, about 230 million people, or 5% of the world population, had used an illicit drug at least once. Of these, 27 million were problematic users, or about 0.6% of adults (UNODC, 2012).

CONSUMPTION: COSTS, LEGISLATION AND ACTORS

THE WAR ON DRUG USE IN THE UNITED STATES AND EUROPE

Mainly due to the myopia of the UN conventions of 1961, 1971 and 1988, during the last fifty years, the predominant trend has shown that repression has been unable to reduce the market for illegal drugs, much less their consumption.

Prohibitionist policies, which aimed for a world free of drugs, were born in the United States and were characterized by the constant use of repressive methods against a variety of social and racial groups. The first steps of this prohibitionist policy occurred during the California gold rush, when the arrival of Chinese migrants gave way to the birth of opium dens in the city of San Francisco. An ordinance of November 15, 1875 was perhaps the first step in the war on drugs. Under the ordinance, the opium dens were closed and all opium consumption that was not strictly medicinal was prohibited. While San Francisco at the time was the largest port of entry for the drug, the closing of the dens was also a method of eradicating the Chinese population of the city. This case launched the prohibitionist policies that have been used since as a tool of discrimination. Not only opium was seen this way: the same occurred with heroin and cocaine at different times, always through direct relationships with certain social groups or races.

(...) heroin, cocaine and marijuana were perceived as anti-American, in ways that alcohol, cigarettes and prescription drugs never were. The xenophobia and racial fears that inspired the first drug legislation still influences our policies (Falco, 1997).

With alcohol prohibition, initiated by some states in 1907, the concept was expanded to prohibit a widely consumed drug. Then, in 1920, the national alcohol ban launched an era that saw the growth of mafias that trafficked in alcohol, leading to the birth of groups that found big business in illegal drug trafficking. In a way, Prohibition benefitted the mafia.

In the history of prohibition, the most symbolic milestone in the direct war against certain drugs was marked by President Richard Nixon (1969-1973, 1973-1974) after calling a national commission to study the matter:

In 1971, President Nixon convened a National Committee against the abuse of marijuana and drugs, composed of obviously conservative citizens. This commission concluded that marijuana ought to be decriminalized, although it alerted against excessive liberalization. [...] (Thoumi, 2002).

Despite these recommendations, in 1972 President Nixon officially declared the war on drugs, something that did not stop expanding throughout the world. For Robin Room of the *Turning Point Alcohol and Drug Centre* in Australia, the main point is that

UN policies define problems in terms of crime and not of public health. The argument that Ban [Ki-moon] puts forward is basically a call to redouble a policy that has failed in practice and that is, I think, immoral (Morris, 2010).

This pessimism about current policy is shared by Antonio María Costa, former director of the United Nations Office on Drugs and Crime (UNODC), who has gone further to say that, "if many wide-ranging and multidimensional issues related to drugs and crime are not addressed, many of the millennium development goals of the UN will not be met in numerous countries" (Morris, 2010). In other words, today's costly and ineffective methods are absorbing the resources needed to move forward in a dialogue based on evidence and harm reduction so as to avoid past mistakes.

At the center of this debate is the need to declare some drugs legal and others illegal. At the end of the day, what is being sought is a way to differentiate between drugs that are tolerated by society and those that end up being publicly repudiated by institutions that prohibit them. However, between these extremes there is reality, which speaks of legal vices, concessions and degrees of tolerance developed to turn a blind eye to the use of certain drugs in certain places and times. Francisco Thoumi sheds light on these degrees of tolerance, which are and always have been present in our societies. He says:

The use of psychoactive drugs has been controlled in various ways: by punishing those involved; controlling usage through the process of socialization; applying gentle or subtle social pressures; ritualized drug use (religious ceremonies, rites of passage); allowing drug use by chosen groups (shamans, for example); or establishing holiday periods during the year during which they can be used (Thoumi, 2002).

This analysis shows that, because they are a construction of reality based on observations and cost-benefit ratios, policies towards drugs often evolve with their societies. This could be a reason for optimism because, with better tools and evidence, it offers a possible exit from the current precarious state of the debate. The magnitude of our flawed focus on drugs and crime, and its direction causal relation to immense setbacks in terms of development, security and equity, is clearly defined by the document "Legislative Innovation in Drug Policy", from the Transnational Institute:

The overly repressive enforcement of the global prohibition regime has caused much human suffering, disrupting family lives and subjecting those convicted to disproportionate

sentences in often abominable prison conditions. It has overburdened the judicial system and prison capacity and has absorbed huge resources that could have been made available for more effective treatment, harm reduction and crime prevention programs, as well as to allow law enforcement to focus on organized crime and corruption (Jelsma, 2009).

But the errors of this war are not limited to local effects. Repressive enforcement policies are not effective in eradicating drug trafficking and organized crime; they simply displace them. As we have noted, the cost of this failed war is alarming and perhaps, given the secrecy with which it has been handled, the real damage is unknown. Expenditures on repressive policies have been primarily geared towards counternarcotics programs in countries like Colombia, Bolivia, Peru and Mexico. The results of this investment can be seen on two fronts: 1) that Latin America remains the largest exporter of cocaine and marijuana into the United States, and 2) that to survive and grow, the cartels have to pack their bags and move to places where they can continue operations. To continue under the current logic offers little hope for a prompt resolution.

THE USER AS BUYER AND PART OF THE MARKET

Consumers of drugs, both legal and illegal, are in constant interaction with the market. Whether they are buying regulated tobacco or alcohol or unregulated illegal drugs, they are always confronted with the basic conditions under which markets operate. While supply and demand operate in different ways depending on market and product characteristics, in all illegal markets the relationships between buyers and sellers are characterized by interactions that are often unstable and unpredictable and, especially in the case of the purchase and sale of illegal drugs, very unsafe.

Moving forward, there are certain concepts that are useful to analyze in the context of illegal markets, as to understand them helps one understand the relationships generated in these spaces and how consumers in particular are affected when interactions are not regulated. In the case of illicit drug transactions, in most cases the user not only participates in an illegal operation, but also becomes an active part of an illegal activity. By participating, he exerts some power from the demand side of the equation, but he does so in conditions in which those who manage supply are much more empowered actors. In other words, the consumer experiences a level of vulnerability that does not occur in legal, regulated markets, sometimes to the level that he becomes a victim. The major traffickers are those who impose the rules, set the prices and control the markets. To that end, let us examine several concepts.

Opportunity cost

In most cases, the opportunity cost is defined by the need for drugs, which is often:

1) Immediate, either because consumer decisions are not planned or because the carrying of drugs and their associated transactions are penalized. In the latter situation, the user tries to minimize the duration of the transaction as well as the time during which these substances remain in his possession. Both processes are efficient when they are limited to the least amount of time possible. This efficiency is shared by those who manage supply, mainly in retail, as they too are in a hurry to finish these interactions as quickly as possible. 2) Thwarted by a lack of supply. Being that the supply has limited availability in many cases, the consumer does not always have the opportunity to buy what he wants; indeed, the supply is characterized by being very unstable and vulnerable to being shut down in most cases. In general terms, the supply is often less than the demand, at least in terms relative to the consumer's available access. As such, opportunity cost plays a major role in how transactions occur, especially in pricing.

Pricing

Pricing has more to do with costs associated with production and sales, mainly in terms of the insecurity and vulnerability faced by the sellers, and less so with the processes of growing and processing. This vulnerability is caused by the lack of formal safeguards; as such, the constant uncertainty of taking part in an illegal activity means that the only institutional structures that can provide support and protection are organized crime groups, which, in a sense, operate as protective entities and guarantors for the street level business. These groups also increase post-production prices, when one includes the costs that they must take on as a result of the risks. Several estimates have attempted to define the effects of these costs on final prices. In the UK, for example, an estimated 24% of the final price of cocaine goes toward offsetting the cost of going to jail (Stevens and Wilson, 2008); other studies estimate that 33% of the final cost is used to compensate dealers in case of death (Caulkins and Reuter, 1998).

To understand price composition, one must compare the different scenarios that go toward generating the final price. For the drug to reach the buyer/user, it has to go through different stages, consisting of links that little by little generate a structure that ultimately defines the price the consumer pays for a personal dose (or for larger amounts for consumption). For example, if we take prices of different types and quality of cannabis in Chile, we can build a progressive sequence that helps us understand the price composition in several major purchase scenarios: 1) the purchase of

cannabis produced *en masse* for large scale distribution; 2) the purchase of cannabis produced on a medium scale for relatively limited distribution; and 3) personal consumption from personal cultivations. Figure 1 shows these three scenarios and the composition of the final price.

The main difficulty in comparing prices between the different scenarios has to do with the quality of cannabis offered. For example, the major difference between Scenario 1 and Scenario 2 is the ability in Scenario 2 to cultivate cannabis of better quality in controlled, small spaces, which results in a higher average price-per-gram than in Scenario 1. It is therefore not possible to directly compare the final price of mass production, which tends to offer cannabis of low quality and therefore low prices, with the price offered by personal growers who provide high quality cannabis that, because of its perceived value, is much more expensive. It would be logical, then, to modify the first scenario by assuming that the cannabis produced was of high quality. Under this assumption, prices would increase dramatically, resulting in prices much higher that the current street price. On the other hand, if the qual-

1.- Massive crops for large markets of low-quality cannabis
\$ [Security, surveillance] + [Crop] + [Transportation] + [Distributors] + [Sellers] = \$ [Consumer]

[\$ of 1 gram of low quality] = [from US\$0.50 to US\$20 + insecurity]

2. Mid-sized crops for local markets of low-quality cannabis
\$ [Basic security] + [Crop] + [Sellers] = \$ [Consumer]

[\$ of 1 gram of medium to high quality] = [from US\$1 to US100 + insecurity]]

3. Small crops for personal use/friends
\$ [Crop] = \$ [Consumer]

[\$ of 1 gram of medium to high quality] = [from US\$1.50 to US\$2 + security]

Figure 1. Three scenarios for cannabis purchases in Chile

Source: Prepared by the author.

ity of the cannabis grown in Scenario 2 were equal to that in Scenario 1, the prices of the second scenario would be lower than the first, mainly because the costs would be associated with a much smaller supply chain, which in turn would imply lower transportation and security costs. In this comparison, personal cultivation (Scenario 3) is extremely competitive, as it has a production cost per ounce between \$1.50 and \$2, depending on the harvest year. Under this scenario, there is also the possibility of producing higher quality cannabis, which may be similar or superior in quality to that produced under Scenario 2. Still, in this scenario, independent of quality, the price-quality ratio is higher.

The most efficient way to understand these dynamics is to compare the price of cocaine in a producing country with its price in a destination country. According to the UNODC, the price of a kilo of cocaine can range from US\$2,300 in Colombia to US\$43,000 in the United States. Less conservative estimates speak of a much larger increase when comparing the initial and final prices. For example, the profits of the Sinaloa cartel can be estimated by taking the price of cocaine in Peru (approximately US\$2,000), as a starting point; on its arrival in Mexico, the price reaches US\$10,000; it later arrives in the United States at a wholesale price between \$30,000 and \$40,000 for a kilo that, at retail, can fetch \$100,000. Taking these numbers into account, the annual profits of a cartel like the Sinaloa (with a market share of up to 40%) could reach US\$3 billion, comparable to those of Facebook in 2011 (Radden, 2012).

Although statistics on drug use in the United States are not completely reliable, they indicate that the use of cocaine and marijuana has been stable for many years, only showing a meaningful decline between 1970 and 1980. The data also shows that, at present, the United States consumes illegal substances at a rate almost three times higher than that of Europe. Drug use is growing rapidly in Europe, however, and a few countries have higher per capita consumption than the U.S. In this country and in Europe, the prices of cannabis and cocaine, both wholesale and on the street, have declined in recent years; at the same time, drug potency has increased and demand remains constant. Worldwide, illicit drugs seem to be available at stable or declining prices. A study by the European Commission concluded that between 1998 and 2007, global drug production and use remained virtually unchanged (Hakim, 2010).

Even when the prices seem exorbitant, several elements must be considered. As we have noted, the high costs of insecurity and vulnerability enter into the pricing process. The final prices have little to do with a fight to deliver greater security to users (buyers) or to offer competitive prices. In this market, competition is defined by other methods, which often have to do with violence and terror. These are the key factors that make one cartel and their dealers more competitive than others.

Consumption preferences

In the U.S., 14.1% of the population uses cannabis, 0.6% opiates, and 2.2% cocaine. Italy is the E.U. country with the highest consumption of cannabis, with a level of 14.6%; 2.2% of Italians use cocaine. In comparison, in England cannabis use is 6.8%, while 2.2% use cocaine. Overall, Great Britain has an opiate consumption level of 0.8%. In Ireland, 6.3% of the population consumes cannabis and 1.7% use cocaine. In Latin America, the levels are much lower. Brazil has a consumption level of 2.6% for cannabis and 0.7% cocaine. In Mexico 1% of the population uses cannabis, 0% opiates, and 0.4% cocaine (UNODC, 2012). This data comes from the countries themselves, making it difficult to ascertain its quality. Viewing the consumption data, it is clear that despite the money spent and sanctions applied, consumption is still high and prices are lower.

In the United States, there has been an increase in drug use, due in large part to the consumption of marijuana; the most widely used illegal drug in the U.S., it has 16.7 million users, or 6.6% of the population, up from 6.1% in 2008. On the other hand, in 2010 the number of cocaine users 12 years old or older declined. According to a survey, in 2012 there were 1.6 million users, which is similar to 2008 but lower than the 2006 estimates of 2.4 million.

Marijuana was the illicit drug most consumed by young users in 2009, reaching 7.3%, compared to 6.7% in 2008. Another finding determined that illegal drug use by people between the ages of 50 and 59 is also increasing, rising from 2.7% in 2002 to 6.2% in 2009. The study attributes this trend to the aging of the children of the Baby Boom generation, born between 1945 and 1964, whose use of illegal drugs has continued over the years and is higher than other older age groups.²

In Europe, meanwhile, in 2000, 45 million people, or 18% of those between 15 and 64, had tried cannabis at least once. Around 15 million, approximately 6% of those between 15 and 64, had consumed it in the last twelve months, compared with 23.7% in 2012.

In 2000, between 1% and 6% of those between 16 and 34 and 1% to 2% of students had tried cocaine at least once, compared with 4.6% in 2012. In 2000, Europe had an estimated 1.5 million problem drug users, mainly heroin users (from 2% to 7% of the population aged 15 to 64), compared with 1.4 million in 2012 (European Monitoring Centre for Drugs and Drug Addiction, 2000).

² Source: Substance Abuse and Mental Health Services Administration (SAMHSA).

CONSUMPTION IN LATIN AMERICA IN A GLOBAL PERSPECTIVE

Statistics on drug use in the region vary and, in many cases, they are based on United Nations data sets that are based on numbers delivered, and defined, by the governments of each country.

In all countries in the region, cannabis is the most used illicit drug, followed by cocaine. In Argentina and Chile, cocaine paste reached third place in the consumption rankings, whereas in Mexico and Paraguay that spot is occupied by inhalants. According to official studies, the level of marijuana consumption is far above the use of cocaine hydrochlorate in the general population (between 15 and 64); marijuana use is twice as widespread in Mexico (CONADIC, 2008) – 4.2% compared 2.4% – and three times as high in Argentina (Argentine Observatory on Drugs, 2011), where 9.3% of the population uses marijuana compared to 3% for cocaine. The spread increases to fivefold both in Paraguay (National Antidrug Secretariat-Paraguayan Drug Observatory, 2004), where 5.5% use marijuana compared to 1.4% for cocaine, and in Chile (Conace-Ministry of Interior and Public Safety, 2010. Annex 5), where marijuana use rates hover around 19.6% and 3.7% of the population consume cocaine.

The highest point of consumption is in the Southern Cone, where school youth population studies (UNODC, 2009) reveal several disturbing facts: In Chile, for example, the rate of cannabis use is 22.71%, cocaine intake is some 5.8%, and cocaine paste use is 5.31%. In all cases, these numbers are much higher than the regional average.

Hand in hand with this consumption data, the United Nations also notes that drug crops are expanding and being diversified. This diversification mainly comes in the form of self-cultivation of small numbers of plants for personal or small group consumption. This means that global crop figures are far from reflective of reality, which is important to note as it directly influences the measurements that can be done in terms of consumption. Much of today's cannabis use is private: the user who grows his own does not need to interact with third parties to provide for his personal consumption. This, coupled with the illegal status of the drug in many countries, means that the data does not represent reality.

Cannabis consumption

As has been noted, cannabis is the most widely used illicit drug in the world. According to the United Nations, in the world there are between 119 million and 224 million users, a number that has remained relatively stable. However, in many cases these figures are based on the prevalence of use, which in many countries covers the last twelve months. This means, of course, that the definition of what it means to be

a user and to have used can have quite different interpretations and implications. The global annual prevalence estimated by the UN in 2010 was in the range of 2.6% to 5%. According to the organization, the greatest prevalence of cannabis use, between 9.1% and 14.6%, was recorded in Oceania (mainly in Australia and New Zealand), followed by North America (10.8%), Western and Central Europe (7%) and West and Central Africa (between 5.2% and 13.5%) (UNODC, 2012). In Latin America, prevalence decreased from 3% in 2009 to 2.5% in 2010.

By country, according to data from the UNODC, Jamaica, Belize, Uruguay and Chile occupied the top four spots on the list of consumption in the region (see Table 1). The difference between countries with high and low prevalence is high. For example, while Jamaica showed a prevalence of 9.8% in 2006, Dominican Republic only reached 0.31%. It is important to note that the data reported is from different years, corresponding to the latest measurements delivered between 2003, in the case of Panama, and 2011, in Venezuela. Age ranges also vary, starting from 12 years of age and reaching as high as 70, in the case of Costa Rica.

Table 1. Prevalence of cannabis use in countries in the Americas

COUNTRY	PREVALENCE	ESTIMATE (LOW)	ESTIMATE (HIGH)	YEAR	AGE RANGE
Jamaica	9.86	7.52	12.2	2006	15-64
Belize	8.45	8.45	8.45	2005	12-65
Uruguay	5.6	5.6	5.6	2006	15-64
Chile	4.88	4.88	4.88	2010	15-64
Guatemala	4.8	4.8	4.8	2005	12-65
Bolivia	4.5	4.5	4.5	2007	12-65
Panama	3.55	3.4	3.7	2003	12-65
Argentina	2.2	3.2	3.2	2010	15-64
Brazil	2.6	2.6	2.6	2005	12-65
Colombia	2.27	1.9	2.6	2008	12-65
Venezuela	1.66	1.66	1.66	2011	15-64
Paraguay	1.6	1.6	1.6	2005	12-65
Nicaragua	1.07	1.06	1.07	2006	12-65
Mexico	1.03	1.03	1.03	2008	12-65
Costa Rica	1.02	1.02	1.02	2006	12-70
Honduras	0.83	0.41	1.59	2005	12-65
Ecuador	0.7	0.7	0.7	2007	12-65
Peru	0.7	0.7	0.7	2006	12-64
El Salvador	0.39	0.35	0.43	2005	12-65
Dominican Republic	0.31	0.25	1.41	2008	15-64
U.S.	14.07	14.07	14.07	2010	15-64

Source: Prepared by the author using data from the UNODC, 2012.

As seen in Table 1, consumption rates vary significantly between countries and demonstrate the different manner in which each tackles the issue. Even though in most cases the numbers are not alarming, it is clear that these indices have been rising relative to the general population, thereby exposing the trend of consumption starting at younger and younger ages.

Prevalence among young people is usually higher than in the general population (see Table 2), with large differences in a range of countries. For example, while the prevalence of use in the general population in Chile (the country with the highest prevalence) is 4.88%, among 15 and 16-year-olds it reaches 25.9%. In the case of El Salvador, while the prevalence in youth between 17 and 25 reached 13.6%, in the general population it is the lowest in the region, at 0.39%. Countries like Mexico reported minor differences between these groups: while the general population shows a prevalence of 1.03%, the youth level is only one percentage point higher, at 2.04% (see Table 2).

Table 2. Prevalence of youth cannabis use in various countries in the Americas

		PERCENTAGES			
COUNTRY	AGE RANGE	YOUTH WHO HAVE USED	WHO HAVE USED AT LEAST ONCE IN THE LAST	USED AT LEAST ONCE IN THE LAST MONTH	YEAR
Chile	15-16	25.9	16.2	8.16	2009
Belize	13, 15, 17	20.5	13.4	6.7	2002
El Salvador	17-25	13.6	3.9		2010
Argentina	16-16	13.2	9.5	5.7	2009
Argentina	13-17	10.9	7.6		2007
Colombia	15-16	9.6	8.4	3	2005
Costa Rica	14-17	9.2	6.3	3.6	2009
Brazil	15-16	7.7	6.3	4.4	2005
Ecuador	16-25	6.4	4.2		2008
Bolivia	13-18	6.2	3.6	1.9	2009
El Salvador	13-17	5.5	3.5	1.8	2008
Nicaragua	15-16	4.8			2003
Paraguay	15-16	3.9	3.1	1.9	2005
Honduras	13-25	3.4			2008
Peru	11-19	3.1	1.9	0.9	2007
Mexico	12-17	2.04	1.18		2008
Guatemala	16-27	2	1		2004
U.S.	10º grado	33.4	27.5	16.7	2010

Source: Prepared by the author using data from the UNODC, 2012.

Cocaine use

A variety of substances beyond powder cocaine (cocaine hydrochloride) can be derived from the coca leaf. Cocaine base paste contains a series of products that are created during the cocaine hydrochloride refining process, and there are also secondary substances like crack, which is part of the post-refinement process. The base paste provides *paco*, or bazuco, which is heavily consumed by low-income people in the region and is deeply rooted in large cities such as Buenos Aires and Santiago. According to information from the OAS-CICAD (Inter-American Drug Abuse Control Commission), in countries like Ecuador, Uruguay, Peru, Argentina, Bolivia and Chile, the lifetime prevalence of cocaine paste use among secondary students exceeds 1%. In terms of consumption in the general population, the highest prevalence is in Chile, with 3.1%, followed by Peru, with 1.3%, and Colombia, with 1.09% (CICAD, 2011).

No less important is the situation in Argentina. According to the UN, in addition to seeing increasing levels of drug trafficking, that country has the highest level of cocaine use in Latin America, followed by Chile. The use of this drug is the main cause of addiction problems in Latin America, as it is responsible for half of the demand for treatment in the region. Moreover, Argentina has a high penetration of other highly addictive drugs (2.6%) in the population between 15 and 64, especially in the poorest sectors. There a close relationship between poverty and the consumption of these low-cost substances, especially drugs such as *paco*, which, while inexpensive (US\$1-2), can end up being costly because of the frequency with which they are consumed in situations of addiction.

Still, despite high levels of consumption, the UN says that lately cocaine use has decreased by 0.7%, especially in Argentina and Chile, the principal consumers. Brazil, meanwhile, is one country where consumption has been rising. In most of the countries of the region, the prevalence of use is higher in men than in women, both in the prevalence rates observed in the general population and in the student population.

Measurements of cocaine use among younger age groups show some alarming figures. However, an examination of the comparative data provided by the UN shows large variations. It is virtually impossible to get a realistic view of the situation in Latin America when there are countries that have not reported official (or reliable) figures since 2003, as in the case of Panama. Table 3 shows the different reporting dates for the data. Besides the wide variations seen in UN data, in its 2011 drug usage report the OAS-CICAD also mentions the difficulty of understanding usage trends from the available data because most countries in the region only have data from the last few years.

Table 3. Prevalence of cocaine use in some countries in the Americas

COUNTRY	PREVALENCE	ESTIMATE (LOW)	estimate (high)	YEAR	AGE RANGE
Uruguay	1.7	1.7	1.7	2006	15-64
Panama	1.2	1.2	1.2	2003	12-65
Chile	1.01	1.01	1.01	2010	15-64
Honduras	0.87	0.87	0.87	2005	12-35
Belize	0.85	0.85	0.85	2005	12-65
Argentina	0.81	0.8	0.82	2010	15-64
Colombia	0.81	0.72	0.89	2008	12-65
Bolivia	0.8	0.6	1	2007	12-65
Brazil	0.7	0.7	0.7	2005	12-65
Nicaragua	0.69	0.52	0.89	2006	12-65
Venezuela	0.69	0.69	0.66	2011	15-64
Peru	0.48	0.34	0.61	2008	15-64
Mexico	0.44	0.44	0.44	2006	12-65
El Salvador	0.41	0.41	0.41	2005	12-65
Costa Rica	0.31	0.23	0.38	2006	12-70
Dominican Republic	0.3	0.13	0.57	2006	15-64
Surinam	0.3	0.3	0.3	2007	12-65
Ecuador	0.25	0.2	0.3	2007	12-65
Paraguay	0.25	0.2	0.3	2003	12-64
Guatemala	0.21	0.21	0.21	2005	15-64
U.S.	2.16	2.16	2.16	2010	15-64

Source: Prepared by the author using data from the UNODC, 2012.

It is worth noting that, as in the case of other drugs such as alcohol and cannabis, cocaine is most commonly used in the population between 18 and 34.

CONSUMER MARKETS IN EUROPE AND THE U.S.

Although this text is primarily focused on consumer markets in Latin America, it is important to understand the characteristics of the markets that drive the high global demand for drugs. Paradoxically, while the United States and some European countries are responsible for much of the use, more in terms of quantity than prevalence, these regions also have far more liberal drug laws than those in Latin America. In the case of Europe, countries such as Portugal and the Netherlands have taken important steps toward successful policies, while in the United States, apart from the two states where cannabis is regulated for recreational use (Washington and Colorado), another 18 have legalized it for medicinal uses.

Europe

According to data from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), the upward trend in the prevalence of use of illegal drugs at least once per lifetime that was seen between 1995 and 2003 stopped in 2007, when the national average was roughly 2% below that observed in 2003, and remained at the same level in 2011. In 1995, 11% of students admitted to using illegal drugs at least once in their lives, compared to 18% in 2011.

The vast majority of students who have tried illegal drugs have used cannabis. In 2011, 17% of students admitted having used it in their lifetime, while 6% had tried one or more other illegal drugs. The second spot is shared equally between ecstasy and amphetamines: 3% in each case. As noted, cannabis is the most frequently consumed illicit drug. On average, in 2011, more boys than girls admitted having used it once in their lifetime (19% versus 14%), and the figures were significantly higher for men in 27 countries.

Some 23 million European adults (6.8%) – or one in three users – had used cannabis in the previous year. Consumption has increased in several European Union countries with smaller marijuana markets, offsetting the decline elsewhere. Prevalence rates of use in the European Union as a whole have been stable in recent years: about 6.7% among people between 15 and 64 years of age in 2010.

With regard to cocaine, the prevalence on the continent is around 15.5 million, or 4.6% of European adults. In 2012, about 4 million adults – 1.2% of the adult population, or one in four users – tried cocaine. Although current use in Western and Central Europe remains high, estimated at 1.3% of the adult population, some studies show a decrease in 2012 of cocaine use in countries with high prevalence rates, such as Denmark, Spain and the United Kingdom, and also the decline in consumption among young adults (15 to 34).

The United States

In 2011, marijuana was the most widely used illicit drug, with 18.1 million users. It was used by 80.5% of current illicit drug users. About two thirds (64.3%) of illicit drug users had only used marijuana in the past month (Substance Abuse and Mental Health Services Administration, 2012: 13).

The number and percentage of people 12 and older who were current users of cocaine in 2011 was 1.4 million people, or 0.5% of the population (Substance Abuse and Mental Health Services Administration, 2012: 16).

EFFECTS AND COSTS OF CONSUMPTION

The costs of the current anti-drug policies can be calculated in various ways. Doing these calculations means facing diverse and, in many cases, unsuspected issues. Costs range from human rights violations, rehabilitation, prevention and education to the military and police spending that is required to carry out prohibitionist policies. One area that is easier to quantify is that of citizen drug abuse and the prevention and rehabilitation programs in which governments have had to invest large amounts.

In Ecuador, for example, the 2012 and 2013 budget for prevention, treatment and rehabilitation is US\$55 million (Consejo Nacional de Control de Sustancias Estupefacientes y Psicotrópicas, nd). In Peru, the prevention and rehabilitation program for the years 2007-2011 cost €2,612,500, while drug abuse health care costs for 2010 were US\$32 million.³ In Chile, the government budget in 2009 for Prevenir en familia (a family drug prevention program), alcohol and drug consumption prevention programs in the educational system, quality of life efforts, treatment and rehabilitation, was \$29,272,815 Chilean pesos (Ministerio del Interior-Subsecretaría del Interior (Chile), 2009: 4). In absolute terms, spending on treatment and rehabilitation almost quadrupled between 2005 and 2008; in real terms, it grew from \$3,881,000 to \$13,756,000 Chilean pesos, or 254%. A look at this component, in terms of total expenditures for the period, indicates that 39% was spent on treating the general population, 30% on criminal offenders, 11% on women, 8% on adolescents and 3.5% on the prison population (Ministerio del Interior-Subsecretaría del Interior (Chile), 2009: 19).⁴

In Europe, one also sees spending on similar programs. Investment in treatment in prisons in Britain increased from £7 million in 1997/1998 to £80 million in 2007/2008.⁵ In 2012, Spain cut 28% of the budget of its National Drug Plan which, according to draft budgets (PGE for the initials in Spanish) submitted in the House of Representatives, was set to fall from €25 million to €18 million.⁶

³ Belgian Development Agency: http://www.btcctb.org/en/casestudy/think-about-it-drug-abuse-prevention-and-drug-addicts-rehabilitation-peru

⁴ El costo de encarcelar: http://www.docstoc.com/docs/67287530/El-Costo-de-Encarcelar

⁵ Reducing drug use, reducing reoffending: Are programmes for problem drug-using offenders in the UK supported by the evidence? http://www.unad.org/biblioteca/temas/drogodependencias/index.html

[&]quot;El Gobierno reduce casi un 30% el presupuesto del Plan Nacional de Drogas". FSC Newsletter E-noticias FSC: http://www.fsyc.org/prensa/el-gobierno-reduce-casi-un-30-el-presupuesto-del-plan-nacional-de-drogas

Via its Drug Prevention and Information program, the European Union aims to prevent and reduce drug use, dependence and related damages. To support this program, the 2012 budget was $\in 3,078,000$; in 2011, it was $\in 4,095,200$.

In the United States, the world's main drug consumer, the costs associated with these programs are proportionally large. Programs like *SFP 1014: Strengthening Families Program: For Parents and Youth 10-14* and *GGC: Guiding Good Choices* produced net benefits in preventing alcohol abuse by adults. Every dollar spent resulted in US\$10 in benefits from the *SFP 1014* program, and US\$6 in benefits from the *GGC* program. In addition, the *Skills, Opportunities and Recognition* (SOAR) program returned US\$4.25 for every dollar spent. A previous study found that for every dollar spent on drug abuse prevention, communities could save between US\$4 and US\$5 in treatment and counseling costs (National Institute on Drug Abuse, 2004).

Providing treatment outside prison is more cost effective: it costs between US\$2,000 and US\$7,000 per person, compared with the cost of incarceration, which is approximately US\$32,000 (Nataranja et al., 2008). It is estimated that in 2003 US\$21 billion was spent treating drug and alcohol abuse, which represented 1.3% of U.S. health expenditures that year (Open Society Foundations, 2010: 5).

The justice system spends US\$433 million on treatment: US\$149 million for prisoners; US\$103 million for parolees; US\$133 million for juvenile offenders; US\$46 million to help municipalities treat offenders; and US\$1 million on drug courts. Patient treatment provided by mental health institutions costs US\$241 million. The US\$492 million remaining in the budget pays for state substance abuse programs, such as employee assistance (US\$97 million); treatment programs for adults involved in welfare services for children (US\$4.5 million); and capital expenditures for the construction of treatment facilities (US\$391 million) (The National Center on Addiction and Substance Abuse at Columbia University, 2001: 24).

It is estimated that if national prevention programs had been implemented, the age of onset of use would have been postponed for 1.5 million young people by an average of two years, which would have saved \$18 for every \$1 invested. In 2003, it was estimated that with these programs, 8% fewer young people between 13 and 15 years of age would have used alcohol, 11.5% fewer young people would have

⁷ Drug Prevention and Information Program. European Union. http://ec.europa.eu/justice/grants/ programmes/drug/index_en.htm

used marijuana, 45.8% fewer young people would have used cocaine, and 10.7% fewer young people would have smoked cigarettes.⁸

COMPARATIVE LEGISLATION BY COUNTRY

Latin America

Throughout Latin America, prohibition is the norm, but in recent years there have been changes in the way countries respond to international treaties.

In Uruguay, possession of drugs for personal use has never been criminalized and was officially decriminalized in 1974. According to the law, a person in possession of, "a reasonable amount designated for personal use only," is exempt from sanctions, both criminal and administrative. If after reviewing the case the judge finds that the drugs were destined for sale, production or distribution, the person must give an explanation. During the last twelve years, harm reduction strategies have been used alongside decriminalization. In the summer of 2012, President Jose Mujica (2010 -) sent a proposal to Congress to legalize the cultivation and sale of marijuana, in order to combat organized crime. The bill authorizes the state to assume, "control and regulation of the business of importing, exporting, planting, cultivation, harvesting, production, acquisition, storage, marketing and distribution of cannabis or its derivatives."9 Although much work has been done on the issue, the judicial system is overloaded and the detention system is very weak. In 2009, 11% of the prison population was people imprisoned for breaking drug laws, and 65.3% of prisoners were held without their cases having been processed, some for months or years (Rosemarin and Eastwood, 2012). These figures, although alarming, are lower than in other countries in the region where prison problems and overcrowding are mainly due to drug laws.

Peruvian law also decriminalizes certain quantities of drugs: five grams of cocaine paste, two of cocaine, 200 milligrams of heroin or eight grams of marijuana. Despite this decriminalization, an investigation has revealed that the police regularly stop individuals for possession. The weakness of justice institutions has a big impact on how decriminalization laws are applied. In Peru, drug offenses are the third most

⁸ Cost-Benefit Analysis of Drug Treatment Services. www.icmpe.org/test1/journal/issues/v3p-df/3-011_text.pdf

⁹ http://www.lamarihuana.com/noticias/silvio-rodriguez-apoya-a-uruguay-en-la-legalizacion-de-la-marihuana/#ixzz2Dp2otorg

common reason for imprisonment, although a third of the 12,000 prisoners have not been charged or convicted of any crime (Rosemarin and Eastwood, 2012).

Colombia decriminalized personal use in 1994. This lasted until 2009, when, under the administration of President Alvaro Uribe (2002-2006, 2006-2010), personal use was again criminalized. Although use and personal possession were criminalized, most of those accused have been punished administratively. In August 2011, a case reached the Supreme Court, which affirmed the 1994 decision that Colombian citizens had the right to carry a minimal amount. In this country, the amount is 20 grams of cannabis or cocaine. ¹⁰

Brazil, Chile, Mexico and Paraguay also have decriminalization laws, which vary widely in terms of the discretion that is given the police, judges and other authorities (Rosemarin and Eastwood, 2012). In addition to these countries that decriminalize the personal use of drugs, some Latin American presidents have proposed a large policy shift. The presidents of Colombia, Guatemala and Mexico have proposed a regional and international debate over the legalization of drugs as a way to combat organized crime. In countries like Mexico, where the collateral damages of the drug war have been awful – estimates run from 60,000 to more than 85,000 dead and official figures speak of 25,000 missing in six years – members of all political sectors and civil society groups are calling for alternatives to the current policy.

Europe

In the strategy developed in 2012, evaluators of the European plan recommended keeping a balanced approach and adopting comprehensive policies on legal and illegal substances, including new psychoactive substances; the creation of an evidence bank for drug supply reduction; and clarifying the roles of the coordinating bodies of the Union.

The strategy includes specific initiatives launched in 2011, namely the *European pact against synthetic drugs* and the Operational Action Plan on synthetic drugs and new psychoactive substances, both adopted by the Council of the European Union. Likewise, there was a call for a stronger response on drugs from the Commission, which announced a series of measures on illegal drugs, among them the adoption of new European legislation that more quickly and effectively addresses the emer-

[&]quot;Corte Suprema defiende el porte de dosis mínima de droga". El Tiempo, [online] 24 Aug 2011. http://www.eltiempo.com/justicia/articulo-web- new_nota_interior-10219935.html

gence of harmful new psychoactive substances. In addition, a proposal to establish minimum quality standards for prevention, treatment and harm reduction is being prepared.

Ten countries in the region have separate strategies or action plans for legal and illegal drugs, which differ from one another in terms of the adoption of certain documents and the classification of certain substances. Fourteen have a unified drug strategy or action plan that is focused on illegal drugs. Among them, however, the measures regarding legal drugs vary (European Monitoring Center for Drugs and Drug Addiction, 2012).

While all this is happening at an official regional level, many European countries are themselves taking part in the drug decriminalization revolution. For example, in 2008 Armenia repealed its criminal law codes dealing with the use and possession of drugs and replaced them with an administrative code. Although fines can be high for drug users, at least they cannot be imprisoned.

After much internal debate, in 2003 Belgium made the distinction between the possession of cannabis for personal use and other drug offenses. There is no penalty for someone who has less than three grams of cannabis, and if the person is caught with other drugs the penalties are stronger. Meanwhile, after years of debate, in 2010 the Czech Republic decriminalized possession of illicit drugs, a decision that was made after doing a cost-benefit analysis of criminal laws adopted in 2000; the two-year study indicated that the criminalization of drugs does not affect the access, which could be seen in the increased use of illicit drugs and the significant increase in the social costs entailed by their use (Zabransky, Mravcik, Gajdosikova and Miovsku, 2001). The possession of certain quantities is now no longer a criminal offense, but an administrative one.

Other European countries that have decriminalized the use and possession of drugs are Germany, Spain, Estonia, Holland, Italy and Poland.

The most famous case in Europe is that of Portugal, which in 2001 decriminalized the use and personal possession of all drugs. Although it was the not first country to make such a decision, it was the first to do so in response to a national drug crisis. In addition to changing drug policy, it developed public health policies, which contributed to a decline in youth consumption. Dissuasion commissions composed of three people (doctors, social workers or lawyers) are designed to be a safe, non-adversarial space focused on the health of the person. Penalties include treatment, community service and fines. For first offenses, the proceedings are usually suspended and penalties are not imposed (Kreit, 2010). Among the cases that reached the dissuasion commissions, 76% were for cannabis, 11% for heroin, 6% for

cocaine and the 7% remaining involved more than two drugs. The Portuguese case shows a slight increase in use among adults, but consumption is still low compared to other European countries. Even more significant is the reduction of drug use among vulnerable groups such as young people (Rosemarin and Eastwood, 2012).

The United States

In 1970, the U.S. Congress enacted the Controlled Substances Act (CSA), in order to regulate interstate commerce. This law is the foundation of federal drug law. Most of the restrictions are established for drugs included in Schedule I, which cannot be owned by anyone except for research purposes authorized by the federal government. This list includes marijuana, heroin, MDMA (ecstasy), LSD and peyote, which are considered to have no medical use and a high potential for abuse. Substances on Schedule II, which have accepted medical uses and a lower abuse potential than those on Schedule I, are also subject to strict controls. This list includes cocaine, opium, morphine, meperidine (Demerol) and codeine.

The Protecting Our Children from Drugs Act of 2000 was passed by the House of Representatives on October 17, 2000. It amended controlled substances law to further increase penalties for drug traffickers who involve children in trafficking. Mandatory minimum sentences were increased for those who used children under 18 years of age to distribute drugs in or near schools and other "protected" places, such as playgrounds (Dolin, 2001).

IMPRISONMENT FOR DRUG LAW VIOLATIONS

To imprison one of the 2.3 million U.S. prisoners costs \$24,000 a year, in addition to the US\$5.1 billion spent on new prisons. A study by the Bureau of Justice Statistics of the Department of Justice concluded that, although the number of people incarcerated for drug offenses increased by 57,000 between 1997 and 2004, drug offenders as a percentage of total state prison population remained stable at 21%. The percentage of federal prisoners serving sentences for drug offenses declined from 63% in 1997 to 55% in 2004. In 2003, 58% of all women in federal prisons had been convicted of drug offenses.

In 2011, California spent US\$9.6 billion on prisons, but less than US\$5.7 billion on the university system. Since 1980, the state has built one university campus and 21 prisons.

¹¹ Drug War Facts. http://www.drugwarfacts.org/cms/Prisons_and_Jails#Federal

In other developed countries, the incarceration rate varies. It is 117 per 100,000 people in Canada (2008) and 154 in England and Wales (2011). Spain's rate is 159 per 100,000 (2011). It is 102 per 100,000 in Greece (2009); 85 per 100,000 in Germany (2010); 113 per 100,000 in Italy (2010); and 178 per 100,000 in Saudi Arabia (2009).

A comparison of countries that have a zero tolerance policy for illegal drugs shows that Russia's rate is 577 per 100,000 inhabitants, while it is 400 in Kazakhstan, 273 in Singapore, 78 in Sweden and 59 in Japan (International Centre for Prison Studies, March 18, 2010).

In 2005, the average annual cost of keeping someone in prison in England was €36,473 (HM Inspectorate of Prisons for England and Wales, 2006). In Sweden in 2003, the annual cost was €200, compared with the cost of probation 12 of €17. In Finland the cost of probation in 2004 was €2,800 per year, while the cost of a prisoner was €44,600.13 In countries where the drug possession was decriminalized, like Portugal, cases were reduced from 14,000 to 5,000-5,500 per year. In 1999, 44% of prisoners in Portugal were imprisoned for drug charges, a figure that in 2008 dropped to 21%, which resulted in reduced prison overcrowding (Rosemarin and Eastwood, 2012: 32).

In Latin America the situation is particularly acute. In Guatemala, between 2008 and 2012 a total of 3,466 people were arrested for the crime of possession of drugs for personal use, although during those years the number of arrests for this crime fell 22%. Ninety five percent of prisoners are male. According to the head of the Metropolitan District Attorney, in 85% of cases the person was carrying marijuana and in the remaining 15% crack or cocaine.¹⁴

Processing several thousand cases of possession of drugs for personal consumption each year (half of which require the services of a public defender), coupled with the cost of maintaining the prison population convicted of that crime, costs the state about 6.9 million Guatemalan quetzals per year, twice what it invests in programs to combat drug addiction.

¹² When the state uses *probation*, it does not have to provide services to the detained person; it only requires a certain amount of contact, via reunions, community service, etc.

¹³ Lindholm, M., Sweden: Legal Basis and Organisation of Probation Services. Paper presented at the Council of Europe/Ministry of Justice, Turkey Conference on Probation and Aftercare, 14-16 November 2005, Istanbul.

¹⁴ Reynolds, L. http://cosecharoja.org/tenencia-de-drogas-para-consumo-personal-hasta-cuando-la-criminalizacion

Based on interviews with staff of the public prosecutor's office, the judiciary and the public defender's office, Public Square found that prosecuting a case of drug possession for personal consumption requires the work of ten people: two police officers (officers of the PNC usually move in pairs); a public prosecutor and an assistant public prosecutor; a public defender (for the 62% of those accused of this crime who ask for one); and five staff members of the judiciary (commissioner, process server, officer, secretary and judge).¹⁵

In Peru, as has been noted, drug crimes are the third most common cause of imprisonment, and a third of the 12,000 who've been imprisoned have not been charged or convicted of any crime (Rosemarin and Eastwood, 2012: 29). In Uruguay, as of 2009, 11% of the prison population was there for breaking drug laws.

In Brazil, a 2006 amendment ended imprisonment for those carrying drugs. However, the number of detainees and prisoners accused of trafficking increased. Today, around 60% of those in prison for violating drug laws have no criminal history. Argentina, meanwhile, spends the equivalent of US\$17,862 annually per inmate.¹⁶

The situation is more complex if one examines incarceration rates: in Chile, for example, the prison population increased 99% between 2005 and 2012, and 42% of the women who've been put behind bars in the past year were imprisoned for drug offenses. In Argentina, 40% of the women imprisoned are there for violating drug laws, and in some prison compounds that figure may reach 70%. In women's prisons in Ecuador, these figures exceed 80% of the female population, and between 65% and 79% of all women prisoners are charged with drug offenses (See Uprimny, Guzmán and Parra, 2012).

These statistics occur in situations where in many cases "mules" are sentenced to longer sentences than those for murderers. In Colombia, the penalty for rape is 20 years in prison, while that for drug trafficking is 30. In Mexico, between 2007 and 2011 the number of women incarcerated increased 400%, in large part directly or indirectly linked to drugs, especially drugs and weapons trafficking, kidnappings, murders and assaults. Despite living in a reality notable for the absence of crime

¹⁵ If this amount is added to the annual Q919,572 it costs to process all cases, the total annual cost to the state totals Q6.9 million, nearly twice the annual budget of Q3.5 million that is earmarked for the operation of the Secretaría Ejecutiva de la Comisión Contra las Adicciones y Tráfico Ilícito de Drogas (Executive Secretariat of the Commission Against Addictions and Illicit Trafficking).

¹⁶ *Prisiones y Penas*. http://prisionesypenas.blogspot.mx/2006/10/segn-la-nacin-cada-preso-cuesta-la. html

levels like those in Mexico and Central America, the situation of women in prison in Chile is not so different. The conclusion reached by a study of the punishment for drug law violations in the region, *La adicción punitiva* (The Punitive Addiction)¹⁷, published by the Center for Justice, Law and Society (*Dejusticia* in Spanish) is that: "In Latin America, it is worse to smuggle cocaine so that it can be sold to someone who wants to use it than it is to rape a woman or voluntarily kill one's neighbor."

According to the report "Systems Overload: Drug Laws and Prisons in Latin America" (Metaal and Youngers (eds.), 2010), while 48% of Latin American women in prison are there for violating drug laws, only 15% of male prisoners are there for that reason. The increase in these numbers was seen in 2004, when Nicaragua reported that eight out of ten women behind bars were serving sentences for drug offenses. The same happened in Panama and Venezuela, where the percentages were 72% and 64%, respectively.

SMALL-SCALE DRUG DEALING: COSTS, LAWS AND CONSEQUENCES

Drug dealing, or the retail sale of drugs, is the last part of the drug trafficking chain. These vendors often work in distinct areas, so they fall into different categories that are defined largely by the way in which the drugs are sold. While the most conventional and best-known drug dealing is that which takes place among vulnerable societal groups, the drug-dealing universe has mutated. Drug retailing can be found across social sectors, sometimes in the richest neighborhoods with participants from the wealthiest classes. They range from women who sell marijuana, cocaine base paste or cocaine on street corners, to college students who provide drugs to their peers, to high-class dealers who specialize in synthetic drugs, cannabis for niche customers, and cocaine. Moreover, there are also retailers who specialize in special niches, such as television actors and actresses, athletes, and members of political and economic elites. Drug dealing is subject to variations based on geographical areas, the seasons of the year, growing seasons, unique events, and other variables.

Those who become drug dealers usually do so out of necessity, with people who lose their jobs being the most likely to take up dealing. In a way, labor flexibility pushes the workforce to turn to small time dealing as an alternative labor source. If reforms cause incomes to drop, those who work look to replace lost income (Bartilow

¹⁷ This study is based on evidence collected in seven countries: Argentina, Bolivia, Brasil, Colombia, Ecuador, Mexico and Peru.

and Eom, 2009). The same can be seen in periods of unemployment in countries like Brazil, which fell into a long period of stagflation and unemployment during the 1980's. As often happens during these periods, corruption and organized crime expanded: "Brazil became a conduit for cocaine from the Andes, and one of the largest producers of cannabis in the world" (William, 1999).

While much is known about the cultivation process, little is known about the subsequent links in the chain. In some cases, growers sell directly to consumers, but generally there are a large number of intermediaries between production and final sale. Due to the involvement of these actors, prices rise steadily in accord with the mark-up imposed by each of the participants. To better understand this part of the chain, it is necessary to define the various participants in it.

USER-RETAIL DEALERS

A large part of this group deals in order to satisfy their personal consumption. While drug dealing does not offer them substantial profits, in many cases it sustains their personal use. Profits for the user who deals are measured by the amount that a sale allows him to keep. Most of them come into user-dealing in reverse: they start as dealers and become users. As in the case of any users, there are those who use drugs recreationally and those who become problem users. The second are those who should be watched more closely, as these addictions often lead to consumption levels that exceed their profit margins and, consequently, push them into vicious cycles in which they continually seek to maximize revenue from drug sales in order to get profits that in turn will lead them to consume more at the expense of selling drugs. Addicted retailers become faithful members of the chain, because their need for profits for personal consumption is so great that they are willing to run any risk in order to sell the drug.

In a number of countries, this type of retail dealer is part of a special category because of his degree of vulnerability, since his participation is often a byproduct of his dependency. The segmentation of dealers who are also users is especially common in European countries like Austria, Belgium, Greece and Hungary, and in the judicial practices of others like Cyprus, Slovenia and Poland.

NARCOTOURISTS

So-called narcotourists (see Vergara, 2011) live in affluent neighborhoods, often with their parents, and have university degrees (though in many cases they have not held formal jobs). They travel to Europe to visit Ibiza, Amsterdam, Barcelona and Berlin,

where they buy drugs and keep them in their luggage, stashed between the odd souvenir. As they do not fit the "narco" profile, they gain entry and avoid police inspection without major problems. They do not sell drugs in slum alleys, but at parties, at beach resorts and within networks that are made up of friends and acquaintances. They target an elite market, mainly affluent youth. Their product mix is generally focused on synthetic drugs, mainly LSD, as well as high quality cocaine and cannabis. As they do not fit the trafficker profile, they go about their business quietly.

MULES

Mules are often victims. Some are completely unaware that they are transporting drugs, while others know they are but do not know how much, therefore leaving them ignorant of the possible implications. In general, these are vulnerable people who take on a business opportunity thinking that one time will be enough. Moreover, mules are often dependent on actors who are in other countries. Taken together, these characteristics speak of people who have no connection with drug trafficking or drugs and have no role in the sale of the drugs they carry. This means that they cannot be considered in the same category as those dealers who are linked to criminal organizations. Given that in many cases their participation in these activities is sporadic or one-time, they form a special category in the drug-dealing world.

WOMEN AND DEALING

The feminization of micro trafficking has negative effects, above all on the woman trafficker herself. They face high levels of violence, especially as they are used and manipulated by men to force them into work as mules. However, they have a profile that makes them the perfect actors to carry out these tasks. Just as narcotourists do not conform to the drug dealer stereotype, women also do not fit this profile. This advantage is often abused, and one sees women with children selling drugs (often hidden in their clothing), and using their children as a shield in case of clashes with police. Their vulnerability is exploited to develop a kind of immunity that few enjoy.

The participation of women in drug trafficking is also seen as a form of social advancement, since those that reach the highest levels can have experiences of "freedoms never before thought of during their dependence on men, even if only for short periods of time" (Campbell, 2008). In broad terms, these are usually the exception to the rule, being that work conditions and profit margins do not allow them to achieve those goals. In general, those who participate in this business become victims of organized crime and involve other family members. When a woman takes

up drug trafficking, the impact on her family is huge. Moreover, the consequences of being arrested and put behind bars are very destructive, especially on her closest family circles.

DRUG DEALING PROFITS

Drug dealer profits are quite low. The overall evidence suggests that, "dealers of this level get little or no profits from these activities, and these usually are used to support their own drug use rather than to make money" (Stevens and Wilson, 2008). However, in regions such as Latin America, drug dealing is becoming the main income for many families.

Looking at drug dealing as a whole, one sees the degrees of influence it has on the market. In other words, we need to view those who make retail sales in the same way we look at workers at the bottom of the production pyramid. They, in their entirety, are the engine of the global drug trade. In June 2011, the President of El Salvador, Mauricio Funes (2009 -), stated that much of the strategy to combat organized crime in his country ought to be aimed at ending this kind of sale, because, "drug dealing has become the main source of income for gangs" (Castro, 2011). Similar claims have been made in Mexico by the Municipal Public Security Secretariat of Tijuana, which reported that drug dealers were making sales of more than US\$1 million in the city each day.

Because of these financial and societal outcomes, which have more to do with drug dealing as a whole than with what each individual dealer does within it, many consider this issue a threat.

Still, considering that in the world of drug dealers we find many cases of mere subsistence for reasons of drug use or financial dependence, profits are very low compared to those of other actors in the chain.

PUNISHMENT FOR DRUG DEALING

Drug laws are characterized by the great disparity between the penalties paid by the different actors linked to the processes of cultivation, production, sale, purchase and consumption of drugs. The first mistake is that the relevant legislation does not make clear what the goals of the punishment are. The resulting disparity in punishment is the result of different interpretations of this issue.

Demands for better proportionality in sentencing have been submitted by international UN-related organizations such as the UNODC, the Inter-American Court

of Human Rights, and the European Court of Human Rights, as well as documents such as the Universal Declaration of Human Rights. The levels of punishment and penalty "should be determined according to the severity of damage that a specific behavior causes to others or to society" (Lai, 2012). Fortunately, influenced by evidence of especially high rates of prison overcrowding, there is some consensus that the penalties imposed for dealing drugs are disproportionate.

The lack of proportionality is not only reflected in punishment, but also in those affected. In Argentina, it is estimated that almost a third of women in prison are there for violating drug laws, while in Ecuador there are prisons for women where up to 80% of the inmates are there for similar reasons. In Ecuador, in 2005, the country's Constituent Assembly issued a mass pardon to more than 1,500 prisoners who had "transported drugs" in quantities of less than two kilos; this policy decongested prisons, and fewer than 1% of those forgiven returned to commit the same types of crimes (Armenta, 2012).

In Latin America, the disparity between penalties and incarceration rates is worrisome, as are the poor living conditions in prisons, where the dignity, security and integrity of the people are deeply affected.

RETAIL SALES, PRICES AND PROFIT IN LATIN AMERICA

Retail cannabis

Unfortunately, the difference in prices reported by governments and national and international institutions is very large. In its last global reports, the UNODC notes that one of the main problems is the availability of data on various aspects of the supply and demand of drugs. United Nations data depends heavily on data provided by governments, which is not necessarily reliable and often lacks rigor. This lack of information occurs primarily in the areas of pricing, profit margins and purity of drugs. Faced with a lack of data in some areas and a shortage of accurate data in others, analyzing the current situation and having discussions based on evidence becomes very difficult, which can lead to erroneous conclusions or ones that have little or nothing to do with reality.

This is, without a doubt, one of the areas that require further attention. One cannot continue discussing possible economic scenarios (such as those brought about by legalization or regulation) while ignoring such important elements as prices and profit margins in the various links in the chain. Misinformation is one of the main obstacles to progress in a debate based on evidence.

Bringing imported cannabis to local markets

It is in the imported drug market that one finds the greatest price increases, which sometimes reach multiples of more than two hundred times the original prices, even in regional markets. Moreover, prices even tend to increase significantly in transactions that only cross one border. For example, in late 2011, the NGO Viva Rio found that marijuana in Rio de Janeiro, which usually comes from Paraguay, was being sold for two hundred and eighty times its original price. The study noted that the biggest price increases took place between cultivation and wholesale in Paraguay. It also found considerable price differences depending on where the marijuana was sold: it is 61% cheaper in the slums than in affluent neighborhoods (AFP, 2011).

In Uruguay, one of the agreements reached on the potential regulatory framework for cannabis was the official price: it was agreed that legal consumers could buy up to 40 grams for a price of 700 Uruguayan pesos (US\$ 36, or about US\$0.90 per gram) (Portela, 2012), similar to the black market price.

Since cannabis can be grown almost anywhere in the world, from open fields to home closets, the competition to dominate the market has proven to be very inefficient. The power that cannabis gave the cartels changed dramatically following the empowerment of micro growers and those who grow for personal consumption. In fact, these grower-users have become the main threat to the large cartels. These competitors, who have lower security costs, have been responsible for the price fluctuations.

Moreover, in recent years European and U.S. agencies have reported that the street price of drugs such as cannabis, cocaine and heroin has fallen dramatically, just as the purity has increased (TNI, 2007). In the case of European markets, the price of cocaine has fallen in the last two decades (*The Economist*, 2011).

With high prices in the final destinations, in wholesale as well as retail, profits are collected by a series of participants, particularly by the large traffickers. A detailed study of the Colombian market revealed that only about 2.6% of the final retail price stays in the country. In other words, just over 97% of the profits remain in the hands of organized crime and other actors linked to heavy trafficking: banks, money launderers, etc. (Rolles, Murkin, Powell, Kushlick and Slater (authors and editors), 2012).

Nevertheless, some studies highlight the "regionalization" of cannabis production, which means that little by little cultivation of the supply is being moved closer to the demand. The latest UNODC report notes that, "while in the 1970s large quantities were imported to the United States from South America, particularly Colombia, nowadays most of the cannabis consumed in North America is produced locally"

(UNODC, 2012). This has also meant that while in the early 1990's the vast majority of seizures were concentrated in South America, in 2010, 70% were made in North America, thus supporting the claim that the crops are being grown closer to consumers.

Just as production is moving from foreign lands to local territories closer to the users, a similar phenomenon is happening on a domestic scale. Production centers that supply national or local urban demands have been affected by micro cultivation, which has led to a shift from large domestic cultivation to indoor growing.

One consequence of the expansion of local growing is a reduction of overall costs. When growing is done in places that are closer to the demand, transportation, transaction and, above all, security costs are dramatically reduced. This lowers transaction risk, and the consumer is less exposed to interactions with dealers linked to organized crime.

Rising cannabis prices therefore depend principally on the quality and composition of THC. While the costs associated with transportation and security have been reduced, product specialization has generated a much more varied supply that the consumer has rewarded by paying higher prices. These characteristics of the cannabis currently available suggest a positive evolution in the market. The final price today depends more on the quality and uniqueness of the product than on costs associated with trafficking. Above all, the controlled indoor cultivation of cannabis has guaranteed a, "constant supply not subject to natural agricultural cycles" (Zamudio and Hernandez, 2012).

This situation has also contributed to the emergence of two new phenomena. The first has to do with the abandonment, in certain social sectors, of the use of low quality cannabis that in many cases has been pressed with chemicals, sometimes even adhesives. For a long period, so-called "Paraguayo" (Paraguayan) cannabis enjoyed a major presence in the consumer market, especially in countries such as Argentina, Brazil and Chile. So-called "Paraguayo" or "Paragua" is basically cannabis that has been pressed with products ranging from honey to wax, glue, oil, tar and ammonia. The "pateado," or mixing process, also takes place in the importing countries. Increased domestic cultivation and the availability of better locally grown cannabis has been largely responsible for the eradication of "Paragua" in many social sectors, relegating it to the poorest strata in society, who can afford it because of its low cost.

The second phenomenon has to do with the gentrification of high quality cannabis, whose prices have significantly increased in relation to the kind commonly found on the street; per gram prices had multiplied by 20 or 30 times, resulting in prices that can reach US\$40/gram in countries like Chile.

Prices

As has been noted, the prices initially reported by governments and other organizations, and then compiled and reported by the UN, are far from the reality in many cases; they also have a number of limitations related to the grouping of different kinds of cannabis in the same category. Even when efforts are made to report differences in the concentration of THC, the information is usually delivered in a general format and without differentiation. Second, despite differences in THC or origin, many governments attach the label of "cannabis" to products such as pressed marijuana (e.g. "Paragua"), which may contain some cannabis but are in reality a composite. Perhaps one could speak in terms of purity, but what is now being quantified is far from actual cannabis. Table 4 shows cannabis prices (in USD) as tallied in the latest drug report from the UNODC (2012).

Table 4. Cannabis prices in various countries in the Americas*

		RETAIL PRICE	l.	WI	HOLESALE PR	ICE
COUNTRY	AVERAGE	RANGE	YEAR	AVERAGE	RANGE	YEAR
Haiti	0.6	0.5	2004	55	50	2004
Jamaica	1.4	0.7	2008		212	2008
Belice	2.5	1	2007	198.6	148.9	2007
Costa Rica		4.7	2010		585	2010
El Salvador	1	1	2009	1,140	1.000	2010
Guatemala	0.2	0.2	2009	92	85,8	2009
Honduras	1.8	1.8	2008	231.2	231.2	2008
Nicaragua	0.5		2007	81,1		2007
Panama	10		2005	50		2005
Canadá	12.7	4.4	2009	4,275.4	1,160.5	2009
Mexico				80		2010
Argentina	1.3	1	2004	400	300	2005
Bolivia		0.7	2009		80	2009
Brasil	0.3	0.3	2005	150	100	2005
Chile	2		2010	1,966.8		2010
Colombia	0.4		2005	40,3		2005
Ecuador	1.5	1	2010	450	400	2010
Paraguay	1	0.8	2008	20	15	2008
Peru				100	80	2008
Uruguay	1	0.7	2010	350	300	2010
Venezuela	1.9	1.4	2006	120	90	2006
E.U. (ounce)		20	2010		100	2010

^{*}In the case of retail sales the prices are per gram; wholesale prices are per kilogram. *Source*: UNODC, 2012.

According to the data in Table 4, there are large differences in prices in Latin America. Brazil, for example, stands out as the country with the lowest retail price at US\$0.30, and Panama with the highest, at US\$10.

This data is compiled primarily from government-provided information. Looking at the Chilean government report, "Price and spending on illicit drugs in Chile," one can get an idea of how these reported prices are calculated. The report says that according to data from the most recent national survey, the retail price of marijuana is \$1,047 Chilean pesos, or US\$2 (Lane, 2012), the same number published in the UNODC report. Herein lies the first problem, because while the Chilean government provides a dollar price *per marijuana cigarette*, the UNODC report lists it as the price *per gram*. It should be noted that these prices have remained relatively stable since 2004.

According to figures from the Chilean government, the price of marijuana increased 17.2% in real terms between 2004 and 2006, going from \$1,044 to \$1,224 per cigarette. However, in the following period it returned to its initial level, with an average price of \$1,047, and stayed there in the most recent period, when it was priced at \$1,038 per cigarette.

There have been a number of attempts to monitor street prices of cannabis and other drugs. In most cases, the results show prices that vary considerably from those reported by countries and by the UN.

Take a recent study from Asuntos del Sur, which compiles street prices, differentiated by types of cannabis, in the main cities of Latin America. Table 5 shows the results of the sample from Chile, ¹⁸ which are divided into metropolitan Santiago and the rest of the country. The sample shows data segmented into different types and quality of cannabis. The lowest average price reported in Chile, US\$5/gram, corresponds to non-natural pressed cannabis, known as "Paraguayo," that is pressed with chemicals, glue, and the like. In the case of natural cannabis, the lowest quality product is the cheapest, with an average price of US\$8, while at the other extreme the highest quality natural cannabis reaches US\$19. Taking all categories into account, the highest price is for high quality natural cannabis in Santiago, which averages US\$21, while the lowest is for non-natural pressed cannabis, both in Santiago and throughout the rest of the country.

¹⁸ The Chile sample includes 245 valid cases, divided by city and region. Prices are in USD. The voluntary survey was conducted online during January 2013. It is part of the Latin American sample. Original questionnaire available at www.asuntosdelsur.org/precio

	TYPE		NATURAL		NATURAL	NON NATURAL	HASHISH
QUALITY	CALIDAD	LOW	MEDIUM	HIGH	PRESSED	PRESSED	N/A
C	Average	9	13	21	10	5	24
Santiago	Range	1-21	2-31	4-100	1-50	1-20	2-100
T	Average	6	10	16	9	5	21
Interior	Range	0.5-20	1-25	2-50	0.7-35	0.5-20	1-100
Cl.:1. (11)	Average	8	12	19	10	5	23
Chile (overall)	Range	0.5-21	1-31	2-100	0.7-50	0.5-20	1-100

Table 5. Cannabis prices in Chile, January 2013

n = 245 / prices in USD.

Source: Asuntos del Sur, 2013.

Examining the ranges in each category helps one better understand the large differences found in cannabis prices of the same quality and in similar locations. The widest range is seen in the price of hashish outside Santiago, which runs from US\$1 to US\$100; the lowest is found in non-natural pressed cannabis in Santiago, which ranges from US\$1 to US\$20. According to the January 2013 sample, the city with the highest priced cannabis was Osorno, for hashish, which cost US\$100. Leaving hashish aside, the highest price was found in Las Condes, Santiago, where the price of a gram of high quality natural cannabis was US\$100. The lowest prices can be found in cities like Iquique, Rancagua and Valparaiso (US\$0.50), both for low quality natural cannabis and non-natural pressed cannabis. Overall, the cheapest cannabis (natural and non-natural pressed) is found in Valparaiso.

Comparing this data with the official data provided by the government of Chile to the UNODC helps explain the lack of accuracy in the information. While official data reports a price of US\$2 (2010) per gram of cannabis (of all kinds), Asuntos del Sur data shows an average of US\$12 (2013).

Among the factors that could be responsible for the large differences in the data reported by Chile and other countries are: 1) prices for marijuana cigarettes reported as if they were for a gram; 2) no differentiation in the type and quality of cannabis; and 3) a lack of differentiation between 100% natural cannabis and that mixed with outside compounds. Table 6 shows, as an example, prices reported in other countries in the Asuntos del Sur study; as they have small sample sizes, 19 they should only be used as rough guides in all cases except Chile.

¹⁹ Data has also been reported in countries such as Argentina, Bolivia, Costa Rica, El Salvador, Paraguay, Peru and Venezuela, but have a very small sample size, unlike Chile, Colombia, Ecuador and Mexico.

	TYPE		NATURAL		NATURAL	NON NATURAL	HASHISH
QUALITY	CALIDAD	LOW	MEDIUM	HIGH	PRESSED	PRESSED	N/A
	Average	1	2	4	3	3	6
Colombia	Range	0.1-5	0.2-10	0.5-20	1-5	0.5-12	0.5-20
	Average	2	4	11	3	3	13
Ecuador	Range	1-3	2-6	4-8	1-5	1-5	5-20
C1 :1	Average	8	12	19	10	5	23
Chile	Range	0.5-21	1-31	2-100	0.7-50	0.5-20	1-100
Mexico	Average	2	4	8	6	2	11
	Range	0.5-10	0.8-15	1-15	0.9-20	0.5-5	0.9-20

Table 6. Cannabis prices in Chile, Colombia, Ecuador and Mexico, January 2013

n Chile = 245, Colombia = 14, Ecuador = 6, Mexico = 11 / prices in USD

Source: Asuntos del Sur, 2013.

Merely as an example, we can compare the prices reported by the UNODC in the *World Report 2012* for Colombia (US\$0.40), Ecuador (US\$1.50), Chile (US\$2) and Mexico (n.a.).

Profit margin

The profit margin of retail cannabis dealers varies with their profile. As we've seen, different types of retailers get into the business for different reasons. Users who deal, for example, seek above all to satisfy their personal consumption, which implies a self-imposed limit on the number of transactions that want to make and the amounts they manage. In this case, the profit margin is reduced and must be quantified based on the amount of drugs that the user can get "for free." This calculation is then based on the consumption need of each user, something that presents several variables.

For example, if a user-dealer consumes 10 grams, his total sales should generate that margin. Since a buyer's demand is large and inelastic, the retail dealer has the power to dilute large quantities at the time of sale. Another element to consider is related to the need to complete the transaction as quickly as possible, which directly influences the buyer's ability to verify the amount (exact weight) of drugs purchased. This also works in favor of the seller, who can constantly increase sales margins.

Retail user-dealers are also often generous with drugs, so their profit margin is not only consumed in personal use, but also by friends and, in some cases, as samples for potential or current buyers. For example, according to a survey by the Collective for a Integrated Drug Policy (CuPHID, in Spanish) in Mexico City,²⁰ if one takes into account an annual market of US\$28 million, with approximately 75,000 users, the average consumption would be about US\$8 a week. Therefore, if an average consumer in Mexico City wants to finance his personal consumption, he should generate approximately US\$32 per month, an amount easy to reach with just one small monthly transaction.

Street dealing does not generate higher profit margins. There, one finds two main types of payment: the first has to do with units, where the seller regularly buys or receives small amounts of drugs for sale; the other is monthly or weekly, where dealers receive a fixed salary for selling drugs.

In the first case, the profit margins are minimal when the cannabis is of low quality. In Chile, for example, if a gram of poor quality cannabis does not sell for more than US\$2 and it is estimated that profit margins only approach a maximum of 50% in exceptional cases, selling 100 grams at retail only offers a profit of US\$50. Expanding this exercise to calculate monthly returns, we get sales of US\$400/month, with earnings of US\$200/month, equivalent to half the minimum wage in the country.

In the case of Argentina, dealers must sell an average of 30 *bagullos* of marijuana for \$10 pesos (US\$2) each, which gives them a daily profit of about \$60 pesos (US\$12) (Iezzi, 2013).

The second manner of calculating retail dealer profit (i.e. via a fixed salary) is the most common. Since medium and large drug traffickers have a vested interest in the sales of their product, primarily for territorial and security reasons, they often opt to pay fixed salaries to their dealers, who are then also available to perform other activities, such as monitoring territory.

A case from Bogota can be used to illustrate the operation of the chain that ends with the retail sale: in late January 2013, police in the neighborhood known as Bronx arrested John Freddy Raigosa, the first cousin of a 33-year-old man who controls half of the drugs and arms business in the city and is the leader of a criminal group known as Gancho Manguera. His arrest uncovered important elements of the criminal group's operations. The marijuana was brought from the town of Corinto (in the state of Cauca, in southwestern Colombia). For retail distribution and direct sales to consumers, they employed *taquilleros* (tellers), who earned about \$100,000 (US\$60) for a 24-hour shift. Before this, the drug had been delivered by so-called *patinadores*

²⁰ Primera encuesta de usuarios de drogas ilegales en la Ciudad de México. *CuPIHD*. http://www.cupihd.org/portal/notas/los-usuarios-responden/

(skaters) in small quantities in order to facilitate transport without detection. The tellers and skaters were supervised by an accountant, who oversaw more than \$100 million (US\$56,000) in daily revenues. The more than forty members were split into two 24-hour shifts and, "controlled the whole criminal process. They were armed and performed targeted killings when a person tried to run a 'rabbit' on Gancho Manguera" (Guevara, 2013). According to this article, street people sold drugs, performed thefts and acted as warning systems.

Although there are no studies focusing on the margins of street dealers, Mejía and Gaviria calculate that only 26% of the final street value remains in the Colombian economy, while 74% ends up in the hands of criminals (Gaviria and Mejía, 2011).

In the case of Mexico, the activities involving the so-called *soldados de la droga* (drug warriors) are quite similar, ranging from the protection of territory and of medium and large drug traffickers, to direct sales to consumers. It is estimated that drug traffickers pay about \$350 (US\$27) per day to informants and \$300 (US\$23) to distributors, plus a commission for sales that can go as high as \$1,000 per day, or about \$30,000 pesos (US\$2,300) monthly (Mejía, 2012). The daily minimum wage in Mexico is \$62, about US\$120 a month. According to Alberto Capella Ibarra, Public Safety Secretary in Tijuana, drug dealing generates US\$1 million in the city per day (Uniradio, 2012).

The jobs offered by drug traffickers vary widely. At one extreme, one finds mercenaries (ex-soldiers) from countries like the U.S. and Israel who are hired to fulfill 'delicate' tasks involved in trafficking drugs, weapons and people, as well as to murder those who become obstacles. For these services, reported wages in 2005 ranged from US\$50 to US\$250,000 per mission (Becerra, 2005). It is estimated that drug trafficking in Mexico employs more than half a million people in more than half of the country's municipalities (Arana, 2009).

Retail cocaine

Looking at the prices of retail cocaine, one finds similar reporting problems as those of cannabis prices (see Table 7). The information published by the UNODC also largely depends on data provided by governments and, as we've seen, there are serious shortcomings in the processes used to investigate and report those prices.

Unlike official prices reported for cannabis, in the case of cocaine the reported prices on the street seem to be more closely grouped, which is undoubtedly due to the fact that by nature it is very different from cannabis. The existence of only three major producers – Colombia, Bolivia and Peru – makes it easier to trace the traf-

Table 7. The price of cocaine in various countries in the Americas (by gram and kilo)

)			
			RETAIL PRICE	PRICE				WHOLESA	WHOLESALE PRICE		
COUNTRY		PRICE			PURITY			PRICE		PUR	PURITY
	AVERAGE	RANGE	YEAR	AVERAGE	RANGE	YEAR	AVERAGE	RANGE	YEAR	AVERAGE	RANGE
Cuba		48.6-64.8	2009								
Dominica	57.5	92-60	2004				38,000	35,000-50,000	2005		86-08
Dominican Republic	8		2010				7,964		2010		
Belize	7.5	7.5-12.5	2005		96-06	2005	7,447	6,454-7,447	2007		96-06
Costa Rica		16-18	2010					7,000-7,400	2010	74	28-97
El Salvador	24	23-25	2009				25,000	12,000-25,000	2010		
Guatemala	13.3	9.9-13.3	2008	06	85-90	2008	12,262	9,810-12,262	2009	06	80-90
Nicaragua	13.5		2007				6,500		2007		
Panama	2		2005		1-100	2005	2,500		2005		
Canada	80.3	21.9-175.4	2009	52	66-5	2010	34,133	17,544-59,649	2009		
Mexico							12,500		2010		
Argentina	5.9	3.5-8.3	2004				4,800	2,600-7000	2004		
Bolivia	13.5	3-4	2008					2,000-3,000	2009		
Brazil	12	10-13	2005		15-36	2005	3,000	2,000-7,000	2005	65	1-91
Chile	8.6		2010	56.5	16-93	2009	9,834		2010		
Colombia	3.5		2008				2,439		2010		87-95
Ecuador	7	5-10	2010				4,000	3,500-4,500	2010		
Paraguay	20	18-25	2008				6,000	5,500-6,500	2008		
Peru	4.5		2006				1,250	950-1,250	2010	100	
Uruguay	12.4	7.4-17.3	2010				5,500	5,000-7,500	2006		
Venezuela	9.3	7-11.6	2006	32	30-40	2009	4,190	5,120-6,980	2010	70	65-80
E.U.		8-300	2010	55.9		2008		11,500-50,000			
		'									

Source: Prepared by the author using information from the UNODC, 2012.

ficking chains, despite the myriad of hands through which the cocaine passes and which make identifying the cocaine difficult. At the very least, in this case it is easier to know where the chain begins and where it ends.

By way of comparison, and according to the data collected by Asuntos del Sur among cocaine users in Chile, the average price in January 2013 was US\$19 outside of Santiago, US\$18 in Santiago, and US\$18 overall. This data does not detail the purity of the drug being used given that one cannot in general make a real judgment about its composition. In cities like Santiago, a gram of cocaine, presumably of high purity, can go for US\$100 (see Table 8).

TYPE COCAINE DESCRIPCIÓN PURITY QUALITY Average 19 Interior 5-80 Range 18 Average Santiago 4-100 Range 18 Average Chile (overall) 4-100 Range

Table 8. Prices of cocaine in Chile

n = 158 / prices in USD

Source: Asuntos del Sur, 2013.

The price reported by the Chilean government in 2010 was US\$9.80 for a purity of 56%, with a range of purity at retail of 16-93%. According to the UNODC report, cocaine prices in other countries in the region show a wide disparity: the cheapest gram of cocaine was found in Panama (2005) and the most expensive in El Salvador, where a gram cost US\$24 and had a purity of 25% (2009).

Profit margin

Unlike cannabis, cocaine is more likely to be mixed with other substances, which makes its purity vary greatly between countries, cities and settings. Moreover, the mixing of pure cocaine with other substances is one of the principal variables that define the final amount of cocaine that is sold on the street. Because of this, estimates of price development, from production to street sale, do not necessarily trace the path of the same cocaine; the final price often corresponds to a mixed substance that merely *contains* cocaine. Considering the percentage of pure cocaine present in the transaction, the final price of the actual cocaine may far exceed the price reported.

For example, the price of a kilo of cocaine that is sold in the jungles of Colombia for US\$2,200, then wholesaled in Australia for over US\$200,000, and then retailed on the streets of that country, may reach US\$500 a gram (Stewart, 2013); this implies a price increase from US\$22/gram in Colombia to US\$500 in Australia. However, Australian authorities speak of purity ranging from 9.5% in Canberra to 30.2% in Victoria (ACC, 2011), while cocaine coming out of Colombia is approximately 80% pure.

This phenomenon occurs in the vast majority of final points of sale, where the purity of cocaine consumed is very low. In 2011, the NGO Energy Control analyzed four hundred seventy-two cocaine samples in Spain: only 5% of these contained pure cocaine; 41% contained cocaine and adulterants; 37% cocaine, adulterants and diluents; 1% cocaine and diluents; and 16% contained no cocaine (Energy, 2011).

These variations mean that one should consider the composition of the product itself when thinking about retail profit margins; in extreme cases, retail cocaine has purity levels of 1 or 2%, percentages so low that one cannot really call it cocaine as such.

According to Mejía and Rico, who published the first thorough analysis of the microeconomics of drug trafficking in Colombia, in 2008 the gross annual income per hectare for coca farmers who only sell leaves was about US\$4,000. When one takes into account land yields and the risks associated with the cultivation of illicit crops, an average farmer saw a net profit of approximately 47%: about \$3,950,000 Colombian pesos per year, or US\$2,000. Information gathered from the communications of illegal armed groups indicates that the price of a kilo of cocaine in the laboratory runs between US\$2,700 and US\$3,600. Then, while en route to North America through Mexico or Central America, the price of cocaine varies between US\$9,000 and US\$12,000 per kilogram, and en route to Europe through Venezuela, the Caribbean and West Africa, between US\$25,000 and US\$30,000 per kilo (Mejía and Rico, 2010).

This information serves to confirm that those at the bottom of the pyramid have very low profit margins, meaning that the retail sale of cocaine is quite similar to that of cannabis. While prices are a lot higher per gram for cocaine, the activity is not very profitable; many deal to satisfy their own consumption, whether it is problematic or just recreational, and some are hired by cartels for street dealing and security and surveillance tasks.

One of the big differences between these drugs – which is a limitation for cocaine 'entrepreneurs' – is that cocaine cannot be produced with the ease of cannabis, meaning that one cannot produce small amounts to commercialize locally for friends or personal consumption. This is an important element, as it means that all retail cocaine dealers are dependent on other links in the trafficking chain. Ironically, it seems that those who earn the most at retailing are those who are not dedicated entirely to selling drugs, but those who do it as a part time job. The profiles of these dealers fall into the categories of user-dealers and narcotourists discussed above, as they have networks that allow them to move more easily and reach more affluent markets. Because they do not devote all their time to the activity and mix with others, their level of insecurity decreases and they can enter and leave the business more easily. By not being part of drug trafficking circles, they can operate more freely and without depending directly on organized crime. This kind of seller can expect to earn between US\$1,000 and US\$9,000²¹ per month, depending on the drug, the quality and their network.

THE COSTS AND EFFECTS OF DRUG DEALING

The negative externalities of illegal markets have a major impact on society, affecting not only those involved in the drug market. Insecurity, violence, corruption, as well as the transformation of urban spaces and the fear of being surrounded by this type of activity, lead to negative externalities that are very costly to society, especially for those who are close to centers of distribution and sale.

As mentioned, the families of those who participate in these activities are also affected and the costs they pay are very high, either through their complicity or because they come to be part of the illegal activities themselves. In addition, in many cases when the heads of household or others who are direct involved are arrested and put behind bars, other members of the same families take over these activities.

Neighborhoods – and sometimes even whole city sectors – suffer the negative effects. Normally, organized crime fights over areas where transactions occur; these disputes include geostrategic points and take place by means of armed struggle, intimidation and practices associated with extortion. The stigma caused by the presence of drug dealing isolates these areas from the rest of society and turns them into zones where an absent state is replaced by criminal organizations that take total control.

In general, the relationship between the sale of drugs and crime is based on the fact that increasing sales allow drug organizations to fund crime and violence. This

²¹ Numerous individual testimonies and cases show the variety of retailer dealers that exist. Those with the highest incomes have large social networks and operate in European, Australian and American markets. Here you can read the story of a young 'camel' who earns up to €8,000 a month participating in the drug dealing market: http://www.elconfidencial.com/sociedad/camello-guante-blanco- 20100227.html

means that an organization's success in illegal markets leads to an increase in its capacity for violence and its funding for crime. More resources allow for broader activities and territorial expansion, so that disputes over market control go hand-in-hand with disputes over power. Consequently, the more attractive and efficient a market is, the more struggle there will be to control it (see Figure 2).

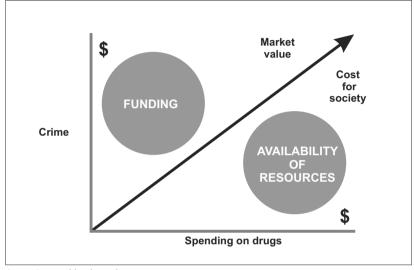


Figure 2. The relationship between spending on drugs and crime

Source: Prepared by the author.

Drug dealing has effects on less obvious areas such as parks, nightclubs, sporting venues and other places where many people/consumers come together and turn them into affected spaces. In these places, increases in drug spending increase the presence of crime.

LAWS AND REGULATIONS ON DRUG DEALING

Prohibition is predominant in legislation related to the drug chain. A large part of the world's laws are based on ones from the United States, where the War on Drugs has been the rule. The exceptions are countries like Portugal, which after thirteen years of decriminalization stands out as the prime example of the paradigm shift. Other countries, such as Chile, have very liberal-seeming laws that, in practice, show another reality: there, the law allows private personal consumption but punishes possession, cultivation, and use in groups. The results of this seemingly forward-

thinking law have been disastrous. In a country of less than 16 million inhabitants, there are more than 80,000 arrests per year; only 17% of these are for trafficking and the rest are for consumption, possession and cultivation.

Mexico

The law against drug dealing, adopted in 2009, includes, among other things: different procedures and jurisdictions for the administration of justice in drug dealing cases, depending on the amount involved; the distinction between consumers, small-scale drug dealers and wholesale dealers based on the amount of drugs in possession; and transitional measures including the ability to investigate and incarcerate drug dealers who carry certain amounts of drugs (see Table 9) (Zamudio, March 2011).

Table 9. Maximum possession amounts for "personal and immediate" use

NARCOTIC	MAXIMUM AMOUNT FOR IMMEDIATE PERSONAL USE
Opium	2 gr
Diacetylmorphine or heroin	50 mg
Sativa, Indica or marijuana cannabis	5 gr
Cocaine (including crack)	500 mg
Lysergide (LSD)	0.015 mg
MDA	Powder, granulated or crystal (Tablets or capsules)
(metilendioxianfetamina)	40 mg (una unidad con peso no mayor a 200 mg)
MDMA (3,4-methylenedioxy- <i>N</i> -methylamphetamine)	40 mg (One unit that weighs no more than 200 mg)
Methamphetamine	40 mg (One unit that weighs no more than 200 mg)

Source: The state of Mexico. Decree amending, supplementing and repealing various provisions of the Health Act, the federal criminal code and federal code of criminal procedures. April 30, 2009.

The law establishes that consumers caught with small drug amounts for the first or second time will not be punished criminally, but instead will be advised to undergo treatment; third time offenders will be required to receive treatment. It does not say how they will be required to, leaving open the possibility for the authorities to act with discretion in each case. It also establishes that those caught with more than the established minimum will be penalized with at least ten months in prison, even if they can prove that the drugs were not for sale or trafficking (General Health Law, Article 477). It should be emphasized that even though the law differentiates between users and traffickers, it also prescribes prison for those users found in possession of amounts slightly higher than those established for "personal and immediate" consumption.

As the law separates the worlds of consumers and traffickers, the interpretation that it does not criminalize drug use is partially true.

An oft-repeated recommendation is to take resources from security agencies and invest them in public health programs, because the more one invests in demand reduction and addiction treatment the less one has to invest in repression (Zamudio, March 2011).

The United States

The average prison sentence for a first trafficking conviction is three years, higher than that for the majority of violent offenders, and most of those convicted of drug trafficking fulfill at least 80% of their sentences, while the average for violent offenders is only 50%.

The *Drug Courts* are special courts, in operation since 1989, designed to reduce the recidivism and drug use of those who have committed a crime directly related to drug dependence or abuse. These courts work mainly with people who have not committed violent crimes²².

The model is based on four basic elements. First, the person who is to lose his liberty for having committed a crime, and it is shown to be a drug user, is the beneficiary of a suspension of criminal proceedings or of his sentence. Second, that person is offered treatment and other social services. Third, the treatment is set and supervised by a judge or court in charge of monitoring compliance with the conditions imposed, for which periodic tests are carried out to determine if the person has consumed drugs; there are also oversight hearings. Fourth, failure to comply with the conditions imposed by the Drug Court leads to the imposition of sanctions that can include exclusion from the program. Compliance, in contrast, leads to the awarding of prizes and, if treatment is successful, the penalty can be significantly reduced or dismissed (Guzmán, 2012).

Although the model has been criticized and has methodological limitations, studies of Drug Courts in general recognize their positive effects in reducing recidivism when compared with typical criminal system responses (Guzmán, 2012).

²² Servera, J.M. Drug Courts: focaliza y vencerás. http://www.cj-worldnews.com/spain/index.php?option=com_k2&view=item&id=2304:drug-courts-focaliza-y-vencerc3a1s&Itemid=114&lang=en

Europe

Selling drugs to raise money to fund an addiction is considered a crime in all member states of the European Union. In some, these "user-dealers" are in an intermediate position between felony distribution and the medical problem of addiction. If one's condition is not covered by national legislation, it is typical for the judge to analyze the situation when sentencing, so discretion is very important.

The maximum prison penalty is three years. In cases involving large quantities of drugs, including the substances that are most damaging to human health or where the drugs have caused serious harm to the health of several people, the penalty ranges from five to ten years in prison. If the sale is made in the framework of a criminal organization, the penalty is at least ten years. When the crime involves precursors and the offense has been committed as part of a criminal organization, or when the precursors are intended for the production or manufacture of drugs, the penalty is from five to ten years.

Sanctions may be reduced if the offender abandons criminal activities related to drug trafficking and precursors, or provides information to the authorities that: helps prevent or mitigate the effects of the crime or helps identify or prosecute other offenders; helps uncover evidence; or helps prevent the commission of further crimes.²³

ELEMENTS TO BE CONSIDERED IN PROPOSED REGULATION: THE IMPORTANCE OF REGIONAL COOPERATION

One of the biggest concerns in proposed decriminalization, legalization or national regulatory efforts is the role of neighboring countries, since any innovation in drug policy will only be successful if it is implemented by a number of states. Reforms cannot be isolated.

This concern is due to the fact that drug markets are highly interconnected and involve many countries: the network of countries that participate in the chain of cultivation, production, trafficking and sale includes a number of nations and regions. Adopting radical reforms in one country, therefore, may have unprecedented effects on its neighbors.

In the case of legalization, for example, the move by one country to allow the use of a drug can have negative effects on its neighbors, effects that have to do with the

²³ EMCDDA. http://www.emcdda.europa.eu/html.cfm/index146646EN.html

relationship between supply and demand. The interest of the cartels or producers in neighboring countries to be part of the legal market could trigger a race to participate in and control it. As is well known, market disputes result in violence and increased organized crime. Moreover, these countries often make public their dissatisfaction with the internal effects created by their neighbor's drug legalization. In these situations, countries are faced with the contradiction of the criminalization of supply and the legalization of demand, a scenario in which legal demand incites supply, which remains illegal.

That the demand is legal but the supply is not is a paradox in terms of the implications for regional regulatory policies. As such, to minimize the negative effects of such national initiatives, drug policy in all countries of the region should be fairly uniform.

UTILITIES FOR USERS AND DRUG DEALERS

UTILITIES FOR DRUG USERS

One of the least explored areas of drug use has to do with the utilities the consumer seeks or receives. While utilities gained by drug dealers are more tangible and have been extensively explored, little is known of the user's upside. However, understanding those benefits would make it possible to understand the most important factor behind consumer behavior and its effects on the drug market. To Miron and Zwibel, "It is notable that the utilities of drug use are ignored in public discussions of drug policy, even by economists" (Miron and Zwibel, 1995, see also Clark, 2003).

The user seeks utilities related to a number of needs that are satisfied by drug use. These needs do not necessarily have a direct relationship with dependency or addiction; indeed, the majority of the benefits are pursued rationally, whether it is through recreational or problematic/addictive use. ²⁴ Moreover, the reasons for drug use range from those who "like" drugs to others who "need" them. The positive utilities, in these situations, have to do with voluntary acts that are part of a quest. Dependence and addiction, on the other hand, begin to cross the barrier between voluntary and obligatory, which has negative consequences for the user (see Figure 3).

The utilities can be varied, simultaneous, mixed and transformable. The benefits desired by each user depend on his needs and his ability to find answers to them

²⁴ For more on rational addiction, see Becker and Murphy, 1988; Grossman, Chaloupka and Tauras, 1998.

through drug use. The needs can be classified into several groups: 1) recreation; 2) pleasure; 3) exploration; 4) physical stimuli/performance; 5) religious or spiritual; 6) health/well-being; 7) emotional; 8) a response to pressure; and 9) addiction or dependency. This last category is the one that has negative consequences and it is reached after the user passes through at least one of the categories that offer positive benefits.

Recreational Response to pressure Health

Exploration Religious/ spiritual Emotions

Physical stimulus/ performance

Addiction depedency

Figure 3. Utilities of drug use

Source: Prepared by the author.

Understanding these utilities helps one understand the incentives for each user to consume a drug. In simple terms, drug use, whether exploratory or addictive, is a response to the quest for a benefit guided by an incentive.

ELASTICITY VERSUS INELASTICITY: UNDERSTANDING DIFFERENT DEMANDS

As has been noted, the demand for drugs should be divided according to the utilities the user expects to receive and whether the demand is the product of voluntary drug use or addiction. Although in both cases one can question whether the conduct is rational or not, they are still different in terms of their effects on the behavior of demand. Various arguments seek to define if the demand for drugs is elastic or inelastic or, rather, how its elasticity helps us understand the results of prohibition.

In "The Economic Theory of Illegal Goods," Becker, Murphy and Grossman suggest that, in the case of drugs, prohibition and punishment policies drive up the final cost of the drug. The consumer must absorb this, and if demand is elastic the user consumes less. That said, the authors shed light on cases in which the demand

is inelastic, arguing that, "In the case of illegal goods such as drugs—where demand seems inelastic—price increases do not cause a decline in use, but rather an increase in spending" (Becker, Murphy and Grossman, 2004).

This in large part explains the failure of prohibitionist policies. As the levels of elasticity are low, consumers absorb the costs of the War on Drugs and the effects on reducing use are minimal.

Keeping in mind the utilities of drug use, we can identify the levels of elasticity and consequently assess the potential impacts of different policies (see Figure 4).

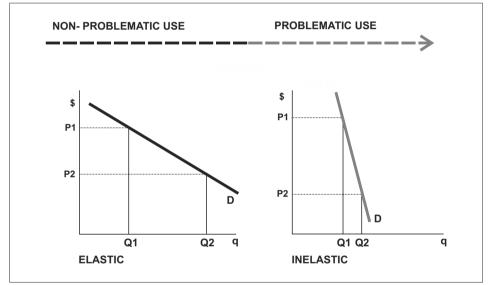


Figure 4. Elasticity, kinds of use and demand

Source: Prepared by the author.

In the case of elastic demand, which mainly responds to recreational and exploratory use (on one end), price increases would have a negative effect on the quantity demanded. In a scenario of complete elasticity, prohibition would give certain results, and under regulation consumption could be controlled by taxes.

On the other hand, in a scenario of complete inelasticity, neither prohibition nor taxes would have an impact on the amount consumed. This last scenario comes closest to describing problematic or addictive consumption. As shown in Figure 4, there is a direct relationship between the nature of consumption and the level of elasticity. This same ratio can be applied to measure the effectiveness of policies. Generalizing the elasticity of demand in drug use without allowing for differences or without un-

derstanding the nature of consumption is an error that prevents one from addressing the problem.

UTILITIES OF DRUG DEALING

The utilities obtained from the sale of drugs and, in particular, from "drug dealing," are quite similar to those acquired in most property transactions. The differences, however, have to do with the relationship of these utilities with illegality and, in this case, with organized crime. In that sense, the utilities of drug sales are most similar to those obtained through any illegal trade.

Moreover, as has been noted, the utilities of those involved in drug dealing are not the same as for those who run drug trafficking organizations, middle managers or, in general terms, of drug trafficking in general. In this case, as we've seen, the utilities of retailers tend to be much lower in financial terms and often higher in other types of needs ranging from protection, to the satisfaction of an addiction, to survival.

The reasons that push an individual into an illegal activity such as selling drugs have to do with a simple equation that takes into account the benefits minus the costs. Figure 5 shows the factors that influence the decision to participate in the sale of drugs.

Many of the incentives that are weighed, such as "expected gains" and final "profits", are not directly related to financial reasons. The participation in many activities,

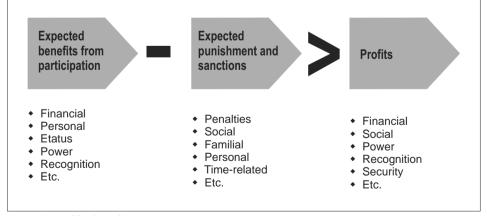


Figure 5. The decision to participate in the sale of drugs

Source: Prepared by the author.

particularly illicit or criminal ones, generates other returns, often related to security, recognition, protection, and so on. These issues are linked to empowerment, relative or real, of the person who chooses to participate.

Similar to the utilities that the user obtains or seeks to obtain by consuming a drug, the decision to participate in the sale and, in this case, in the micro-sale, follows a rational chain of assessments that consider the costs and benefits of entering the business. Although this can be a rational decision, there are other scenarios in which the incentive to participate is the product of pressure or even of slavery. In many cases, participation in drug dealing is a practice of those who find themslves in networks of human trafficking, prostitution and gang membership. Understanding these incentives is crucial when setting punishments or penalties for drug dealers. Poverty, the need to support one's family, and safety considerations lead thousands of people enter this business without being part of criminal organizations and without receiving large profits. Evaluating these issues is the first step toward effective policies.

The remaining element in this equation is related to the sanctions and penalties that can be imposed, which vary from country to country and are often extremely disproportionate to the crime, sometimes even reaching the death penalty. In these extreme cases, the criminal organizations are forced to take on the role of guarantor and protective entity, and must guarantee returns that are commensurate with the risks involved. In such scenarios, organized crime gains more power, as it is instrumental in maintaining order, security and peace.

BENEFITS OF REGULATION

REDUCING DAMAGE CAUSED BY DRUG USE AND THE POLICIES FOR DOING SO

As is known, the policies that seek to reduce the use of illicit drugs have had more negative effects than consumption itself. With this in mind, the objective of regulation is to reduce the damage caused by use and, perhaps even more so, to reduce the damage generated by the current prohibitionist policies that seek to reduce or eliminate drug use and create a "drug free" world. Even through in some cases policies have sought to understand drug use differently and to treat users as human beings and not criminals, the general trend has been toward inhumane, inefficient and harmful policies.

According to this logic, the state represses, pursues, stigmatizes and punishes, thereby cornering users and pushing them into the shadows (see Figure 6). There, the drug use continues, but it is done in secret, without information and with the constant feeling that whoever is doing it is taking part in an activity that should be

hidden. In these areas, any help offered by support and assistance networks, whether they are the state, family or society, is nullified and the consumer ends up isolated, silenced and ignored. One of the most serious risks of this isolation is that, because the users are vulnerable and often dependent, they regularly end involved in organized crime networks.

Punishment

Pamily - Friends - Organizations

Drug use in the shadows
Relationship with crime
Uninformed use
Vulnerability
Infections (HIV, etc.)
Drug dealing

Figure 6. Prohibition and drug use in the shadows

Source: Prepared by the author.

By denying drug use and believing that addiction can be treated by means of force, prohibition has led to an increase in uninformed consumption and pushed users into places where there can be no effective policies. In addition, the logic of prohibition has in many cases led to increases in the spread of other diseases, largely via shared syringes.

Harm reduction is possible in scenarios where priority is given to openness, acceptance, and health care and, above all, to understanding and respect for the dignity of the person. Harm reduction refers to practices, strategies, programs and policies that focus on reducing the negative health, social and economic consequences of drug use, whether it is legal or illegal. One of the central elements of harm reduction strategies has to do with participation levels, being that, "people who use drugs and other affected communities should be involved in decisions that affect them" (HRI, 2012). The implementation of harm reduction strategies allows the user to be put in the center of the process.

Finally, regulating drug availability implies offering them responsibly and under supervision. Prohibition has achieved the opposite, meaning that illicit drugs are often more easily attained than legally regulated ones like alcohol and tobacco. Moreover, regulating the drug market would eliminate a significant portion of the profits made by organized crime, a group that is the "least qualified or incentivised to manage [drugs] responsibly" (Rolles, 2012).

Organized crime only seeks to increase its profits and is not interested in any controls – either ethical or of "good faith" – that would generate a degree of responsibility at the moment of sale, nor in distinguishing between buyers, who are only a source of demand. In addition, dealers often hope that their customers become addicted or dependent, since this ensures a certain loyalty and fidelity as buyers. For these reasons, in many cases dealers give away drugs like cocaine base paste, so that people will become addicted: "The first is free; the second I charge for."

The central question here is which actor would be more efficient in offering security at the moment of a drug sale. Is it organized crime, which only wants to increase its financial return? Or is the state, which can regulate the sale, work to reduce damages and ensure the buyer's dignity and health safety? Figure 7 illustrates the differences.

In a sense, these questions led to the creation of drug distribution and consumption rooms. The idea of drug distribution rooms was promoted in late 2012 by the

Quality control
Controlled delivery/access
Health supervision
Security/protection
Monitoring
Labeling
Harm reduction
Uncontroled supply
Open access
Lack of ethics and policy
Secrecy
Lack of security
No quality assurance

Figure 7. Distribution via tobacco shops versus illegal sales

Source: Prepared by the author.

Mayor of Bogota, Gustavo Petro. Controlled centers of illicit drug use were part of an initial proposal that the mayor promoted as a way to reduce the dangers that drug users faced when they acted clandestinely. The proposal is based on international experiences in which controlled consumption rooms have reduced negative impacts on addicts. Examples of these models are the hygienic drug consumption rooms (DCR) opened 26 years ago in Bern, Switzerland, or the so-called shooting galleries in Madrid, Barcelona and Bilbao. Petro's proposal imagines rooms staffed by doctors, psychologists, dentists and nurses who provide users with health care as well as free minimum doses to addicts suffering from withdrawal symptoms.²⁵

REDUCING THE RESOURCES OF ORGANIZED CRIME AND SIMILAR ACTORS

One of the major challenges of any reform that seeks to regulate illegal drug markets is to minimize the resources attained by organized crime gangs or illegal armed groups via drug production, trafficking and consumption.

Much of organized crime's funding comes from the sale of drugs, one of the most lucrative businesses in the world. These resources allow them to increase their financial, social and political power, and expand their activities and networks of influence.

According to the UNODC, the largest chunk of transnational organized crime revenues comes from illicit drugs: 20% of all criminal income and between 0.6 and 0.9% of global GDP (UNODC, 2010). With such an availability of resources, criminal groups can also provide communities with employment, support, opportunities for social advancement and security. As a result, "criminal entities can gain political capital with local communities" (Felbab-Brown, 2012). As has been noted, market regulation of today's illicit drugs would deprive these organizations of key resources and allow better use of the millions of dollars in resources spent on pursuing them. Improvements in product quality, safety, trust, legality and price competitiveness, among other issues, would make drug traffickers uncompetitive in a regulated market. Users would make the rational decision to buy drugs in regulated centers or to grow drugs themselves in the case of cannabis, which are altogether more attractive and efficient routes to attaining drugs.

For criminal organizations, the inability to compete in these markets would end the violent disputes over territorial control. Here one can begin to see the incen-

²⁵ See El Comercio.

tives that would be generated for those involved in drug dealing under the umbrella of criminal organizations: the departure of the cartels and organized crime groups would have a direct effect on retail, being that drug dealers would be out of business. Special attention would have to be paid to retail dealers, as they would be the ones who pay the highest costs in a regulated scenario.

REGULATION OF PLANT-BASED DRUGS

The consumption of drugs like alcohol and tobacco is regulated through models that have positive and negative consequences, ranging from tax collection and the development of educational policies and communication campaigns focused on reducing use on one side, to the rebirth of black markets and violence caused by over-regulation on the other.

The regulation of drugs in its broadest sense means the state or private agents become part of the market by supplying the substances while regulating the production and sale and associated health policies: education, prevention, rehabilitation, and so on. There are also some competitive legalization models, in which the market regulates itself and the state does not participate. However, in this scenario the state is forced to take or further develop health care measures in order to contain the negative externalities. The state must be part of any regulatory scenario. It is important to make clear that total regulation of the drug market is practically impossible. As with alcohol and tobacco, a certain percentage will remain illegal. In England, for example, 25% of the tobacco market is illegal; and it is estimated that in the Russian market, between 30% and 50% of the vodka – and almost a third of the cognac and wine – is illegal (Putiy and Ayala, 2010).

TAXES

There are ways for the state to benefit under both legalizations scenarios, especially in the competitive model (in which it also has to incur some costs). But arguments like Ethan Nadelmann's lead us to think that the regulated model is more virtuous. Nadelmann argues that, "The government could raise millions of dollars, with a sales tax, by regulating production and distribution; some of that money could be used to fund real prevention and treatment programs." Gary Becker, a Nobel laureate in economics, joins this point of view. By comparing the current repressive models with the legalization model, Becker has demonstrated that the only punishment in this scenario would be for those who want to evade taxes (Becker, 2005).

This argument should be the start of a debate about the benefits of regulation. States could allocate funds they raised to education and prevention programs and end the absurd and gigantic police and judicial spending necessitated by thousands of arrests and detentions. Moreover, regulation would have a direct impact on the prison population, the stigmatization of minorities, youth and women, and, especially, on people's rights.

There are various ways to understand the impact of the income that could be raised through taxes. Although there is no official data on total worldwide collection of alcohol and tobacco taxes, there are a number of regional and national estimates. According to the Tax Policy Center, in 2010 the United States collected US\$17.3 billion in tobacco taxes and US\$6.0 billion in alcohol taxes.²⁶ In the UK, in 2010-2011 tobacco taxes raised £11.1 billion,²⁷ and beer and spirit taxes brought in £14.6 billion. And in Spain, of the €9.84 billion collected in tobacco taxes in 2010, €7.97 billion corresponded to the excise tax on tobacco products and €1.88 billion came from value added tax.²⁸

That said, it is also necessary to explore who will absorb this tax (the consumer or the product) in the regulation of drugs such as cannabis or cocaine. In both cases, the costs of production would substantially decrease. The best example is that of cocaine, whose price rises from approximately US\$2,500 per kilo in producing countries to US\$100,000 in the U.S., numbers that, while rough, help to explain the real costs of production, transportation and sale, as well as those associated with corruption. Understanding these costs allows one to deduce the drug's street sales price in a controlled scenario. According to estimates made by economist Jeffrey Miron, the price of legalized marijuana would be half what it is today and, in the case of cocaine, the price would drop to 20% of current values (Miron, 2010). According to other models (Liccardo, 2008), prohibition is estimated to increase production costs by up to 400%.

In this context, it is necessary to understand how a tax on selling drugs would be formulated. Tobacco taxes, for example, are characterized as a tool that, besides ensuring large revenues for the state, also acts as a kind of disincentive for consump-

²⁶ See Tax Policy Center. Regarding tobacco: http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=403. And regarding alcohol: http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=399

²⁷ See *Tobacco Manufacturers Association*: http://www.the-tma.org.uk/tma-publications-research/facts-figures/tax-revenue-from-tobacco/

²⁸ See ABC.es: http://www.abc.es/20110119/sociedad/abci-impuestos-tabaco-201101190130.html

tion. It is often a disincentive that principally affects the lower classes but at the same time helps to reduce use overall. Nonetheless, it is especially important to note the differences among those who absorb the value of the tax, called the *tax burden*.

In the case of tobacco, producers and users share the tax burden. The tax is set on the actual cost of production, which can either be a fixed or real price but in general is one that remains relatively stable. What makes tobacco (cigarette) prices rise is the increase caused by the tax.

In the cases of marijuana and cocaine, the reality is different. Their final prices, either wholesale or retail, are the result of a series of costs added throughout the chain, which mostly have to do with the corruption, insecurity and punishment present in the process. All of these costs arise from the illegal nature of the drugs. Consequently, in legal and regulatory scenarios, these costs would be replaced by those generated by the regulatory systems and their bureaucracies.

Therefore, the final costs of these drugs if they were legal would be substantially lower than they are today. If the price were kept at that lower level, there would be a risk of creating new incentives that could increase consumption. With low prices, demand can be affected, especially when the barriers to access have been lowered.

Given that the costs associated with the cultivation, production, transportation and distribution (sale) would be lower, a tax on these prices serves a dual purpose: 1) to generate revenue; and 2) to increase the price so that it stays in normal levels, compared with current prices. This second purpose is especially important as a way of avoiding a radical drop in prices and its impact on access and consumption levels.

QUALITY CONTROL

Retail market regulation also offers an opportunity to improve product quality. In the case of cannabis, its quality has greatly improved due to the increase in personal cultivation and the availability of real cannabis, which has led to the elimination of much of the marijuana that's been mixed with other substances. This is what happened, for example, in the case of "Paraguayo," the consumption of which – because of its mixture of glue and other compounds – has dire consequences for the health of users and frequently leads to addiction to substances that are not cannabis. Under a regulated model, the presence of such compounds could be eliminated, thus ensuring the quality of the final product. In successful cases of partial regulation, such as that for medicinal use in California or the tolerance of drug sales in the Netherlands, steps have been taken to label cannabis according to its percentage of THC, which makes it clear what type of drug is being sold.

Furthermore, the lack of purity of drugs sold on the street is worrying, especially in the case of cocaine. Purity levels often do not exceed 50%. While in many cases the drugs are mixed with substances that do not have harmful health effects, in many others the chemicals used do have very negative effects. Indeed, on many occasions users develop addictions not to the cocaine itself, but to the chemicals added at the end of the chain, which leads to situations where they are dependent on specific dealers.

Regulation would permit quality control systems, supervised by health institutions that would act as guarantors of the production, composition and origin of the substances on the market, thereby minimizing the risks faced by users who do not know what they are consuming.

True education, prevention and rehabilitation programs

The expensive anti-drug campaigns that have been launched in most countries in Latin America and other nations around the world are characterized by a focus on terror, intimidation and stigmatization. Because they are not based on evidence but on moral discourses, they have been powerful tools for boosting uninformed consumption, stigmatizing consumers and criminalizing various kinds of users.

These campaigns are heavily criticized by the public, which sees them as ineffective tools and propaganda that serve purposes far from the stated goals of ensuring the health and welfare of the users. For example, one of the main conclusions of the study *Politicas de drogas y opinión pública* ("Drug Policy and Public Opinion") performed by Asuntos del Sur in 2012 in six countries in Latin America, is the negative evaluation of these campaigns in all countries surveyed. In Santiago, Chile, 52% had a negative view of government campaigns aimed at preventing consumption; the percentage in Mexico City was 46%.²⁹

To be effective, educational strategies must provide truthful information and tools that allow consumers to make an informed decision about beginning or continuing drug use. Educational programs can reduce damages by reporting on the actual effects of the use of different drugs.

²⁹ See Asuntos del Sur, 2012. *Políticas de drogas y opinión pública*. www.asuntosdelsur.org/estudio2012

REDUCTION OF CRIME ASSOCIATED WITH DRUG BUYING

In case of problem users, the delivery of minimum doses would dissuade them from committing crimes to acquire drugs by keeping them out of contact with criminal organizations. Furthermore, in the regulated system today's prices for most illicit drugs would fall.

REGULATION OF DRUG DEALING

To be effective at lowest levels of the chain, the regulation of drug dealing must be part of a comprehensive regulatory package that also regulates much of the drug trafficking chain. This is because regulating drug dealing without regulating production can lead to unintended consequences; in this case, the provision of drugs by drug traffickers remains illegal. Regulating only one step may bring more costs than benefits.

To design a model that regulates drugs and drug dealing, it is necessary to have partial or total regulation of stages such as cultivation, production, transportation and sale. One of the most common problems faced by proponents of legalization or regulation of illicit drug use has to do with its effects when the other parts of the chain are still illegal. If one looks at Mexico's reactions to Prop 19 in California, Colombian arguments during the same period, and more recent calls made by Presidents Juan Manuel Santos (2010 -) and Otto Pérez Molina (2012 -) in reaction to cannabis regulation adopted in Colorado and Washington, all of them are linked by a common line of questioning: How can we continue criminalizing supply while we legalize demand? What are the negative effects of continuing to criminalize the activities of farmers, producers, traders and retailers when those who consume go unpunished? Do the regulation of drugs and the criminalization of the supply imply an inconsistency? Can regulatory models even survive when important parts of the chain remain illegal?

Regulating only one link in the chain – retailing – would have a funnel effect of concentrating all the pressure at this stage to distribute the drug legally. In a regulatory framework that does not affect the other stages, all earlier actions involving traffickers would be illegal. In this case, their acts would be criminalized and punished, not for the act of sale, but for the steps taken to get there. One can also imagine scenarios in which the production and distribution of lesser amounts is decriminalized by turning a blind eye to these stages. While this would have fewer negative effects, it would have similar effects on retail dealers.

To move forward, it is necessary that we begin with the regulation of the previous stages (production and wholesale). Only then one can explore on how to regulate micro-sales.

If these preconditions are not met, there are other indirect ways to regulate. One is via quality control, which serves as a regulation method. Quality control, which should be provided by health authorities and could be similar to the controls that are applied in scenarios where prostitution is still illegal, must be a voluntary mechanism driven by incentives that result in end benefits to the seller. Those are monitored will offer certain guarantees to consumers in terms of product quality and safety in the transaction. As these control mechanisms deal with an illegal substance, this practice has limitations in terms of the power that consumers can exercise when dealing with sellers.

Finally, it is necessary to establish rehabilitation programs for those working in drug sales. Reinsertion plans would vary according to the sector or depending on the person's condition: deprived of freedom or free, needing job training or the able to undertake study, imprisoned. To design such policies, various experiences of reintegration should be analyzed.

COSTS ASSOCIATED WITH THE REGULATION OF USE

INCREASED COSTS OF IMPLEMENTING HEALTH PROGRAMS

While regulation would allow problem users to be addressed with more speed and openness, thereby reducing long-term costs, the overall costs associated with health care would increase. This is due to the cost of the plans and campaigns that governments and organizations would have to develop to educate and prepare the general population and to rehabilitate problem drug users.

INCREASED INVOLVEMENT OF ORGANIZED CRIME IN OTHER ILLEGAL ACTIVITIES

Upon losing the drug business, it is likely that traffickers would seek to fund themselves through other activities, in the process increasing their use of violence to maintain and augment their power. They could increase the scope of their activities to include prostitution, human trafficking, migrant smuggling, kidnapping, participation in the sale of other illegal products, and piracy, among others.

GOVERNANCE AND DEMOCRACY AS NECESSARY PRE-CONDITIONS

One of the main problems of Latin American drug policies is that they are based on policies from other countries and heavily angled toward the needs of the United States. Prohibition has also failed becauase it is a bad copy of previously used strategies. As we move forward in our analysis of what policies Latin American countries should develop, especially when considering the recommendations presented below, it is necessary to consider diverse elements that help one understand the diversity of the realities in the region, along with indices of democracy and national economic scenarios.³⁰

Without a doubt, one of the great challenges is to design and implement successful policies in democratic settings, where human rights are respected and people are at the center of the strategy. To advance in this respect, one must respect the democratic framework and capacity for governance of each country. Democracy is a starting point, since we assume that for policies to be effective they must be implemented in democratic settings by leaders that have public support. In addition, the levels of public understanding and capacity for governance should offer the citizenry some reassurance about the government's ability to develop such policies. In other words, we are talking about the conditions of state stability and respect for human rights necessary for a successful policy. The proper evaluation of these conditions – via the levels of support for democracy or for tough-on-crime initiatives, for example – is helpful for predicting the chances for success of progressive regulatory policies.

A 2009 study led by Salazar and others explored the relationship between development and drug use. Using the human development index and rates of drug use in countries in the region, they noted that, "the higher the human development index, the higher the consumption rates" (Salazar et al., 2009). While the authors do not claim that there is a direct relationship between human development and drug use, they do present observations that speak of elements that may be causal for consumption. One of their conclusions has to do with the "ease" with which drugs can be accessed in countries with a high human development index; they put forth the case of Argentina, a country with high human development index that also has one of the highest prevalence of use rates in the region.

Below we examine some Latinobarómetro survey results (2011) and indices to observe the relationships and differences between drug policies and use prevalence rates as reported by the UNODC in 2012.

³⁰ We do not forget that the successful eradication of the drug cartels in Chile in the 1970's came during the dictatorship of General Pinochet, who in his early years implemented an aggressive erradication strategy. Achieving that goal had to do with the dictatorial nature of the government, which imposed rules according to its objectives, without any regard for human rights or dignity.

SUPPORT FOR DEMOCRACY, DRUG POLICY AND CONSUMPTION LEVELS

We can take the support for democracy as a starting point. The Latinobarómetro survey includes a question related to this issue. Looking at the rates of support in selected countries, only two out of ten have support of less than 50%: Brazil (45%) and Mexico (40%). In real terms, these may be the countries with the largest number of casualties in the War on Drugs. While Mexico's situation is better known, the levels of violence in large Brazilian cities and in northern Brazil are also worrisome. In a sense, while they are democratic countries, their levels of citizen support for democracy are quite low. We can also say that over time the two have followed fairly repressive drug policies, but with very little success. Despite the relative progress of Mexico, the current situation can be classified as disastrous and it does not offer much hope for change. Brazil, meanwhile, is known for the high levels of violence that can be associated both directly and indirectly with the drug problem, especially in the favelas (slums) of the big cities, where the state and democracy are largely absent and where one finds the worst practices, human rights violations and violent acts. Among that country's most recently implemented policies are changes to the laws on carrying and dealing, which, contrary to expectations, have increased the prison population. When comparing support for democracy with consumption levels (see Figure 8), the differences between the two countries are low. Mexico has a prevalence of 1% cannabis and 0.3% for cocaine, while in Brazil the numbers are 2.6% and 0.7%, respectively. Overall, if we compare consumption and support for democracy, the levels are low in both countries.

At the other extreme one finds Uruguay and Argentina, countries with the most support for democracy, at 75% and 66%, respectively. Uruguay is a particular case and difficult to compare to Argentina because of geographic, economic, and other conditions. However, both countries have taken important steps in relation to drug policy, or at least shown intentions to do so. The Uruguayan case is perhaps the most emblematic of the region, thanks to the audacity of President Jose Mujica, who opened the debate in the region through leading by example. Uruguay is the country in the region with the greatest support for democracy and the highest support for drug policy change. When we compare support for democracy with drug use in both countries, we also find common elements: both have consumption levels above

³¹ This condition is still present despite the government's decision to freeze the parliamentary debate on regulation, a decision that does not deprive the country of its position at the forefront of the regional debate.

the average of other observed countries. Moreover, Uruguay has the highest rate of cannabis use (5.6%) and cocaine use (1.7%), while Argentina is second in cocaine use (0.85%) and fourth in cannabis.

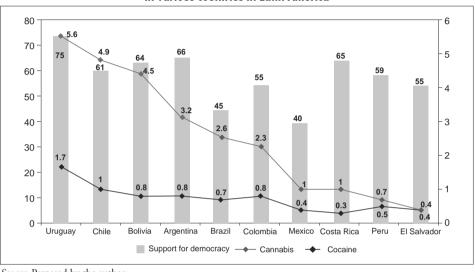


Figure 8. Cannabis and cocaine use and support for democracy in various countries in Latin America

Source: Prepared by the author.

The general relationship between support for democracy and drug consumption offers more clues. The four countries with the highest consumption rates – Uruguay, Chile, Bolivia and Argentina – have levels of support for democracy over 61%. At the other extreme, where one finds countries with lower prevalence – Costa Rica, Peru and El Salvador – support for democracy is in the range of 55-65%. This comparison is not enough to sustain a relationship between support for democracy and drug use, but it does allow one to observe that the level of support for democracy appears to be a factor and that it follows the (positive) moves the mentioned countries are taking in terms of drug policy. In a sense, greater respect for democracy and opportunities for dialogue and participation offer a greater chance that the issues that societies have historically avoided will at least be discussed.

THE RELATIONSHIP BETWEEN THE ECONOMY AND DRUG USE

Just as the relationship between development and drug use can offer clues about differences in consumption patterns, it is necessary to explore the relationship between the Purchasing Power Parity (PPP) and consumption. There is no doubt that

purchasing power influences the ability to buy drugs. However, it is necessary to take into account the inelasticity of demand in specific situations that generate drug use scenarios; for example, the behavior and level of inelasticity of an addicted consumer compared to that of a recreational user. Does purchasing power affect behavior at the moment when one decides whether to consume or not? Does the purchasing power parity of a country affect how drugs are consumed in it? Does it affect how much is consumed?

By taking as an example the PPP of the countries analyzed in the previous section and comparing it with the prevalence rate in consumption (see Figure 9), one finds certain relationships: with the exception of Bolivia, all the observed countries offer some similarities. Those that have a higher PPP also consume more cannabis and cocaine. The countries with the highest parity are Uruguay (US\$16,607), Argentina (US\$18,205) and Chile (US\$17,380), and, as noted, these are three of the four largest consumers (in terms of prevalence) among the countries studied. At the other extreme, Costa Rica, Peru and El Salvador – countries with lower purchasing power parity – also have the lowest rates of prevalence. Bolivia is the exception, because while its parity is US\$4,789, it is among the countries with the highest prevalence of the two drugs.

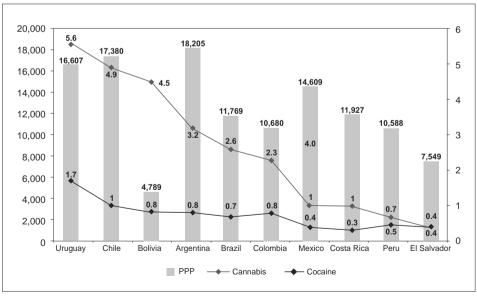


Figure 9. Cannabis and cocaine use and purchasing power parity in some Latin American countries

Source: Prepared by the author.

THE RELATIONSHIP BETWEEN LIFE SATISFACTION AND DRUG USE

Finally, it is also important to explore the relationship between drug use and other behaviors. One of a drug user's stimuli may be a pursuit of happiness or satisfaction related to his everyday life or his hoped-for life, and such stimuli come into play in his rational decision to use drugs. The quest for satisfaction may have much to do with the search for drugs. However, many of the arguments that explain the failure of prohibition explain the user's search for an escape in drugs as a way to combat his lack of happiness. For this reason, many prevention campaigns, especially those aimed at young people, try to offer options (diversions, sports, art, etc.) to help counteract the dissatisfaction with everyday life that can eventually lead to drug use and abuse.

There is considerable evidence about the relationship between consumption and dissatisfaction, which can take the form of depression, dependency, addiction, or simply a lack of happiness at being without the substance required.

As seen in Figure 10 (based on data from Latinobarómetro (2011) and UNODC (2012)), the countries where marijuana is most consumed (in terms of prevalence/year) – like Uruguay, Chile and Bolivia – have low levels of satisfaction compared with the rest of the sample. In all countries, except Peru and El Salvador, it is possible

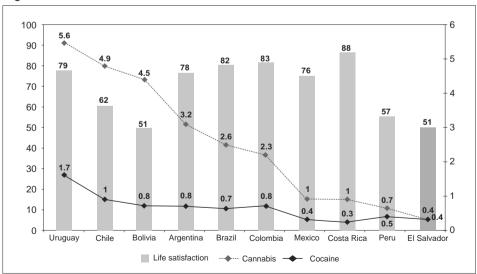


Figure 10. Cannabis use and the level of life satisfaction in various Latin American countries

Source: Prepared by the author using data from Latinobarómetro and the UNODC.

to see an inverse relationship, being that those with higher levels of life satisfaction³² show lower prevalence of use.

This data should be interpreted with caution because, while it serves for future debates, it is not sufficient to prove that there are direct relationships. Samples from selected countries are not representative of the entire region, but they do give an overview of countries with different realities that in some way represent the region's diversity.

One must better understand today's scenarios in order to offer solutions that fit the reality of each country and, above all, that help clarify the minimum conditions that a state must have for reforms and measures related to changes in drug policy to be effective. Faced with the possibility of implementing regulated scenarios, it is very important to take into account the conditions in a variety of countries (in terms of democracy, economy, human development, satisfaction, etc.) to recognize which ones could be scenarios for the proposed reforms.

In this sense, Uruguay deserves attention because, as seen in the selected indices, it offers conditions related to high rates of prevalence of use and to steps that its leaders are taking to change the current drug focus and policy. One has to ask what conditions this country has that allow it to be so successful in this debate and to take the huge strides it has proposed (ones which could lead to revolutionary reforms worldwide)?

The first condition has to do with democracy, not only the support for democracy shown in surveys, but also a democratic culture that allows society and its institutions to initiate a wide variety of discussions, including about drugs. The existence of spaces for discussion in which citizens participate widely is the first step in moving toward reform. Second, democracy is reflected in institutional quality that enables progress towards possible reforms. These are key conditions for generating questions, which are followed by debate and discussion and eventually lead to proposals and reforms. This democratic environment, coupled with economic stability and the absence of a debate about security, violence and death, make the country an ideal scenario for change.

At the other extreme are countries where the debate on drugs is very fraught, such as Mexico, Colombia and El Salvador. These countries offer different economic

³² Latinobarómetro's question about this issue is as follows: Generally speaking, would you say you are happy with your life? Would you say you are: a) very satisfied, b) fairly satisfied, c) not very satisfied, or d) not at all satisfied. In Figure 10 we only include 'very satisfied' and 'fairly satisfied.' Total by country 2011.

characteristics, but they share the experience of living and having lived in situations in which the debate about drugs is directly related to thousands of deaths caused by cartels and organized crime and the almost endless violence that has been caused by the War on Drugs. Without a doubt, these situations create an environment in which the space for evidence or rational debate is very small: too much blood has been shed for people to be willing to sit down and talk, and there are too many conflicting interests (corruption, cartels, police, government, etc.) to launch a dialogue about the subject.

At some level, Chile and Argentina share characteristics with Uruguay. As such, it is important to consider that in these countries reforms might see some success. In Colombia's case, while the government has helped to open a debate and the country has some leadership in the region, it is still threatened by instability due to armed conflict and its role as a cocaine producer. These conditions make the debate there very vulnerable to circumstances.

RECOMMENDATIONS: PUBLIC POLICIES FOR REGULATING AND CONTROLLING THE USE AND RETAIL SALE OF PLANT-BASED DRUGS

The following recommendations are general suggestions for developing new regulatory frameworks or improving existing ones, based on the situation of each country. Although there are some universal elements on the road to optimal regulatory models, as has been seen throughout this text each country must develop a model appropriate to its identity and reality. The main distinction between Latin American countries begins with the differences inherent in their contrasting roles as producer, transit or consumer countries. In some cases, they are all three, a phenomenon that has expanded in recent years largely because cannabis crops are found in almost all countries, something that is not true in the case of coca. One of the major failures of the implementation of prohibition laws around the world is that they have been copied from countries like the United States and applied to ones with quite different realities. In a way, a new "Washington Consensus" has been imposed, this time on drug policy.

Public opinion requires special attention. There are no regional studies that help to explain the public's attitudes and perceptions toward these issues. It is necessary to develop strategies to educate the public on the basis of science and evidence, and as a starting point their current positions and preferences must be known.

To develop educational and communication strategies, it is necessary to analyze trends in public opinion. Such strategies should show prohibition's negative effects

on human rights, increased drug use and related violence. As a general recommendation, it is important to consider the use of concepts such as 'regulating illegal drugs like alcohol is regulated' and to avoid using the word 'legalization.'

Finally, when designing and implementing new policies, one should emphasize the importance of assessing each country's democratic, economic, cultural, political and welfare conditions. These analyses must go take into account the characteristics of each country, whether it is a grower, producer, consumer, transit or multiple profile country. As has been seen, a country's level of democracy, development and welfare can influence the drug use behavior and opinions on drugs (or freedoms) of its citizens, and, above all, the capacity of its institutions to successfully carry out proposed reforms.

It is also advisable to proceed in stages, according to the state of the debate in each country, since in the vast majority of the region's countries the political costs of proceeding are high. For this reason, front-line political actors are reluctant to take the lead on this issue. Civil society organizations have the responsibility to accompany the political leaders; otherwise, these will continue to be taboo subjects that prevent any progress in public opinion or public policy, and any changes made will be seen as proposals and implementation led by elites.

Before moving forward with concrete proposals, the following measures should be taken; these measures constitute the foundational steps needed to assure a positive environment in which to develop and implement the proposals in this document.

DECRIMINALIZATION AND DEPENALIZATION

Before applying a regulatory model, it is advisable to decriminalize the use of all drugs, something that is politically more feasible than regulation and can serve as a preparatory step that will generate the conditions to proceed.

Decriminalization allows the consumption or sale of illicit products without a penal response. There are two types of decriminalization: one that allows the law to go unenforced and one that makes it less rigorous. According to the authors of "La batalla perdida contra las drogas" ("The Lost Battle Against Drugs"), decriminalization only lowers congestion in the system. "The goal of decriminalization is to decongest the judicial and penal system and benefit a large number of users by appealing to the argument that the use of psychoactive drugs is a victimless crime" (Guerrero, 2008). In other words, it is a measure that frees up institutions, and above all people, by ceasing to view those who use drugs as criminals.

Decriminalization can be successful by also allowing the state to address this problem in a new way, especially when the prosecution stops focusing on users, who cease to be criminals (or at least to be treated as such), in order to focus on members of organized crime.

Unlike decriminalization, *depenalization* envisages amendments to the law where it punishes drug use; it should be the second step. There are variations in this, depending on whether drug use or trafficking is depenalized. In general, depenalization ends criminal penalties for users. It is a step beyond decriminalization in terms of reducing the weight of drug laws, and it is more effective, as it delivers better results.

Both measures move the focus of repression away from the user. This substantially increases the ability to implement health policies around education, prevention and rehabilitation. It also stops users from being driven underground, where it is much harder for institutions and aid to reach them.

QUALITY CONTROL AS A FORM OF REGULATION

In scenarios where the processes associated with what is now the drug trade cannot be totally regulated, establishing quality control mechanisms permits the development of a new kind of regulation. These mechanisms should be developed in line with principles of tolerance, on the understanding that a form of control, including one on illegal activity, can bring more benefits than allowing the illegal scenarios to continue as they are (i.e. the *status quo*).

Ideally, quality control should be implemented by health authorities, but if this is not possible, it can be delegated to non-governmental organizations. It also should be a voluntary mechanism stimulated by incentives that result in benefits for the dealer. These can range from security guarantees to amnesties in exchange for cooperation and the ability to participate in rehabilitation or workforce training programs.

Those who are monitored under this process will guarantee consumers a certain product quality and transaction safety. Being that these are control mechanisms for a currently illegal substance, this practice only offers consumers a moderate level of power when dealing with sellers.

The voluntary quality control model should generate the following benefits to the seller, the consumer and the environment in which these transactions are made (see Figure 11).

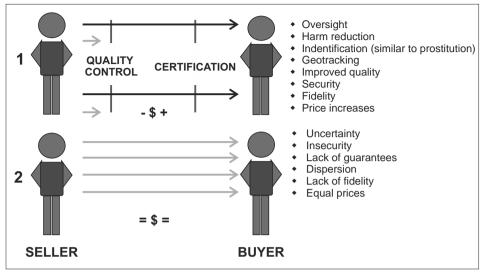


Figure 11. Quality control as a form of regulation

Source: Prepared by the author.

- Control over quality: This process will ensure minimum quality standards in the products sold, which will also serve as an important element in facilitating better competition through the presentation of better or higher quality products.
- Harm reduction: Improving product quality will have positive effects on the potential negative health outcomes associated with drug use. By knowing the exact composition of the substance, the consumer and the system will be aware of which substances are being bought and sold.
- Identification: Even in a voluntary system, the identification of the actors may be beneficial in later stages where the vendors are integrated into legal markets, as it could help control potential outbreaks and reduce the illegal profile of the actors as they move toward reintegration.
- Geotracking: The move toward quality control offers a form of geotracking that allows for the improvement of safety mechanisms, the maintenance of order and an increase in relative knowledge of the activity. This tracking can be lax, as when large parts of a city or smaller land areas are turned into zones of tolerance for drug transactions.
- Safety: The existence of quality control systems increases the consumer's sense of security. It would also have significant effects on crime reduction in areas controlled by organized crime. Participation in drug sales would no longer involve

costs related to safety or the constant struggle for territorial dominance. These tensions would be dramatically reduced.

- Fidelity: Improved quality assurance systems generate loyal relationships between buyers and sellers, which also contributes to increased knowledge of the substances being sold and adds a degree of complicity between the parties involved. This mechanism also empowers buyers faced with the uncertainty and vulnerability that currently exist in these scenarios.
- Price increases: This model is bound to lead to price increases, as ensuring a constant flow of better quality drugs implies certain costs, and also because the buyers would be willing to pay more for the benefits mentioned.

A model without quality control maintains the *status quo*, a system ruled by uncertainty for sellers, buyers and society, insecurity, lack of guarantees and the dispersion of supply.

REGULATING CANNABIS FOR MEDICINAL USES

The use of cannabis for medicinal purposes should be regulated as it is done in eighteen U.S. states.

Depending on the political system in place, the sale of cannabis by prescription should be overseen by central or regional governments.

Patients should be properly registered and have a badge similar to the *Medical Marijuana Identification Card* that is granted in California after an evaluation by the regulating agency.

Those applying for this card should cover the costs associated with the administration and related bureaucracy. Cannabis should be distributed in regulated dispensaries, where the drug should be labeled and certified by health authorities.

HARM REDUCTION

National and local health authorities should develop harm reduction programs. Imprisoned drug users require special attention. Harm reduction refers to the practices, strategies, programs and policies put into place to reduce the negative health, social and economic consequences of the use of legal and illegal drugs. A central element in harm reduction strategy is the level of participation, because, "people who use drugs and other affected communities should be involved in decisions that affect them" (HRI, 2012). The implementation of harm reduction strategies allows the drug user to be put in the center of the issue.

Harm reduction strategies should also be implemented in the sales, buyer/seller interaction, and transport processes. In this way, harm reduction theories can acquire a true regional, national and local identity. Harm reduction cannot be monopolized by healthcare strategies, especially when the damage to the health of users is much less than that inflicted on their welfare and dignity by repressive actions.

MASS PARDONS TO REDUCE PRISON POPULATION

Another important step is to reduce the population imprisoned for violating drug laws (usually incarcerated for drug dealing or use). Excessive sentences are largely responsible for prison overcrowding in Latin America. An interesting example is the mass pardon granted by the Constituent Assembly of Ecuador in 2005, which was discussed earlier in this document.

SPECIFIC RECOMMENDATIONS

In general terms, when discussing the possible economic scenarios that would be brought about by legalization or regulation, it is necessary to have reliable data on the prices and profit margins in the various links in the chain. Misinformation is one of the main obstacles to moving forward with an honest debate based on evidence. This recommendation is very important, because the lack of data and evidence, or its instability or unreliability, may have unexpected effects when developing and implementing public policy.

Keeping in mind the arguments posed, and recognizing the various issues, shortcomings and debates that still need attention, the specific recommendations are as follows.

Regulating the sale of cannabis for personal use

- The sale of cannabis should be regulated in a similar way to how alcohol and tobacco are handled, which would facilitate regulation's implementation and approval. There are several examples of alcohol regulation models that can be copied and adapted to local or national realities. Regulation that uses legal identification is especially recommended. For example, the U.S. alcohol drinking age is twenty-one, while in many Latin American countries it is eighteen.
- The sale of cannabis should not be limited to a country's residents or citizens. States must develop standards and regulations that allow free access to all who are within its territory.

- All cultivation, production, possession, transport and distribution should be legalized and regulated, in order to prevent the development of illegal areas that are dependent on legal acts.
- Access to cannabis must follow similar regulations to those of other legal drugs in the country where it is regulated.
- Cannabis regulations should also address its use in situation such as driving a vehicle or operating machinery, among others. Standards should be set for the presence of THC in the body, allowing for the presence of low percentages as in alcohol regulations.
- Carrying cannabis for personal use should be regulated, allowing for the transport of quantities larger than a single personal dose when they are meant for personal or group consumption, or for legal sale.
- If alcohol is prohibited in public, except in specifically authorized areas, regulated cannabis use should be too.
- The sale of cannabis should be taxed, not only to raise resources to fund health and education programs related to the use of it and other drugs, but also to ensure a minimum price, similar to that of the black market of the country in question.
- Zones for consumption and sale should be established, in order to protect areas
 of the city and establishments such as schools and colleges that may be affected
 by their proximity to places of use or sale. In this case, the rules may be similar
 to those that exist around the sale of alcohol and tobacco.
- The dosages available for sale in the permitted locations should be labeled with the warnings and information required by the health authority, such as THC content, origin, and so on. The product provider's data should be placed alongside the information from the country's mental and health authority.
- Doses sold in the permitted spaces should be standardized in terms of size, quantity and format.
- Advertising and labeling, as well as all media campaigns, should be regulated in the way that the sale of tobacco is today.
- Regulating clubs and cooperatives for cultivation and use: These groups organize to buy cannabis in order to avoid dealing with the state or large producers in cases when one, the other, or both exist. These clubs provide cannabis to their members and also provide spaces for use and leisure.

Regulating access to and use of other drugs

- The retail sale of coca leaf should be regulated, and markets that allow its sale should be created and regulated. This type of regulation should assume that the coca leaf is not a narcotic, and in no case should it be combined with other potential drug regulatory scenarios.
- Cocaine (hydrochloride) should be sold in accordance with strict rules and licenses, in a pharmacy model, there should be restrictions on age and mental and health conditions.
- A consumer registry should be established with the aim of classifying recreational users, problematic addicts and those who consume for medicinal purposes.
- Medical societies or schools should determine the quantities permitted and the conditions that allow access to these drugs.
- In the case of problem or dependent drug users, the state should provide access to minimum doses and controlled spaces for use. However, if there are substitutes for treating addiction, such drugs or substitutes must logically be provided.
- The state should create user rooms, supervised by professional bodies composed of physicians, psychologists, dentists and nurses who can provide care to addicts or users who suffer withdrawal syndromes.
- The doses available for sale in permitted spaces should be labeled with the information and warnings required by the health authority and should indicate the cocaine content (purity), composition, origin, and so on. The product provider's data should be placed alongside the information from the country's mental and health authority.
- Doses sold in the permitted spaces should be standardized in terms of size, quantity and format.
- Advertising and all sorts of media campaigns should be banned in public places. Advertising should only be available to existing customers and limited to providing information about locations for controlled use and harm reduction programs offered by the state or related organizations.

Policies focused on retail drug dealers

As those who had previously been engaged in drug sales will find themselves unemployed and isolated from the criminal gangs that indirectly offered them everything from security to the meaning of life, the first goal should be reintegration into society, followed by regulation. It is necessary to focus on reducing the damage that unemployment and the loss of personal networks can cause; the main objective of this process is to prevent these people from following the easiest path and participating in other criminal activities.

- Reintegration programs should provide tools to help dealers find lawful employment and to ensure that, at the very least, they receive income similar to what they earned in the drug market. During these programs, it will be necessary to provide financial resources and basic needs (e.g. housing, clothing, food, etc.) so that the dealers are no longer reliant on their previous activities and are not tempted or forced to return to crime. An effective strategy should be able to completely replace the criminal networks and their benefits in daily life.
- It is useful to review the United Nations's Disarmament, Demobilization, Reinsertion, Reintegration (DDR) strategy. While it was conceived to demobilize armed groups (combatants) and ensure the sustainability of the peace process, it presents some useful similarities. Reintegration can cause dealers psychological and physical challenges related to other illicit activities, such as prostitution, trafficking, etc., in which they participated while dealing drugs.
- Reintegration processes may offer voluntary relocation to places elsewhere in the country or abroad, thus ensuring integration in spaces where dealers will not be judged on their previous behavior. This aims to stop them from falling back into the same network they once called home, considering that in most scenarios, these criminal networks will not be completely disabled and will continue to seek the participation of those with whom they used to work. In addition, voluntary relocation of those involved in retail dealing enables them to rebuild their lives far from the people and society who stigmatized them before and who now make them feel that they have no chance of reintegration. Finally, voluntary relocation keeps their customers from coming back into contact with them.
- It is important to offer amnesties to dealers depending on their various profiles; amnesties should be offered to dealers who are involved in legal proceedings or already incarcerated. While they remain in prison or in legal proceedings, the chance that they will participate in trafficking or crime is heightened. Moreover, in many cases putting someone behind bars only leads them to act with more experience and toughness when they get out and try to return to the same activities that led to their punishment. Nonetheless, it is important to note that, depending on the kind of the activities they participated in, certain forms of punishment are justified.

- Creating programs for user-dealers who are dependent on drugs and whose participation in dealing was based on the need to supply their personal use. As this is the most vulnerable group, it is necessary to pay special attention to the reasons why they participated in this activity. These programs should not be mandatory or forced, but rather offered as an alternative to the penalties the dealer could pay or is serving. Addicted dealers have the highest level of motivation to return to dealing, and if they are unable to do so, to engage in other illicit activities to satisfy their addiction.
- Last but not least, it is imperative to develop quality control systems as a form of retail regulation.

REFERENCES

- ACC. 2011. *Ilicit Drug Data Report 2010-11*. Australian Crime Commission. ACC.
- AFP. 2011. "Precios de marihuana paraguaya se disparan en Rio de Janeiro." *El Universal*, [online] 5 Dec. Available at: http://www.eluniversal.com.co/cartagena/actualidad/precios-de-marihuana-paraguaya-se-disparan-en-rio-de-janeiro-56245 [Accessed 22 Dec 2012].
- Arana, A. 2009. "Narco SA, una empresa global." *CNN Expansión*, [online] 17 July. Available at: http://www.cnnexpansion.com/expansion/2009/07/17/narco-sa [Accessed 20 July 2009].
- Armenta, M., Metaal, P. and Jelsma, M. 2012. "A breakthrough in the making? Shifts in the Latin American drug policy debate." *Legislative Reform of Drug Policies*, 21.
- Bartilow, H.A. and Eom, K. 2009. "Free Traders and Drug Smugglers: The Effects of trade openess on States' Ability to Combat Drug Trafficking." *Latin American Politics and Society*, 51 (2).
- BECERRA, J. 2005. "Los soldados del narco: ex combatientes en Irak, kaibiles y desertores mexicanos." *Revista Milenio Semanal*.
- BECKER, G. 2005. *The Market for Illegal Goods: The Case of Drugs*. University of Chicago-Hoover Institution. Chicago.
- BECKER, G.S. MURPHY, K.M. AND GROSSMAN, M. 2004. "The Economic Theory of Illegal Goods: The Case of Drugs." *NBER Working Paper*, 10976.
- BECKER, G.S. AND MURPHY, K.M. 1988. "A Theory of Rational Addiction." *Journal of Political Economy*, 96 (4).

- CAMPBELL, H. 2008. "Female Drug Smugglers on the US-Mexico Border: Gender, Crime, and Empowerment." *Anthropological Quarterly*, 81 (1).
- Castro, E. 2011. "Narcomenudeo se ha convertido en la fuente principal de ingresos de las pandillas." *Diario Co Latino*, [online] 30 June. Available at: http://www.diariocolatino.com/es/20110630/nacionales/94028/Narcomenudeo-se-haconvertido-en-la-fuente-principal-de-ingesos-de-las-pandillas.htm [Accessed 29 October 2012].
- CAULKINS, J. P. AND REUTER, P. 1998. "What Can We Learn from Drug Prices?" *Journal of Drug Issues*, 28 (3).
- CICAD. 2011. *Informe sobre el consumo de las drogas en las Américas*. OAS-CICAD. Washington.
- CLARK, A. 2003. The Economics of Drug Legalization. CNRS and DELTA.
- Conace-Ministerio del Interior y Seguridad Pública. 2010. *Noveno estudio nacional de drogas en población general*. Conace. Santiago. Available at: http://www.senda.gob.cl/wp-content/uploads/2011/03/2010_InformeEjecutivo_Noveno_Estudio_General.pdf
- CONADIC. 2008. Encuesta nacional de adicciones 2008. Instituto Nacional de Salud Pública. Cuernavaca. Available at: http://www.conadic.salud.gob.mx/pdfs/ena08/ENA08_NACIONAL.pdf
- Consejo Nacional de Control de Sustancias Estuperacientes y Psicotrópicas. n.d. *Ecuador: Plan nacional de prevención integral de drogas 2012-2013*. CONSEP.
- Cross, J.C. 1996. "El desalojo de los vendedores ambulantes: paralelismos históricos en la ciudad de México." *Revista Mexicana de Sociología*, 58 (2).
- DILLEHAY, T.D. ET AL. 2010. "Early Holocene coca chewing in northern Peru." *Antiquity*, 84 (326).
- Dolin, B. 2001. *National Drug Policy: United States of America*. Parliament of Canada, Library of Parliament. Ottawa. Available at: < www.parl.gc.ca/Content/SEN/Committee/371/ille/library/dolin2-e.htm>
- Energy Control. 2011. Análisis de sustancias 2011. Energy Control. Madrid.
- EUROPEAN MONITORING CENTRE FOR DRUGS AND DRUG ADDICTION (EMCDDA). 2000. 2000 Annual report on the state of the drugs problem in the European Union. EMCDDA. Lisbon. Available at: http://www.emcdda.europa.eu/html.cfm/index-37279EN.html

- —. 2012. 2012 Annual Report on the state of the drugs problem in Europe. EMCD-DA. Lisbon.
- FALCO, M. 1994. The Making of a Drug-Free America. Three Rivers Press. New York.
- Felbab-Brown, V. 2012. Organized Criminals Won't Fade Away. Brookings Institute. Washington. Available at: <http://www.brookings.edu/research/articles/2012/08/ drugs-crime-felbabbrown>
- GAVIRIA, A. AND MEJÍA, D. 2011. Anti-Drugs Policies in Colombia: Successes, Failures and Wrong Turns. Ediciones Uniandes. Bogotá.
- GROSSMAN, M., CHALOUPKA, F.J. AND TAURAS, J.A. 1998. "The Demand for Cocaine and Marijuana by Youth." NBER Working Paper, 6411.
- Guerrero, G.A. 2008. "La legalizacion de las drogas ilicitas en Colombia: elementos para una discusion." In T. R. Galán, ed. La batalla perdida contra las drogas: ;legalizar es la opcion? Intermedio Editores. Bogotá.
- Guevara, C. 2013. "La policía va por el capo de capos de la calle del Bronx." *El* Tiempo, 25 Jan.
- Guzmán, D. 2012. Las cortes de drogas. TNI. Amsterdam.
- HAKIM, P. 2010. Rethinking US Drug Policy. Inter-American Dialogue-The Beckley Foundation. Washington. Available at: http://www.thedialogue.org/Publica- tionFiles/Rethinking%20US%20Drug%20Policy.pdf>
- HM Inspectorate of Prisons for England and Wales. 2006. Annual Report of HM Chief Inspector of Prisons for England and Wales 2004-2005. The Stationery Office Limited. Norwich. Available at: http://www.tso.co.uk/bookshop
- HRI. 2012. What is harm reduction? Harm Reduction International. Available at: http://www.ihra.net/what-is-harm-reduction [Accessed 5 Nov 2012].
- Iezzi, G. 2013. "Drogas: la ley de menudeo y el plan que puso en acción Tigre para luchar contra este delito." iProfesional, [online]. Available at: http://www.ipro- fesional.com/notas/153378-Drogas-la-Ley-de-Menudeo-y-el-plan-que-pusoen-accin-Tigre-para-luchar-contra-este-delito> [Accessed 24 Jan 2013].
- International Centre for Prison Studies. 2010. "Prison Brief-Highest to Lowest Rates." World Prison Brief. King's College London School of Law. London. [Accessed 25 March 2011].
- JELSMA, M. 2009. Innovaciones legislativas en políticas de drogas. Transnational Institute. Amsterdam.

- KREIT, A. n.d. The Decriminalization Option: Should States consider moving from a Criminal to a Civil Drug Court Model? University of Chicago. Chicago.
- Lai, G. 2012. "Drugs, crime and punishment. Proportionality of Sentencing for Drug Offences." Series on Legislative Reform of Drug Policies, 20. TNI.
- LICCARDO, R. 2008. Legalizing Marihuana. RAND. Santa Monica.
- Mejía, D. and Rico, D. 2010. La microeconomía de la producción y tráfico de cocaina en Colombia. Universidad de los Andes, Cede. Bogotá.
- Mejía, J.M. 2012. "Distrito Federal base del narcomenudeo." Periodistas en línea, [online]. Available at: http://www.periodistasenlinea.org/modules.php?op=mod load&name=News&file=article&sid=7850> [Accessed Dec 2012].
- METAAL, P. AND YOUNGERS, C. 2010. Sistemas sobrecargados. Leyes de drogas y cárceles en América Latina. TNI-Wola. Amsterdam-Washington.
- Ministerio del Interior-Subsecretaría del Interior (Chile). 2009. Informe final de evaluación. Programas de prevención del consumo de drogas programas de tratamiento y rehabilitación programa Previene (Municipios). Available at: <www.dipres. gob.cl/574/articles-49641_doc_pdf.pdf>
- MIRON, J.A. 2010. The Budgetary Implications of Drug Prohibition. Cambridge: Harvard University, Department of Economics.
- MIRON, J.A. AND ZWIEBEL, J. 1995. "The economic case against drug prohibition." *Journal of Economic Perspectives*, 9 (4).
- Morris, K. 2010. "World Report: Drug Crime and Criminalisation progress on MDG." The Lancet, 376 (9747), pp.1131-1132.
- Naím, M. 2003. The Five Wars of Globalization. Foreign Policy. Washington.
- NATARAJAN, N. et al., 2008. Substance Abuse Treatment and Public Safety. Justice Policy Institute. Washington.
- NATIONAL INSTITUTE ON DRUG ABUSE. 2004. Cómo prevenir el uso de drogas en los niños y los adolescentes. Una guía con base científica para padres, educadores y líderes de la comunidad. Second edition. National Institute on Drug Abuse. Bethesda. Available at:
- OBSERVATORIO ARGENTINO DE DROGAS. 2011. Tendencia en el consumo de sustancias psicoactivas en Argentina 2004-2010 población de 16 a 65 años. Secretaría de Programación para la Prevención de la Drogadicción y la Lucha contra el Narcotrá-

- fico. Buenos Aires. Available at: http://www.observatorio.gov.ar/investigaciones/ Tendencia_en_el_consumo_2004-2010_Poblacion_General.pdf>
- OPEN SOCIETY FOUNDATIONS. 2010. *Defining the Addiction Treatment Gap.* New York: Open Society Foundations.
- Portela, R. 2012. Marihuana se venderá a 700 por mes. *La República*, [online] Nov. Available at: http://www.diariolarepublica.net/2012/11/700-pesos-los-40-gramos/ [Accessed 1 Jan 2013].
- Putiy, A. and Ayala, D. 2010. Russian alcohol market regulation, 2008-2010 update. *USDA Global Agriculature Information* (GAIN) *Report*, RSATO1010.
- RADDEN, P. 2012. Cocaine Incorporated. *New York Times*, [online] 17 June. Available at: http://www.nytimes.com/2012/06/17/magazine/how-a-mexican-drug-cartel-makes-its-billions.html?pagewanted=all&_r=0">http://www.nytimes.com/2012/06/17/magazine/how-a-mexican-drug-cartel-makes-its-billions.html?pagewanted=all&_r=0 [Accessed 2 Nov 2012].
- Ramírez, G.G. 2009. ¿Quién se vuelve narco y por qué? *Poder Edomex*, [online] 27 Aug. Available at: http://poderedomex.com/notas.asp?id=48114> [Accessed 13 Jan 2013].
- Ríos, V. ¿Quién se vuelve narco y por qué? El perfil del narcotraficante mexicano. *Este País, Tendencias y Opiniones*, [online]. Available at: http://estepais.com/
- Rolles, S. 2012. After the War on Drugs: A Blueprint for Regulation. Bristol: Transform.
- ROLLES, S., MURKIN, G., POWELL, M., KUSHLICK, D. AND SLATER, J. (authors and editors). 2012. *The Alternative World Drug Report. Counting the Costs of War on Drugs*. London: Count the Costs.
- ROSEMARIN, A. AND EASTWOOD, N. 2012. A Quiet Revolution: Drug Decriminalization Policies in Practice across the Globe. London: Release. Available at: http://www.release.org.uk/>
- Ross, J. 2002. Backlash against Prostitutes' Rights: Origins and Dynamics of Nazi Prostitution Policies. *Journal of the History of Sexuality*, 11 (1/2).
- Salazar, F. et al. 2009. *Relationship between human development and drug use.* Available at < http://www.uade.inpsiquiatria.edu.mx/pagina_contenidos/cuadernillos/carteles_PDF_INP/Relationship%20betwen%20human%20development.pdf>
- Secretaría Nacional de Antidroga-Observatorio Paraguayo de Drogas. 2004. Estudio nacional. Consumo de drogas en hogares paraguayos. Prevalencia, factores de riesgo, prevención. Asuncion: SENAD. Available at: http://www.senad.gov.py/ publicaciones/estudio-hogares-2004.pdf>

- SENDA. 2012. Precio y gasto de drogas ilícitas en Chile. Gobierno de Chile, SENDA. Santiago.
- Shneider, J. and Schneider, P. 2008. "The Anthropology of Crime and Criminalization." *Annual Review of Anthropology*, 37.
- Spapens, T. 2013. "Decriminalization as regulation: The gambling and cannabis markets in the Netherlands." *Tilburg Law School Research Paper*, 05/2013.
- STEVENS, A. AND WILSON, L. 2008. "Understanding Drug Markets and How to Influence Them." *Policy Achievements, Policy Achievements Featured*, 14. The Beckley Foundation, Drug Policy Programme.
- STEWART, S. 2013. "Mexico's Cartels and the Economics of Cocaine." *Stratfor Global Intelligence*. Available at: http://www.stratfor.com/weekly/mexicos-cartels-and-economics-cocaine
- Substance Abuse and Mental Health Services Administration. 2012. *Results from the 2011 National Survey on Drug Use and Health: Summary of National Findings*. NSDUH Series H-44, HHS Publication No. (SMA) 12-4713. Substance Abuse and Mental Health Services Administration. Rockville, MD. Available at: http://www.samhsa.gov/data/NSDUH/2k11Results/NSDUHresults2011.pdf
- THE ECONOMIST. 2011. "The cost of coke." 23 June.
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University. 2001. Shoveling Up: The Impact of Substance Abuse on State Budgets. CASA. New York.
- Thoumi, F. 2002. El imperio de la droga: narcotráfico, economía y sociedad en los Andes. Planeta. Bogotá.
- TNI. 2007. Wishful thinking clouds independent assessment in UN World Drug Report.

 TNI. Amsterdam.
- Uniradio. 2012. "Genera 'narco-menudeo' 1 mdd diarios en Tijuana: SSPM." *Radio Noticias*, [online]. Available at: http://uniradionoticias.com/noticias/policiaca/articulo147943.html [Accessed 10 Jan 2013].
- UNODC. 2012. World Drug Report. UNODC. Vienna.
- . 2010. Informe subregional sobre uso de drogas en población escolarizada. Segundo estudio conjunto información para el diseño de las estrategias nacionales y regionales sobre la problemática de drogas en jóvenes. 2009/2010. OEA. s.l. Available at: http://www.cicad.oas.org/oid/NEW/Pubs/Informe_Subregional2009.pdf>

- —. 2010. Estimating illicit financial flows resulting from drug trafficking and other transnational organized crimes. UNODC. Vienna.
- ——. 2007. World Drug Report. UNODC. Vienna.
- ——. 2000. World Drug Report. UNODC. Vienna.
- Uprimny, R., Guzmán, D.E. and Parra, J.A. 2012. La adicción punitiva: la desproporción de leyes de drogas en América Latina. Dejusticia. Bogotá.
- Vergara B., E. 2011. "Narco turistas, fiestas electrónicas y el plan verano." *El Mostrador* [online] 28 Dec. Available at: http://www.elmostrador.cl/opinion/2011/12/28/ narco-turistas-fiestas-electronicas-y-el-plan-verano-2012/>
- WILLIAM, A.M. 1999. "From Family Feud to Organised Crime: The Cultural Economy of Cannabis in Northeast Brazil." Bulletin of Latin American Research, 18 (3).
- Zabransky T., Mravcik, V., Gajdosikova, H. and Miovsku, M. 2001. Impact analysis project of New Drugs Legislation. Summary Final Report. Secretariat of the National Drug Commission Office of the Czech Government. Prague. Available at: http://www.druglawreform.info/images/stories/documents/ czech_evaluation_2001_pad_en.pdf>
- Zamudio Angles, C. and Hernández Tinajero, J. 2012. "Mariguana DF. El mercado y sus dimensiones: una propuesta para usuarios y autoridades." Cuadernos Cupihd, 5. México.
- ZAMUDIO ANGLES, C. March 2011. México y su ley contra el narcomenudeo. International Drug Policy Consortium.

Illegal Drug Cultivation and Legal Regulatory Options in the UN Drug Control Framework: Comparing Coca and Opium Poppy

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INTRODUCTION

Just a few countries in the world monopolise to a very considerable extent the illegal cultivation of coca and opium poppy, the source plants for cocaine and heroin, commonly known as hard drugs. For coca, these are the South American countries of Bolivia, Colombia and Peru; for opium poppy, alongside a number of comparatively insignificant producer states, these are the Asian countries of Afghanistan, Myanmar and Laos. There is also a whole range of states that produce opium poppy legally for pharmaceutical and culinary purposes. This kind of legal utilisation of alkaloidcontaining plants such as opium poppy or coca is possible within strict international guidelines and the framework of a thorough international regulatory regime and is in accordance with the three relevant UN Drug Control Conventions. While these legal uses of opium poppy have become well established, there are so far only limited legal utilisations for coca and therefore hardly any possibilities for making legal profit from its cultivation. Some states, notably Bolivia, have for some time been attempting to boost the use of the coca leaf for legal commercial purposes. The problem, however, has been the failure to implement an effective and therefore credible regulatory system for coca-growing and, therefore, a failure to avoid surplus production for illegal purposes. At the same time, alkaloid extraction from the coca leaf would represent a viable possibility for utilising and commercialising the plant without any legal conflicts. With the strictly controlled alkaloids removed (or with their content reduced below certain thresholds), coca would no longer subject to counter-narcotics law.

^{*} The content of following article represents exclusively the opinions of the author, not those of the Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH or any other third party.

In this way, the legal use of coca would present the Andean states with a good possibility of reducing the damage that has for some considerable time been done in the affected countries due to drug cultivation and to the efforts to contain the problem. The legal opium poppy economy, as it exists in countries like India or Turkey, is almost completely unknown in Latin America. However, the analysis of this possibility and the comparison with the cultivating states of South America is very instructive and can provide a basis for the formulation of proposals for the reform of current drug control policies. With this goal in mind, the present study adopts the following approach: the second chapter presents the problems arising from cultivation and the often widely diverging legal and political frameworks in the three Andean states that monopolise coca production worldwide. The third chapter outlines the negative social, developmental and environmental impact that drug cultivation has in the affected states and the extent to which the legal framework directly conditions the impact that the production of organic drugs has on the affected states. Understanding this causality is central to being able to assess the requirement for and the impact of reform options. This is followed, within the framework of an excursus, by a short description of the frameworks and the function of the legal production of opiates in Turkey and in India, which provides a backdrop for comparing the situation in both of these countries with that in the Andean states. The comparison concludes by outlining three scenarios for the development of drug cultivation in Latin America under various different premises.

THE STATUS QUO: COCA CULTIVATION BETWEEN LEGALITY AND ILLEGALITY IN THE ANDEAN REGION

To a very large extent, the three Andean countries of Bolivia, Colombia and Peru monopolise the global cultivation of the coca leaf, the organic source substance for alkaloid cocaine, which is converted into a variety of forms and used as cocaine HCl (powder cocaine), crack or cocaine paste (bazuco, paco, pasta básica de cocaina / PBC). Processing of the coca leaf into cocaine also takes place mainly, but not exclusively, in these three states. At the same time, law enforcement agencies regularly discover and destroy so-called cocaine laboratories also in the neighbouring states of the cocaproducing countries.¹

¹ For 2009/2010, alongside Bolivia, Colombia and Peru, other countries such as Argentina, Chile, Ecuador and Venezuela also reported the detection of numerous laboratories for producing coca paste and cocaine HCl. Furthermore, similar facilities were also discovered sporadically in Mexico and the USA as well as in Greece and Spain. Cf. UNODC 2012c, Statistical Annex, Illicit Laboratories.

Coca cultivation in the Andean region has a history that extends far back into pre-Colombian times. Up to the present day, the chewing of the coca leaf, its consumption as tea, and its use for ritual purposes, are widespread in the Andean region. This applies above all, but not exclusively, to indigenous peoples. Traditional consumption of the leaf is most widespread in Bolivia and Peru, that is in countries in which through to the present day indigenous peoples make up a significant proportion of the population. But it is also common in some ethnic groups in Argentina, Chile, Ecuador and Colombia. Consumption of the coca leaf – as a leaf in the original form, not as concentrated cocaine – is only completely prohibited in very few South American countries. It is legal in Bolivia and Peru as well as in most neighbouring states – at least for indigenous population groups.²

Cultivation is also widely permitted in Bolivia and Peru, either within geographic and individual thresholds or within the framework of a regulatory system, whilst it is not prohibited for individual ethnic groups in a number of neighbouring states. The basis for the empirical assessment of coca cultivation is provided by the UNO-DC's World Drug Report or the same organisation's annual crop monitoring surveys, which are compiled each year for each of the three Andean countries. The US government employs its own procedure to estimate the extent of coca cultivation and the volume of cocaine production with, however, what are often significant discrepancies from the figures calculated by the UN. The discrepancy between coca cultivation and cocaine production in 2011 as estimated by the UNODC and the figures issued by the Office of National Drug Policy at the White House for cocaine production in the three countries during the same period is especially striking.³ As the US government has not so far issued any figures on cultivation volumes (rather than only for estimated cocaine production) in 2011, the following remarks are based on the UNODC figures, which are now available for all three coca-growing states for the year 2011, and which are far more transparent and comprehensible in terms of the methodology upon which they are based.

According to the UN Single Convention on Narcotic Drugs from 1961, both the consumption and the cultivation of the coca leaf are fundamentally prohibited,

² Possession and consumption of the coca leaf is not in principle a criminal offence in Argentina either. Cf. http://www1.hcdn.gov.ar/dependencias/cdrogadiccion/ley23737.htm, accessed on 03.10.2012.

³ While UNODC comes to the conclusion that Colombia and Peru have more or less the same levels of cultivation, with Bolivia some way behind, the US government estimates that Colombia, which was for a long time the largest cocaine-producer in the region, is now only the third-largest producer after Peru and Bolivia. Cf. WOLA 2012.

although exceptions are possible for the cultivation of and trade in the coca leaf primarily for scientific or medical purposes. The disconnect between national and customary law on the one hand and the (altogether three) UN Drug Conventions on the other is also reflected within the region in what are often very divergent approaches to the problem of coca cultivation, as is apparent in the description of the situation in the three cultivating states:

SURPLUS PRODUCTION AND LEGAL UTILISATION OF THE COCA LEAF: BOLIVIA

In Bolivia, with around 28,000 ha of cultivated area in 2011 is currently the smallest of the three coca-producing states, the cultivation of coca, also known in Bolivia as the *hoja sagrada* (holy leaf), is legal up to a maximum limit of 12,000 ha. The basis for this is Law 1008 from 1988, which set down this maximum national limit. However, the current government of President Evo Morales, who is himself chairman of the cocalero unions in the Chapare coca-growing region, officially permits a limit of 20,000 ha, whereby Law 1008 has for some considerable time been set for reform in order to bring it up to date with the situation on the ground. It is hoped that a compendium of studies financed by the EU Commission will provide an empirical foundation for measuring the legal demand for coca and identifying the agricultural area required to meet this demand. After several delays, publication of the compendium is expected in May 2013.⁴

Alongside the national upper limit, there are also individual and geographic thresholds and restrictions to coca cultivation in Bolivia. Cultivation is only permitted in two regions: Chapare in Departamento de Cochabamba and in Yungas in Departamento de La Paz. At the household level, cultivation is permitted up to a limit of 0.16 ha, a unit of area commonly knows as a "cato" in Bolivia. Because of close political ties between the cocalero movement in Chapare and President Morales, the cato regime has been implemented with some success in that region. This is not the case in Yungas, where it has been much more difficult to impose limitations on individual cultivation, especially in so-called traditional cultivation areas, where no individual limitations are set down. Despite widely held assumptions to the contrary, the Morales government is also carrying out manual crop eradication campaigns in order to penalise violations of geographic and individual upper thresholds on cultivation. This applies, for instance, to illicit coca cultivation in national parks as

^{4 &}quot;Gobierno aún no concluyó estudio sobre la demanda y consumo de coca", *Los Tiempos* (Bolivia), 17.02.2012; "El Gobierno alista estudio de la coca para mayo", *La Razón* (Bolivia), 26.11.2012.

well as to infringements of the cato upper limit in Chapare, which are penalised in close coordination with the cocalero unions. This system, known in Bolivia as *control social*, is viewed as an alternative model to repressive policies imposed in an authoritarian manner and as a shift towards a more participatory approach that gives the unions greater responsibility for ensuring that cultivation limits within their peers are respected.

For a number of years, the Morales government has been trying to eliminate the discrepancy between the national legal situation and the obligations imposed by the international conventions, specifically the UN Single Convention of 1961. The Single Convention includes the coca leaf in its list of drugs contained in Schedule 1.5 This means that its utilisation is tightly controlled and that production of and trade in the coca leaf can only take place with the permission of the International Narcotics Control Board (INCB), which monitors the implementation of the three UN Drug Conventions. The coca leaf is therefore subject to the same international constraints as cocaine itself, or even heroin. Across the world, between 300-400 t of coca leaf are legally traded each year for culinary, medical and scientific purposes - with INCB permission (INCB 2012). However, in comparison with annual overall production, or even with legal opiate production, this is still only a very small quantity. UNODC estimates that for 2010 alone, Bolivia and Peru had a total production of dried coca leaf of around 160,000 t (UNODC, 2012c: 35). At the same time, the text of the 1961 Convention stipulates that the practice of coca-chewing should be phased out within a period of 25 years after the coming into force of the Convention in the affected countries.6

The current Bolivian government has made two attempts since 2010 to overcome the discrepancy between the situation of coca consumption in the country and the legal provisos of the new Bolivian constitution from 2009 on the one hand and Bolivia's legal obligations arising from its membership of the Single Convention on the other. In this context, Bolivia points to, among other things, the third United Nations Drug Convention of 1988, which provides for a more permissive approach, including traditional uses of the organic source plants for a number of nar-

⁵ The Single Convention has an annex in which drugs are put into four (updateable) lists or schedules, in which they are divided up according to how dangerous and addictive they are believed to be. For each list there is a specific control regime, which has an immediate impact on the regulation of production and trade in the drugs in question.

⁶ Cf. United Nations Single Convention on Narcotic Drugs (1961), §49, 2e.

cotic substances.⁷ This strategy began in 2009 when Bolivia pushed for the removal of the passage in the convention calling for the phasing-out of coca-chewing within a twenty-five year period. Bolivia failed in this bid due to the opposition of altogether 17 convention member states⁸, including Germany. The Morales government made a second attempt to achieve greater coherence between national and international law in 2011. With effect from 01.01.2012 Bolivia withdrew from the UN Single Convention only to take up membership once again on 01.01.2013, this time with a formal reservation to the Convention text with the provision that one third or more of the treaty members would have had to formally object. Bolivia's reservation concerning the Convention demanded that traditional, cultural or medical uses of the coca leaf, coca-chewing, and other aspects of its utilisation and processing would be legally permitted in Bolivia and that the respective provisions of the Convention would not apply to Bolivia. A conclusive response from the member states to Bolivia's re-adherence to the convention is not expected before the end of 2012. So far the USA has signalled its opposition to the application whilst all Latin American countries as well as Spain and Portugal expressed their backing in November 2012 within the framework of the XXII Ibero-American Summit in Cádiz. 10

With this strategy, Bolivia is not only pursuing the goal of overcoming the international criminalisation of coca consumption in its country: it is also seeking to boost opportunities for secondary legal commercialisation options. The Bolivian government has begun efforts to promote the manufacture of coca-based products and it is already possible to purchase coca-based cough syrup, toothpaste, ointments, biscuits, liqueur or sweets in Bolivia, although these products are generally of a very poor quality. Furthermore, the Bolivian government's industrialisation offensive has only targeted the very limited domestic market because the export of these products is problematic due to the fact that Bolivia does not have the technology for extracting alkaloids from coca leaves, which would open up commercialisation beyond the area

⁷ Cf. United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988), §14, 2.

⁸ Cf. http://www.un.org/News/briefings/docs/2011/110624_Bolivia.doc.htm, accessed on 24.09.2012.

⁹ Cf. "ONU: Es el mejor momento para hablar del acullico", *La Razón* (Bolivia), 23.02.2012.

¹⁰ Cf. "Gobierno afirma que Bolivia está ganando batalla por masticado de hoja de coca", La Razón (Bolivia), 21.11.2012.

^{11 &}quot;Cocaleros del Chapare dicen que fracasó industrialización de la hoja milenaria", Radio ERBOL (Bolivia), 26.11.2012.

in which the UN conventions apply. Alkaloid extraction is a difficult procedure, as Austrian energy drink manufacturer Red Bull discovered when it reportedly failed to master the technology. In 2009 four of Germany's federal states placed a temporary ban on sale of the drink "Red Bull Cola", which partly includes coca leaf extract, as the legal limits for traces of alkaloids had been exceeded. ¹² By exceeding the legal limits in this way, the drink had ipso facto become subject to German federal narcotics law.

LEGAL CULTIVATION, CRIMINALISED CULTIVATION: PERU

Whilst a great deal of international attention has been focused on coca cultivation in Bolivia and the approach adopted by South America's poorest state to the UN Single Convention, the basic situation in Bolivia's neighbour Peru is actually very similar. It is also the case in Peru that neither coca cultivation, nor the practice of cocachewing, nor other ways of traditionally consuming the leaf are criminalised. The state monopolist ENACO (*Empresa Nacional de la Coca*, National Coca Company) is the body that is exclusively responsible for managing and monitoring the cultivation and commercialisation of the coca leaf for legal purposes. ¹³ To this end, ENACO maintains a national register of coca farmers and buys up the harvest produced by the registered coca farmers.

That at least is the theory. In reality, there are the same kind of problems when it comes to putting this system into practice as with the regime imposed under Law 1008 and the system of social control in Bolivia. It has proved very difficult in both countries to draw a divide between the legal market for the coca leaf and the illegal market for cocaine production. In both countries it is not so much a legal problem as a problem of implementation: basically a problem of effective governance. Whilst in Peru the number of coca farmers, and with it the level of supply, is far higher than the number of registered farmers and the demand for legal coca leaf, ENACO buys up the dried coca leaves at a lower price than the illegal middlemen in the country. It goes without saying that the parallel market for cocaine production is therefore more attractive for many farmers.

Peru was for a long time the leading coca producer in South America. It was not until 1997 that Colombia assumed its notorious role at the head of the coca market

¹² Cf. "Zwei Länder verbieten Red Bull Cola wegen Cocain", *Die Welt*, 22.05.2009; "Cocainspuren: Vier Ländern verbieten Red Bull Cola", *Der Spiegel*, 23.05.2009.

¹³ Cf. Dekret 22095 (1998), Chapter IV. http://www.digemid.minsa.gob.pe/normatividad/ DL2209578.HTM>, accessed on 17.09.2012.

in the region. In the 80s and the first half of the 90s there was effectively a division of labour between Bolivia and Peru on the one hand and Colombia on the other. Even at the beginning of the 90s there was hardly any coca cultivation in Colombia; it was only the coca laboratories, supplied with dried coca paste from the producing regions of Bolivian and Peru, that had moved in. This meant that the criminal creation of added value did not actually take place in the production regions themselves. In collaboration with the Peruvian government, this supply route was cut off by the US government with the result that, firstly, the coca cultivation shifted to Colombia, and secondly, the exploitation of the coca paste and its processing into cocaine increasingly took place directly in both Peru and Bolivia - a tendency that has continued until today (Friesendorf, 2005: 46-53; Brombacher, 2011a: 120-122). This is just one example of many of how criminalisation as a strategy for tackling the problem of drugs tends to ignore the market character of the problem. The illicit drug trade can be channelled and regulated through external interventions, but it is almost impossible to eradicate it entirely, especially in conditions where there is a deficit of state authority over a region.

For a long time Colombia maintained its role as the leading coca-growing country. However, after regular periods of growth in recent years, Peru has more or less caught up and a rather remarkable battle of the numbers is currently being fought out. UNODC puts cultivation in Peru in 2011 at between 62,000 and 64,000 ha depending which month provides the baseline for calculation. In any case, the upward tendency since 2005 has been maintained (UNODC, 2012a: 6). A 2004 study measured how much coca cultivation would be required to meet the legal demand for traditional and other purposes of around 9,000 t of dried coca leaves, which in Peru would be the equivalent of a cultivated area of around 9,000 ha (UNODC, 2012a: 7). The increasing efforts of the Peruvian government to push through the eradication of cultivation through the manual tearing out of crops on coca plantations - around 10,000 ha in 2011 -, as well as alternative development programs with significant international and also German backing, can only be deemed to have been successful on the local level, given the re-emergence of the displacement effect (the so-called balloon effect) and the often rapid rates of growth in demand in both the MERCOSUR states and Europe. While the Peruvian government regularly points to the so-called "miracle of San Martín" 14, the positive results in some regions are

¹⁴ San Martín is a former coca-growing region in Peru, where in recent years a large part of the coca/cocaine economy has been replaced by flourishing agriculture (mainly cacao, coffee and oil palm), which is why it is viewed as a prime example of successful alternative development.

outweighed by high growth rates for cultivation in other areas. As was the case in Bolivia, for a long time coca cultivation in Peru tended to be concentrated in just a few regions. However, there has been a diversification in coca-growing areas due to the growing intensity of crop eradication measures in recent years. While it is true that the three regions Apurimac-Ene (Valle de los Ríos Apurimac y Ene, VRAE), Alto Huallaga and La Convención-Lares still made up around 70% of coca growing in 2011, cultivation has also increased significantly in new and different regions such as Ucayali or the lower Amazon (UNODC 2012: 13-15). There is often in this context a direct causal link with the internal migration patterns of the coca farmers that are triggered by crop eradication measures. After the destruction of their fields, the farmers move to another region and continue with coca cultivation, which is a relatively simple agricultural endeavour and provides quick yields. The Shining Path guerrilla group (Sendero Luminoso), which has often been pronounced dead, has more recently reconstituted itself as rather criminal stakeholder in various cocagrowing regions of Peru, taking part in both the cultivation of and trade in drugs. The group has proved to be extremely persistent in some areas despite being put under considerable military pressure. This can in large measure be explained through the funding possibilities offered by the drug economy. As was the case with the FARC in Colombia, the political discourse has not entirely disappeared but the fact is that the senderistas are now acting as a kind of "muscle", a violent enforcer for the drug business, mining coca fields, ambushing eradication units, or providing security for cocaine transactions. 15

RIGID CULTIVATION ERADICATION POLICIES: COLOMBIA

Despite the gradual re-location of coca-growing areas, the territorial spread of coca cultivation in Peru is still far more limited than in Colombia. The link between the drug economy and guerrilla groups, which is in some respects evident in Peru, is the predominant pattern in Colombia. After what has been a decades-long conflict, the

¹⁵ This applies especially for the VRAE cultivating region, where there has been a correlation between the absence of the state, long-established structures set up by the *senderistas*, and coca cultivation, and where state attempts to impose regulation and prevention have so far had very little success. Cf.: "Sendero Luminoso y el narcotráfico en el VRAE ¿Cuáles son los ingresos por narcotráfico que percibe SL-VRAE en la region", *IDL Reporteros* (Peru), 16.07.2012, http://idl-reporteros.pe/2012/07/16/sendero-luminoso-y-el-narcotrafico-en-el-vrae, accessed on 12.09.2012. Cf.: "Der Pfad leuchtet wieder. Der peruanische "Sendero Luminoso" und das Rauschgift", *Frankfurter Allgemeine Zeitung*, 15.10.2012.

drug trade and a culture of violence are more closely intertwined in Colombia than in any other country in the Western Hemisphere. It is hardly surprising that the problem posed by drugs and its "solution" is one of the five key points on the agenda for the peace talks between the FARC and the Colombian government that began in October 2012.¹⁶

Coca cultivation takes place in 23 of Colombia's 32 regions – a fact that is clearly closely linked with the internal conflict in the country. After a small increase in 2010-2011, UNODC estimates coca cultivation in Colombia in 2011 to be around 64,000 ha; Peru and Colombia are therefore currently running more or less neck and neck in the eagerly-anticipated annual competition on numbers. About two thirds of Colombia's coca cultivation is concentrated in the four departamentos of Nariño, Putumayo, Guaviare and Cauca, that is in tropical regions in the south of the country and along the border with Ecuador, where the growth rates in recent years have been especially high (UNODC, 2012b: 10–14). This is in no small measure due to the fact that the Colombian authorities have issued reassurances to the Ecuadorian government that they will no longer carry out any aerial spraying of coca fields along the two countries' shared border as the pesticide (glyphosate) that is employed to destroy the coca fields is believed to have a negative effect on human health, the environment and agriculture. The massive crop eradication measures continue to be carried out with US backing even after the phasing-out of Plan Colombia, an estimated six million dollar US government program designed to support drug eradication and counter-insurgency in the period 2002–2008.¹⁷

In the reporting year 2011 an estimated 140,000 ha of fields containing the "mata que mata" ("the plant that kills" according to a campaign run by the government of Álvaro Uribe, 2002-2010) were either sprayed from the air or the crops were torn out manually (UNODC, 2012b: 9–10) – each field, therefore, more than twice on average. In recent years there has been a slight shift in the relationship between aerial spraying and manual eradication. As the Colombian armed forces have won back an increasing amount of territory from the guerrillas, eradication measures in situ, which are believed to be more effective and more environmentally friendly, were once again possible. Nevertheless, these measure are often accompanied by bloody incidents as the fields are often mined or eradication units are ambushed; more re-

^{16 &}quot;Así será la negociación", *Semana* (Colombia), 13.10.2012; "Política antidroga global, clave en proceso de paz con las Farc", *El Espectador* (Colombia), 17.10.2012.

¹⁷ Cf., for a critical evaluation of Plan Colombia, the report from US accountability office: GAO 2008.

cent data shows that the tendency to a manual eradication approach has been reversed again, probably due to violent incidents.

Furthermore, the contrast between the estimated total coca-growing area and the cultivation area that has been destroyed (64,000 ha under cultivation compared with 140,000 ha that have been eradicated in 2011), appears to indicate that the efficiency of the eradication measures can empirically only be viewed as minimal. The successes of the crop eradication measures are neutralised through replanting or relocation and other similar strategies. In much the same way as in Peru, the crop eradication programs tend to trigger internal migration, which means the coca production know-how, jointly with the migrating coca peasants, simply moves from one part of the country to another.

One reason why the Colombian government has continued to stick by its program of crop eradication measures despite all the known negative side-effects is often overlooked: it is the role of repressive drug policies as a counter-insurgency strategy. All armed participants in the conflict in Colombia – the two guerrilla groups FARC and ELN as well as the many other groups that operate in the grey area between criminality and political self-projection as successors to or a continuation of the paramilitaries – have for some time now been employing the cocaine economy as a cash cow and actively participating in that economy in one way or another. The once widely accepted division between the FARC, who levied taxes on coca cultivation, and the paramilitaries, who controlled the lucrative cocaine trade and its export (Saab/Taylor, 2009), is no longer valid today¹⁸, especially because the demobilisation of the paramilitaries since 2005 has made the situation in Colombia far less transparent – a trend that has only been accentuated by the arrest of numerous established drug dealers. The cocaine business has become just as much of an "elixir" (Maihold, 2012: 3) for the FARC as it is for the other armed groups in the country.

It would nevertheless be wrong to reduce Colombia's drug policies to its crop eradication strategy. Alongside massive investments in alternative development mea-

¹⁸ Cf. on the role of the FARC's Frente 48 in cocaine trafficking from Colombia to Ecuador: Farah/Simpson 2010. For the link between the Beltran-Leyva and the FARC see: "Un matrimonio peligroso. Las Farc y los carteles mexicanos", *El Espectador* (Colombia), 04.07.2012.

¹⁹ The September 2012 arrest in Venezuela of the man believed to be the last remaining leading "Capo", Daniel Barrera, also known as El Loco ("Crazy Barrera"), was viewed by many as the end of an era, as he was one of the last of a generation of drug traffickers who succeed in establishing a regional monopoly in the cocaine trade as well as a local reign of terror based on violence. Cf.: "Narcotráfico de Colombia entra a una nueva era sin grandes capos", *El Espectador* (Colombia), 21.09.2012.

sures – just one program, *Plan Colombia*, led to spending in this area of around half a billion US dollars (GAO, 2008: 47) – the Colombian government is increasingly attempting to introduce integrated programs in the coca-growing regions that are as a rule also conflict regions. This approach combines components of counterinsurgency and conquer-and-hold with concrete measures to establish and reinforce state institutions as well as alternative development and social projects. It is hoped that this strategy of "territorial consolidation", originally developed as a pilot project in La Macarena, a former FARC stronghold in the Departamento del Meta, will in future be applied across the country, whereby the Colombian government intends to put more emphasis on tackling the causes of drug cultivation rather than the symptoms.²⁰

LATIN AMERICAN DRUG PRODUCTION: NEW TENDENCIES

Whilst coca/cocaine remains the most profitable segment of the Latin American drug economy, a range of other drugs, some of which have gained in significance in comparison with cocaine, are also produced in the region. Marihuana consumption and cultivation have for some considerable time been widespread in numerous countries. Countries like Mexico and Paraguay can be counted among the largest cultivating states in the world, even if the exact extent of the cultivation remains largely unclear. However, as in many European countries, marihuana is generally not viewed as a problem drug in Latin America because it does not have the same kind of public health impact as cocaine or other cocaine derivatives; nor does the marihuana market have the same detrimental dynamic for security as the market for hard drugs. This phenomenon is, moreover, evident in numerous marihuana-cultivating states around the world: the fact that the tendency towards violence is less pronounced in this market is presumably linked with the lower levels of repression of the market, but at the same time with the low level of criminalisation of the consumption of and trade in marihuana.

In comparison with the well-established marihuana market, the cultivation of opium poppy and the production of synthetic drugs are relatively new phenomena in Latin America, which must however be mentioned in brief in the following in order

²⁰ Cf. for an overview of the territorial consolidation strategy in La Macarena: Mejía/Uribe/Ibáñez, 2011.

²¹ Cf. UNODC 2012c, pp. 49 – 51; there has been a rise in the number of marihuana seizures in numerous South American states in recent years.

to present a complete picture. Despite countervailing developments, the orientation towards the US consumer market remains strong and the production tendencies in the region in many respects follow the consumer trends in the USA. This has not only led to a shift of cocaine production within South America (see above), but also to the establishment of the production of newer drugs. The focus here is currently on the production of methamphetamine (meth or crystal meth for short), for which the USA is one of the most important international markets, and for which there are rapidly rising levels of consumption around the world. This includes in recent times Germany, where until just a short while ago the drug was largely unknown.²² Whilst for a long time production in the USA itself mainly took place decentrally at the household level or was controlled by motorcycle gangs, larger laboratories have in the meantime been located to Mexico and Guatemala, where they are large-scale operations run by Mexican organised crime gangs. ²³ One important reason for this relocation of production facilities is the more restrictive control of the basic ingredients required for meth production in the USA. In this way, Mexico has become the most important external meth supplier for the USA. The Sinaloa Cartel with its almost mythical leader "Chapo" Guzmán is probably the most powerful of all the Mexican "cartels". It is currently viewed as the most important meth producer and has clearly acted quickly to focus its resources on this relatively new branch of the transnational drug economy .24 It was for this reason that the former capo of the Sinaloa Cartel, Ignacio "Nacho" Coronel, who was killed in a shootout, was also known as Rey del Cristal, the King of Crystal Meth (Hernández, 2010: 378).

This trend is, for instance, mirrored in a doubling of meth seizures in Mexico in the period 2009–2010, in the massive seizure of basic materials like ephedrine and pseudoephedrine, or in the busting of numerous industrial-scale processing laboratories in the USA's southern neighbour.²⁵ A drop in the price of meth in the USA that has come at the same time as a rise in its purity in recent years (UNODC, 2012c: 51–52) indicates a supply surplus that could be linked with an increase in production in Mexico.

²² Cf. "Crystal Meth: Europäischer Binnenmarkt", Frankfurter Allgemeine Zeitung, 04.04.2012.

²³ Cf. "Sinaloa Cartel Shifting Meth Production to Guatemala", *Insight Crime*, 02.01.2012, http://www.insightcrime.org/news-briefs/sinaloa-cartel-shifting-meth-production-to-guatemala, accessed on 08.10.2012.

²⁴ Cf. "Mexico Captures Sinaloa Meth Maker, in Latest Blow to Cartel", *Insight Crime*, 15.02.2012, http://www.insightcrime.org/news-briefs/mexico-captures-sinaloa-meth-maker-in-latest-blow-to-cartel, accessed on 08.10.2012.

²⁵ Cf. "Mexican Meth Production Goes on Speed", Reuters (USA), 10.05.2012.

In contrast with the cocaine market, which is increasingly spreading out within South America itself, but also in Europe and other regions of the world, production of opium poppy/heroin in Latin America is almost entirely directed towards the US market. Approximately 7% of global opium poppy cultivation currently takes place in Latin America, mainly in Mexico and Colombia, as well as on a smaller scale also in Guatemala and Peru. According to its own figures, Mexico is the world's leading country in terms of the number of opium poppy fields destroyed each year. The total area destroyed in 2010 was more than seven times that destroyed in Afghanistan and more than twice as much as in Myanmar, the two main opium-producing countries worldwide. The increase in seizures of heroin in Colombia, Ecuador and even in Mexico itself in recent years also appears to suggest that Latin America has a growing share in the US heroin market (UNODC, 2012c: 27–29). At the same time, there are currently no definitive figures for the actual extent of opium poppy cultivation in Mexico. Beginning in 2013, UNODC plans to carry out a crop monitoring survey, as in the Andean countries and in the Asian opium poppy-growing states. The aim is to come up with a better database on the production of organic drugs in Mexico.

MORE THAN JUST DRUGS: THE IMPACT OF DRUG CULTIVATION ON DEVELOPMENT AND SECURITY POLICIES

The generally accepted justification for the battle against drug cultivation in Latin America and elsewhere supposes that measures like crop eradication and alternative development projects are directly linked with a reduction of the supply of illegal drugs in consumer markets. This justification is the basis for Germany's and for Europe's foreign policy when it comes to drugs. It is only recently that the realisation has been made that drug economies have an impact that goes beyond questions of public health, extending far into development and security policies. Furthermore, drug cultivation has a devastating environmental impact in many of the countries where it takes place because it often goes hand in hand with the slashing and burning of forests and woodlands and the excessive use of fertilisers, which in turn lead to soil erosion and serious pollution of rivers and other waterways, to mention just a few of the more visible effects.

In accordance with the received global logic that underpins drug policies, crop eradication measures and drug seizures are always viewed as successes because the assumption is that destroyed coca plants or seized cocaine will be withdrawn from the end consumer market; that they will in the final instance not be consumed. This fundamental assumption is only partly correct. Of course, a confiscated quantity of

drugs – X – can no longer be consumed if it has been destroyed, or if it is in storage in a court's evidence vault. In fact, the level of demand for the quantity of drugs – X – remains same and the market reacts by adapting to the loss of commodity. Suppliers try to replace the loss by getting destroyed plantations back into operation or by relocating production facilities; the middlemen step up their prices in order to signal a supply shortage to the drug-producing farmers or they make up for the loss by spreading the remaining drug quantity – Y – more thinly. The actual non-availability of a specific drug on a consumer market is a rare event and usually only occurs when the supply chain breaks down a long way from the production locations – not however, as in the case of the cocaine trade, to a significant extent in close proximity to the production facilities. In this way, the reasoning behind the health policy justification of drug control in drug-cultivating countries must, in empirical terms, be viewed critically. At the same time, however, development and security dimensions take on a greater importance.

In the final analysis, it is the conflict between health and development considerations on the one hand and security on the other that is the source for the current reform debate on drug control policies in Latin America. Due to public health concerns, the Western "consumer states" have for decades supported partner governments in South America and Asia in implementing hard-line policies to control supply that have begun right at the earliest stage of the value chain for illicit drugs. However this strategy has tended to have a substantial impact on security and development policies in the affected source countries. Resistance to this trade-off is being expressed in some Latin American countries as the development and security costs are viewed as too high for them to continue to be met. In this way, it is not just the prioritisation of public health issues in the consumer countries that is being called into question, but effectively the whole international drug control regime that is the political and legal foundation for burden-sharing between consumer and producer countries.

²⁶ When there was a temporary breakdown in supply of cocaine in a number of US cities in 2007, and when prices there doubled between 2007 – 2009 although the purity of the cocaine traded had slumped considerably, there was no credible causal link between these developments and drug seizures or eradication measures in the Andean region.

Cf. US Drug Enforcement Agency (DEA), http://www.justice.gov/dea/pubs/pressrel/ pr121108_PPGcocaine_05to08graph111408_with%20box.pdf> (accessed on 12.07.2009) as well as DEA / US Federal Bureau of Investigation (FBI): "Testimony to the US Senate Caucus on International Narcotics Control", 05.05.2010, http://www.fbi.gov/news/testimony/drug-trafficking-violence-in-mexico-implications-for-the-united-states, accessed on 03.10.2012.

Against this backdrop, in order to assess to what extent the negative external consequences of drug cultivation and the various strategies designed to combat it can be mitigated, the first thing that is needed is a short description of the complex correlation between drug cultivation and trafficking and the development and security situation in the affected states.

WHY DOES DRUG CULTIVATION TAKE PLACE IN SOME PLACES AND NOT IN OTHERS?

The number of states around the world in which the organic precursor plants for cocaine and heroin are cultivated is astonishingly small. While coca is almost exclusively cultivated in the three above-mentioned Andean countries, around 85% of the global – illicit – production of opium poppy is currently concentrated in Afghanistan, Myanmar and Laos (UNODC, 2012c: 37). This despite the fact that numerous other countries have the right geographic and climatic conditions for coca or opium poppy. Coca could be produced in countless other countries; Reuter (2010) reports that a cocaine precursor plant was once produced in Indonesia, China and Taiwan.²⁷ The extensive range of legal opium poppy-producing states in itself demonstrates that there are also very few geographic or climatic limitations on opiate production (see chapter 4).

While legal production takes place within the framework of an international regulatory regime and authorisation procedures, the illegal production of drugs cannot be explained by pointing simply to geographic or climatic factors because the high profitability of drug economies would otherwise suggest that a greater number of countries would be expected to become involved. Why does coca and opium poppy cultivation for illegal drug production only take place in a small number of developing countries, while synthetic drugs and marihuana are produced in large quantities in industrialised countries, including Germany? The most plausible explanation is very simple: the visibility of the large-scale coca and opium poppy plantations, coupled with the fact of their illegality, means that cultivation can only take place in areas where – alongside the right agricultural conditions – there is also only a minimal risk of state action being taken to penalise illegal production. Both marihuana and synthetic drugs can be produced in-house, that is to say under a roof, which makes production much more difficult to detect than coca or opium poppy fields. It

²⁷ Cf. Reuter, 2010: 103; Buxton, 2010: 68. Thoumi estimates the number of countries that could cultivate coca to be at least thirty and those who could produce opium poppy to be over ninety; cf. Thoumi, 2010: 195.

is true that coca and opium poppy can theoretically also be produced in-house, but in reality this does not happen so far (Reuter, 2010: 103).

Fragile states, in which the state's monopoly on the use of force does not extend across the whole national territory, in which the rule of law has no deterrent potential, and in which the security apparatus is either absent in specific areas or corruptible, provide the ideal preconditions for visible drug cultivation – as well as for drug trafficking and other illegal markets. With reference to Ricardo, Thoumi coined the term "comparative cost advantages" that apply to a number of states, enabling them to concentrate the global cocaine and heroin economy in their territories (Thoumi, 2010: 195–199). According to Thoumi, the most important factors that promote the location of drug economies in certain territories are weak rule of law and a low level of acceptance of the norms that underpin the rule of law, as well as existing normative structures that fail to negatively sanction illegal activities like the drugs trade. Another factor is the availability of expertise, or "illegal skills": that is a pool of experienced labour ready to carry out the many criminal activities that range from the cultivation of the drug through to its final sale (Thoumi, 2010: 198–201).

Suitable soil conditions and rates of precipitation are not therefore the most important factors when it comes to explaining why organically based drug economies are located in a specific area. Instead, the main factor is quite simply the level of risk that there will be negative consequences for illegal value added activities. Minimal risk is the most important production factor in illegal markets, unlike in legal markets where labour resources and raw materials are more important. The risks of negative sanctioning can be mitigated by neutralising core state functions through corruption or the threat of violence. Where states are weak ex ante, the costs for corruption and violence can be reduced:28 states that are not in control of their full national territory, and where judicial structures do not pose a sufficient deterrent, therefore offer greater freedom of activity to organised crime because the risk of criminal activities being penalised is by definition much lower. This argument provides a plausible explanation for the persistency of the drug economy in inaccessible border and Amazon regions of Colombia and Peru, in southern Afghanistan, and in Burma's Shan State, where, through to the present day in some instances, the state has not been able to establish a real presence. The result has been that violent non-state actors have either imposed an illegal drug economy or have at least participated in it, or continue to participate in it. Bolivia is an exception in this respect. Because of its specific national legal set-up it is in many ways more like India where

²⁸ On risk as a production factor and risk minimisation strategies cf. Brombacher, 2012: 4-5.

the legal production of opiates is widespread, whereby opium is diverted into the illegal market (see chapter 4) in much the same way as coca in the Andean state. Alongside the central factor of the way in which a state is constituted and the extent to which that state's monopoly on the legitimate use of force extends across its national territory, there are also a number of secondary factors that favour the location of drug production or other sectors of the drug economy in a specific country. These include: the proximity of sales markets (Mexico), the passing down of cultivation traditions (Bolivia), existing war economies (Colombia), informal market structures for money laundering (Central America), or the availability of international diaspora networks for distribution (Nigeria) (Reuter, 2010: 104-111). At the same time, at the household level of drug-cultivating families in the regions of origin for organic drugs, a range of micro-factors can be identified that promote the trend towards coca and opium poppy cultivation. These include: the size of an individual household's area of agricultural cultivation and how accessible it is, ²⁹ skills required for legal agriculture, 30 the availability of micro-financing systems, 31 as well as the presence of violent political or criminal actors who exercise pressure on the local population to engage in drug production.

Conversely, this means that while certain factors promote the location of drug economies to specific regions, it is also true that these factors are deliberately accentuated by criminal elements in order to create biotopes that are favourable for the illegal drug economy. It is above all this dynamic that has had such an immense impact for development and security policies in Latin America, as the following examples will demonstrate:

WHAT DAMAGE DO DRUG CULTIVATION AND OTHER SEGMENTS OF THE ILLEGAL DRUG ECONOMY ACTUAL DO?

As was outlined above, limited risk for the participants is the most important production factor in illegal markets like the drug economy. The illegality of the trafficked

²⁹ As a general rule it is assumed that the smaller the agricultural area available, the greater the incentive there is to engage in drug cultivation, as the yields per m² for coca or opium poppy are higher than for legal alternatives.

³⁰ Less know-how is requited for coca and opium poppy than for many legal alternatives. Both plants are viewed as very robust and are easier to cultivate than substitute goods.

³¹ Many alternative goods need longer lead times than coca or opium poppy before they yield a crop. The households of small-scale farmers do not normally have any savings at their disposal to help them make it through these interim periods.

product constantly forces the market participants to conceal the criminal offence that results ipso facto from the trafficking, or at least to prevent it from being penalised (Reuter, 1983: 109–113). Minimising risk is therefore the central structuring factor in this market and it must be explained if the way in which the cultivation of and trade in drugs in Latin America functions is to be understood. The necessity for participants in the drug economy – from small-scale farmers through to large-scale traders – to minimise risk is also the key factor behind most of the damage done in the affected states in terms of both development and security policies.

According to the minimum definition of organised crime, as set out in the UN's so-called Palermo Convention, the term can be applied to an association of three or more people, who over a period of time commit one or more serious crimes with the aim of making an economic profit.³² Persons or groups who intend to enrich themselves economically through criminal activity face a dilemma: a certain degree of organisation and structure is indispensable in order to achieve economies of scale in their pursuit of criminal profits. For instance, an organisation trafficking in cocaine must first buy up the drug or the raw material before packaging it, organising transportation, bribing state monitoring authorities, procuring weapons, buying off security personnel, intimidating potential informers, camouflaging the return flow of cash, and laundering any profits made – that is to say, concealing the illegal source of those profits. At the same time, however, organisation and structure imply visibility, and therefore a higher risk of being caught and with it a potential loss of life and liberty, or at least the loss of the goods that are being trafficked. It is for this reason that, contrary to many clichés, organised crime generally takes place locally and within families. Also, it tends to have flat structures and to be based on networks, rather than being pyramidal and hierarchic. This boosts the resilience of illegal networks towards external interventions.³³ Criminal organisations often therefore tend to be more similar in structure to small handicraft enterprises than large transnational businesses, as is often suggested in the media (Reuter, 1983: 109–117).

The global prohibition and control regime for drugs like cocaine does not only lead to structures in the criminal drug economy taking on the character of risk mini-

³² Cf. "United Nations Convention against Transnational Organized Crime" (2003), §2a: ""Organized criminal group" shall mean a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit."

³³ Cf. on the application of the term resilience for drug markets: Bouchard, 2010: 327–331.

misation. What also happens is that the criminal networks charge a high price for the risks that they enter into (Caulkins/Reuter, 1998: 596-597). In simple figures: the market participants charge the middlemen and consumers for the loss of the estimated 700 t of cocaine seized by the authorities globally in 2010. They also charge consumers a price for the risk they have taken of losing their lives or their liberty. There is hardly any other way of explaining why, in Germany, a kilo of cocaine with an average purity of below 40% has an average street value of around €60,000 (EMCDDA, 2012) while a kilo of pure South American coffee has a supermarket value of about €8. It is very likely that the coffee came originally from the same region as the cocaine, was probably cultivated by a neighbour of the coca farmer, has passed along the same transport route as the cocaine, has probably been more labour intensive, and required more technical know-how to make its way into a German coffee machine. In short: the manufacturing costs for the kilo of cocaine are almost certainly no higher than for the coffee; in fact they are likely to be lower. A coca farmer is no better off than a coffee farmer, often poorer. The drastic price discrepancy therefore requires an explanation: the huge increase in the price of the cocaine that took place between the region of origin and the target region reflects the success of, but also the dilemmas faced by the global control regime. The same kilo of cocaine that still cost the Peruvian middleman €1,000–1,500, the Mexican Narco €12,000–15,000, and which can bring in as much as €60,000 for the final seller, is only so expensive because the prohibition regime and state sanctions make the risks of trafficking so high.³⁴

Meanwhile, it is the price dynamics in the illegal drug economy that provide the central arguments for and against the legalisation of drugs – a debate that is currently taking place with unprecedented vehemence in Latin America: without the risk surcharges, drugs would be cheap and the absurdly high earnings of organised crime would collapse. Without the risk surcharges, drugs would become cheap and the consumption of these drugs would increase as they would be cheaper and more socially acceptable (because they would be legal). These basic assumptions are both fundamentally correct, making it almost impossible to reconcile the two positions and leading to the high level of polarisation in the debate on drugs policies in the region.

Going beyond the problem of consumption, the illegality of the drug market and the huge profits that result only serve to promote its almost infinite resilience and capacity to adapt to all attempts to prohibit the drug economy coupled with all the devastating effects that this has on the impacted societies. The price dynamic in the drug economy leads to the high earnings for organised crime that are in turn

³⁴ Cf. Rydell/Everingham, 1994: 10-11; Reuter, 2011: 22.

invested in risk minimisation. These funds can be used for corruption, the purchase of means of transport and weapons, or for the financing of *sicarios* (contract killers) and money laundering. At the same time, the large return flow of funds does not reach the coca farmers; in contrast with many clichés, coca or opium are not necessarily cultivated because the earnings on such crops are higher but because coca and opium poppy are simply easier to cultivate and because the products are extremely non-perishable, which is their central advantage over more perishable rival products in the marginalised drug-cultivating regions of South America and Asia. The marginalisation of drug-cultivating regions and the widespread link between drug cultivation and different forms of violence result in the farmers in these regions being cut off from economic development in the rest of the country, leaving them in a vicious circle of drug cultivation and poverty, from which they cannot escape.

The high profit margins from the drug economy remain with the middlemen, enabling them to create and consolidate illicit value added frameworks. They can also use illegally generated funds to neutralise core state functions and to further weaken already fragile states. The illegality of the drugs forces the actors involved to eliminate the rule of law and law enforcement and to undermine the state's monopoly on the legitimate use of force because otherwise the illegal value chain would constantly be interrupted. Corruption is in this respect the method of choice because, as a crime without victims, it is per se quiet and invisible.

Using violence to intimidate or deter state authorities tends to have a similar effect, but it is visible and more likely to trigger a reaction than corruption. However the examples of Mexico, Colombia and Guatemala – that is countries in which organised crime deliberately employs extremely visible violence to intimidate the police, judicial authorities and rivals – currently show that violence is only an effective tool if those who exercise it are likely to go unpunished. The escalating and extremely brutal violence in Mexico's northern and coastal regions, in the Petén region of Guatemala, and along Colombia's Caribbean coast therefore only appears to be irrational. It is in fact an entirely rational strategy designed to protect the illegal economy from external intervention and intimidate competitors. Tortured and abused bodies that are hung up on bridges, strewn across the squares of towns and cities, or used as carriers of threatening messages are the criminal gangs' way of warning the state, citizens and rivals not to get involved (Brombacher/Maihold, 2012). The reinvestment of the return flow of funds from the drug economy in visible and therefore communicative acts of violence is, in the logic of the illicit value chain, risk minimising – and thus profit maximising.³⁵ Visible violence

³⁵ Cf. on the communicative violence of organised crime in Latin America: Brombacher, 2012, as well as Brombacher, 2010a: 117–118.

therefore has the same effect as corruption. It is designed to prevent the negative sanctioning of criminal added value. *Plata o plomo*, silver or lead (meaning accept a bribe or face assassination) are therefore just two sides of the same coin.

LEGAL STATUS OF DRUG CULTIVATION AND ITS CONSEQUENCES

Wherever drug cultivation is criminalised, it is nearly always linked with corruption and the establishment of structures of violence. Especially in the rural and peripheral regions of the Andean countries where coca cultivation is established, the weak presence of the state and its institutions is endemic. Empirical studies of the cocaine economy in interregional comparison appear to indicate that organised criminal added value tends to follow the "path of least statehood" (Brombacher/Maihold, 2009: 17) in order to minimise risk. The rural regions located between the high Andes and the tropical Amazon basin in the three cultivating states of South America are therefore ideal territory for the location of easily visible illegal drug cultivation. At the same time, the presence of coca cultivation, as well as in part of opium poppy and marihuana, only further weakens state structures through corruption and violent enforcement.

A comparison of the thee main coca-growing states of South America, as well as one for opium poppy in Asia, clearly shows that the legal status of cultivation has a direct impact on development and security policies in Bolivia, Colombia and Peru or Afghanistan and Myanmar. While the fundamental legality of coca cultivation in Bolivia and Peru means that the coca farmers there do not necessarily come into contact with the illegal economy - they trade in dried coca leaves and can not necessarily tell what the further utilisation of the product will be because it has a dual-use character - the link between their counterparts in Afghanistan or Colombia and the drug market normally begins with cultivation. In Colombia, fresh leaves that are not suitable for traditional consumption are put on the market or processed into coca paste, which is the first step leading to cocaine production. The large-scale drying of the leaves under opens skies, which is common in Bolivia and Peru, is more rarely possible in Colombia. So while in Bolivia and Peru the participation of the smallfarmers in the drug economy normally ends with cultivation, in Colombia the initial processing of coca is often carried out by the farmers. The processing of the coca leaves into coca paste and later cocaine³⁶ is however normally done by the middlemen who function as service providers for criminal networks, supplying them with pure cocaine.

³⁶ For a short summary of the production process cf. Brombacher/Maihold, 2009: 8.

The fact that cultivation is in large measure legal in Bolivia means that in the coca-growing regions of Yungas and Chapare violence and corruption are hardly more
widespread that in other comparable rural regions of the country. It is true that there
are often instances of organised violence as part of political protests against the government, or against US-financed development agencies; criminal violence is however
rare. Broadly speaking, in Bolivia coca is an agricultural product like coffee or cocoa;
the fields are located right next to roads or close to towns and villages. The biggest
problems resulting from coca-growing in Bolivia are environmental problems. This is
because both monocultural cultivation and slash and burn clearing of land for crops
have a devastating impact on soils, biodiversity and climate. At the same time however, coca cultivation in Bolivia has little direct influence on security issues. Once
again the situation in Bolivia appears to have much in common with the situation
of legal opium production in India, which will be a focus of the following chapter.

Despite its fundamental legality, coca cultivation in Peru is increasingly being criminalised, not least due to efforts to stem the rapid increase in cultivation in recent years. The legal divide between certified cultivation for legal purposes and illegal surplus crop production for cocaine production is extremely blurred. The de facto criminalisation of cultivation has in recent years led to a stronger geographical diversification of cultivation, which is above all located in areas where the presence of the state is especially limited such as the VRAE and Monzón regions. Violence and corruption are both widespread in these areas. The violence is especially emblematic in VRAE, where it is characterised by an impenetrable mix of remnants of the Sendero Luminoso guerrilla group and transnationally operating drug cartels (see chapter 2).

The consequences for development and security policies can, however, be seen most clearly in the case of the three (post-) conflict states Afghanistan, Myanmar and Colombia. There is also a similar connection between criminal violence and the hard-to-quantify production of organic drugs in Mexico or Guatemala. In all of the countries mentioned, there is a strong link between the drug economy and armed perpetrators of violence who participate in the drug economy and use it to finance their activities. In the three (post-)conflict states, and also still in parts of Peru, the areas where non-state perpetrators of violence exercise influence and control are in large measure congruent with the most important drug-cultivating regions. Both phenomena, illegal drug cultivation and non-state violence, can only flourish if the state is either weak or absent. At the same time, the two very different phenomena are interdependent: non-state or criminal groups promote or protect cultivation in order to impose taxes on it, or to use the crop to produce drugs. It was in this way that drug cultivation helped many armed groups or insurgents to fund their activities even after they lost their external sources of financing at the end of the Cold

War. This connection between violence and the drug economy has had a substantial impact on security and development in the countries affected. This is clearly the case in a number of examples, such as the Putumayo region of Colombia, Burma's Shan State, Mexico's Sinaloa region, or in the provinces of Helmand and Kandahar in Afghanistan, as well as in part in Peru's VRAE. All of the regions mentioned are to a greater or lesser extent controlled by a broad range of political or criminal perpetrators of violence, whereby for a long time state institutions had no influence and the negative sanctioning of illegal added value simply did not take place.

The government in Colombia has in recent years stepped up efforts to break the regional monopoly on the use of force held by guerrilla groups and to cut off their sources of revenue through coca cultivation and cocaine trafficking. The firm repression of cultivation has forced all participants in the drug economy, from famers to guerrilla groups and criminal gangs, to try and shield the coca/cocaine economy from external intervention through violence and corruption, or by constantly changing the fields used for cultivation, as well as reducing the size of the fields or attempting to disguise them. In Colombia and to a certain extent also in Peru, the necessity to minimise risk has led to the dispersion of cultivation across the whole country in what is effectively a large-scale ongoing evasive manoeuvre. The break-up of the regional monopoly on the use of force held by the guerrilla groups and other non-state perpetrators of violence also signalled the end of the kind of geographic continuity of the cultivation that still exists in Afghanistan's Helmand Province or Shan State in Myanmar. This geographic relocation dynamic has also led to violence, corruption and other phenomena associated with drug cultivation being spread across the whole of the country. Repressive policies designed to control supply networks in the restive Andean states have tended to duplicate the problem rather than solve it. By contrast, Bolivia's permissive cultivation policy has had a much more positive record in terms of both security and development policies – albeit with the, from the perspective of Western governments problematic, trade-off of a surplus of coca cultivation, leading to an increase in under-controlled cocaine production in recent years.

EXCURSUS: LEGAL UTILISATION OPTIONS FOR OPIUM POPPY AND COCA

LEGAL COMMERCIALISATION METHODS: OPIUM POPPY AND COCA IN COMPARISON

By comparing the situation in the states that cultivate coca and opium poppy, the previous chapter illustrated how strongly the legal status of the cultivation determines its influence on development and security policies. This becomes even clearer

on the basis of the comparison between the legal production of opium in countries like Turkey or India and illegal opium poppy and coca production in Afghanistan, Myanmar or the Andean countries, whereby important lessons emerge for dealing with coca cultivation in South America as well as for the containment of the resulting problems.

Opium poppy, as a source plant for heroin and many different pharmaceutical products based on the alkaloids morphine and codeine, is categorised in the same way as coca in the standard-setting UN Single Convention of 1961. Opium poppy is, like coca, cannabis, heroin and cocaine listed in Schedule 1 of the Single Convention and therefore subject to a strict control regime monitored by the INCB in Vienna. Although the alkaloid content in the precursor plants coca and opium poppy is small, they are categorised as drugs even in their original form. This was agreed by the international community in the Single Convention. It is true that production of either these drugs or their source plants, as well as their import or export, are not prohibited. However, as has already in part been explained, it is subject to strict requirements and can only take place with either state or INCB approval. All cultivating states have to inform the INCB regularly on their production volumes and the quantity of derivatives produced, as well as providing figures for exports and stocks in storage. States with a demand for products must also measure and provide the INCB with detailed accounts of expected requirements for the year to come of products listed in Schedule 1 of the Single Convention.

While there is a very large global demand for opium derivatives for pharmaceutical purposes, the legal utilisations of coca or cocaine for scientific or medical purposes are currently rather limited. There are still some applications in which cocaine is used for prescription purposes in Germany such as in analgesics, but the reality is that such utilisation is very limited, as is apparent from the figure for annual requirement that is registered with the INCB. The globally registered total quantity of cocaine for medical or scientific purposes was around one and a half tonnes in 2010, which amounts to almost nothing in comparison with the export volume for opium derivatives (INCB, 2012). There are however a number of non-scientific and non-medical processing possibilities for the coca leaf, such as its utilisation as a flavouring agent in soft drinks like Coca-Cola and other culinary purposes. Moreover, attempts are above all being undertaken in Bolivia to develop other ways of utilising the coca leaf (see chapter 2) – so far, however, with only limited success.

Existing legal options for coca utilisation are currently rarely used, although they certainly offer a potential for alternative development (coca cultivation substitution projects funded by development agencies) *without* the difficult search for alternatives (Kamminga, 2011: 8). Coca has a range of competitive advantages in comparison

with alternative products: in just a couple of months after it is planted, it generates several crops each year; it is relatively easy to cultivate; it is generally non-perishable and resistant; and the required know-how is widespread in the cultivating regions. Fundamentally, therefore, there are many arguments in favour of a legal utilisation of the plant.

Contrary to the impression that is often given, it is not legal considerations that prevent coca from being used for legal purposes, but issues surrounding the effective regulation of coca cultivation by the governments in the affected countries and the prevention of the dual-use of coca for illegal purposes. As the following examples for opium poppy production demonstrate, the establishment of a legal utilisation regime would be possible. However the Single Convention prescribes that the states in questions must set up a control system that effectively prevents legal production being diverted into the illegal production of drugs. Due to the inability of the cultivating countries to ensure constant prevention of such a diversion of coca and its derivatives into illegal use, and due to the absence of any infrastructure for alkaloid extraction from coca leaves, the legal utilisation options for the pharmaceutically active alkaloid in the coca leaf on the one hand and the coca leaves from which the intoxicating alkaloid has been extracted on the other are not being exhausted. Coca-Cola, for instance, uses coca leaves from which the alkaloids have been removed in its soft drink production. The industrial processing procedure that is necessary to make this possible does not however take place in the coca-cultivating countries but, according to older press reports, in the USA itself, where it is carried out by an intermediate company that supplies Coca-Cola with the cleansed coca leaves.³⁷

The case of legal opium poppy production is very different although the identical international control regime applies as for coca/cocaine: alongside the main producer countries Turkey and India, a range of others including France, Spain, the United Kingdom and Australia also currently cultivate opium poppy commercially for opiate production for medical purposes.³⁸ In the following, the cases of Turkey and India will be described in brief in order to see what possible lessons can be derived for the problems arising from drug cultivation in South America. Both countries are traditional cultivators of opium poppy, in which – in contrast to the new producers

³⁷ It is extremely difficult to track the Coca-Cola supply chain and trace the original source of the utilised coca leaf. There is only very little information that is openly accessible on this subject. Cf. "How Coca-Cola obtains its Coca", *New York Times*, 01.07.1988.

³⁸ Cf. for a full list of the states with legal opium poppy production, dated 2005: Jensema/Archer, 2005: 145.

in the EU or Australia – production takes place decentrally and is carried out by local small-scale farmers, meaning that the situation can more readily be compared with coca production in the Andean states.

THE EXAMPLE OF TURKEY

Opium poppy has long been established in Turkey. As far back as 1953, the country was authorised by the UN to produce opium for (legal) export purposes within the framework of the so-called Opium Protocol. As a result, Turkey set up an initial licencing system, which regulated cultivation and production. At the time opium poppy was cultivated in 42, or about two-thirds, of Turkey's provinces. That figure is lower today and cultivation now only takes place in 13 provinces. Turkish production is regarded as well-regulated because the diversion of production for illegal purposes can apparently largely be prevented. However, for a long time, the control regime did not function satisfactorily because part of the crop did flow into illegal drug production. With the increase in heroin consumption in the USA in the 60s, Turkey came under growing international pressure, especially from the Nixon administration, as it was suspected that supplies of Turkish heroin were reaching the US market. However, attempts to try and force Turkey to adopt a total ban on cultivation failed, which led to substantial tensions in relations with the country (Kamminga, 2011: 12–17). The situation was in part reminiscent of the role played by coca cultivation in present-day relations between the USA and Bolivia.

For a short time the American efforts were, however, successful and from 1972 Turkey imposed a full ban on opium poppy cultivation. Because of the large importance of opium poppy industry for Turkey, the difficulty in establishing alternatives, and the insufficient compensation payments made by the USA the ban had already been rescinded by as early as 1974 and opium cultivation had once again begun in Turkey. The restart was used to impose a strict control regime, which set a maximum cultivation limit per household of (0.5 ha) as well as a cumulative national limit (100,000 ha). From this time on, an in situ verification regime monitored compliance with the cultivation limits. Any surplus production was destroyed. At the same time, the state bought up the whole crop, giving it a monopoly over the commercialisation of opium poppy plants for further processing outside Turkey for medical purposes. Since 1981 the processing of the poppy straw took place in Turkey itself. The Bolvadin factory for the extraction of alkaloids from the dried poppy, which was set up with international support, is still the only one in the country and remains in operation.

The establishment of a credible control regime and the setting up of domestic processing capacities were linked with international recognition of Turkish (as well

as Indian) opium production. In the same year as the production start-up at the Bolvadin plant the US Drug Enforcement Administration (DEA) established its so-called 80/20 Rule, according to which the USA would satisfy 80% of its demand for opiates through purchases from Turkey and India and 20% through supplies from other producer states (Kamminga, 2012: 17–22). In this way, the special role of the two states as legal opium producers with a long tradition of non-industrial cultivation by small-scale farmers was internationally recognised. The same fundamental arrangements still apply today.

According to official sources, a maximum of 70,000 ha of opium poppy is currently cultivated in 13 of Turkey's provinces by around 100,000 farmers, who have to apply for a new cultivation licence each year. The average field size is 0.7 ha. Applicants have to prove that they are over 18 years of age and that they are farmers. They are not allowed to have a criminal record. The maximum area of cultivation across the country (the current area cultivated is in fact only about half of this total), the size of the fields, and the number of farmers involved, are roughly equivalent to the key data for the coca industry in Peru or Colombia. As is the case with coca cultivation, opium production in Turkey is very labour intensive because both cultivation and harvesting of the crops mainly take place manually.

The Turkish Grain Board (TMO), a subsidiary of the agriculture ministry, employs a sophisticated control and verification system to monitor compliance with the limits and buys up the crop from the farmers, who first remove the poppy seeds for commercialisation for culinary purposes and for making food oil. By overseeing the entire supply and production process, the TMO functions as the monitoring system that is required by the international control regime. Opium poppy is processed at the factory in Bolvadin where morphine and codeine are extracted in a variety of chemical forms. 95% of the production is exported, with the largest part of the farmers' income being generated through the poppy seeds rather than through the commercialisation of the capsules, which are bought up by the government (Turkish Ministry of the Interior, 2010: 105; Kamminga, 2011: 24–28; Mansfield, 10–12).

THE EXAMPLE OF INDIA

Opium poppy cultivation is a tradition in India and it is traditionally restricted to three north-eastern states.³⁹ However, aside from the regional concentration of the cultivation, the parameters are basically similar to those in Turkey. Depending on the

³⁹ Madyah Pradesh, Rajasthan and Uttar Pradesh.

source and the year reported on, the number of farmers involved is estimated to be between 80–160,000; the average area cultivated is smaller than in Turkey and currently totals around 0.2 ha per licence, whereby in both countries opium production is only one component of the revenue systems of the households involved. Overall responsibility for the licencing and control of opium poppy and its harvesting as raw opium, which is traditional in India (in contrast to Turkey where it is harvested as poppy straw), is in the hands of the Central Bureau of Narcotics (CBN). This body also administers the licencing process decentrally at the district level. As is the case with the TMO in Turkey, the CBN is not only responsible for dealing with annual applications for licences from the farmers but also for the time consuming and labour intensive oversight and verification of cultivation in situ as well as monitoring of the supply chain. Another similarity to Turkey is that the CBN's decentral agencies also have a monopoly over the purchase of the crop and pay the farmers. In two factories, one in Nimach, the other Ghazipurzur, the opium is either sold in dry condition or the alkaloids are directly isolated from the raw opium for commercialisation and processing.

Whilst in Turkey poppy straw is the main product of cultivation, in India it is traditionally raw opium that is generated from opium poppy cultures. In contrast to the poppy straw variation, raw opium can easily be used to generate heroin or as smokable opium. Unlike in Turkey, it appears that in India therefore the diversion or theft of opium poppy production for illegal purposes is far more common, whereby above all the harvest period and the subsequent storage phase prior to processing are viewed as critical (Mansfield, 2001: 17-31). It is clear therefore that there is a dual-use problem with the harvest in India that is entirely comparable with the case of coca cultivation for traditional purposes in Bolivia and Peru. Raw opium as a basis for illegal drug production is, like the coca leaf, an attractive raw material for organised crime, which – due to the price multiplication that results from the illegality – can afford to pay higher prices (Mansfield, 2011: 32) than the state monopolies tasked with buying up the crop. Peru's ENACO faces very similar problems to its Indian counterpart. However, despite regular illegal diversions, the control system in India is regarded as being much more extensive and effective than the underdeveloped systems in Bolivia and Peru.

THE FUNDAMENTAL CONDITIONS IN TURKEY AND INDIA COMPARED WITH THE ANDEAN COUNTRIES

It is not widely known in Latin America that there are a number of fundamental parallels between the opium economy in Turkey and India and the problems resulting from coca cultivation in the Andean states. These parallels are above all to be found in the fundamental conditions, but the effects are very different.

Coca and opium are subject to the same global control regime. In Turkey and in India cultivation has the same traditional connotations as in Bolivia and Peru. In all of the countries mentioned, this means that there are well-established cultivation traditions in some regions as well as age-old consumption traditions, be it the culinary utilisation of poppy seeds in Turkey or coca-chewing in Bolivia. In Turkey, India, Peru and Bolivia cultivation takes place decentrally and not, as it is the case in Australia for instance, industrially. The cultivation of both opium poppy and coca is carried out by small-scale farmers and is viewed as very labour intensive: another important reason alongside those already mentioned above why the creation of legal alternatives in Andean countries or Afghanistan has always proved to be very difficult. Furthermore, cultivation does not take place throughout the whole country: whilst production in India is restricted to three federal states, which is similar to the coca cultivation in the two Bolivian regions of Chapare and Yungas, the dispersion of cultivation in both Turkey and Peru is somewhat greater. Nevertheless, it is not a national phenomenon in any of these countries. The total volume of cultivation is within the same parameters in these countries, whereby the de facto cultivation in Turkey and in India is basically the equivalent of that in Bolivia, while in Colombia and Peru (illegal) cultivation is approximately twice as high.

The two most important differences between drug cultivation in the Andean countries on the one hand and Turkey and India on the other highlight the weak point in all attempts to regulate coca cultivation in South America:

First of all, Turkey has one and India two factories for processing opium poppy and raw opium respectively. There is however no corresponding infrastructure in Bolivia or Peru, where such an option would be most likely to come into question. The task of these factories is to isolate alkaloids, which, given that there are only very few remaining pharmaceutical applications for cocaine, does not appear to be worthwhile. What would be worthwhile however would be to create the industrial infrastructure required for alkaloid extraction from the coca leaves, which is a fundamental prerequisite for marketing the substances contained in the leaf without infringing against anti-narcotic laws. A factory for the industrialisation of the coca leaf has recently come into operation in Bolivia, but without any components for alkaloid extraction and apparently with very poor quality products.⁴⁰

Secondly, Turkey and India both have well-established and well-functioning control systems to combat the illegal use of opium poppy production. It is true that

^{40 &}quot;Cocaleros del Chapare dicen que fracasó industrialización de la hoja milenaria", Radio ERBOL (Bolivia), 26.11.2012.

the legal market for coca in Bolivia is also concentrated (with two sales markets – one each in La Paz and Cochabamba), but there are no market monopolists comparable to the official agencies in Turkey and in India that both buy up the crop and oversee and control the supply and added value chain. Peru's ENACO is only in theory a market monopolist; in fact, together with the illegal buyers, it is only one of many market participants. What is more, it pays significantly less than its illegal rivals. The lack of an efficient state regulatory authority in the Andean countries means in turn that neither Bolivia nor Peru has a viable licencing system for coca cultivation. Such a system does exist in Peru. But expert estimates indicate that its register is inadequate and that the issuing of licences is not based on transparent criteria. What is more, anecdotal evidence suggests that no new licences are currently being issued at all. In Bolivia it is the cocalero unions who are in charge of licencing coca cultivation and therefore of legal possibilities for its commercialisation. There is however currently no central national register that is controlled by the government.

It is these two central differences – the lack of legal commercialisation options and processing capacities for coca, as well as the absence of an efficient central state regulatory authority – that account for the fact that in India and in Turkey flourishing agricultural sectors have emerged from established cultivation traditions, whilst similar cultivation traditions in the Andean region (with the exception of Colombia) have only led to one of the largest social, environmental and security problems facing the affected countries. This is all the more remarkable given that very similar fundamental conditions apply in the countries described. It is true that there is also a dual-use problem with production in India that is similar to the situation in South America; but neither India nor Turkey are affected by the problems that are associated with drug cultivation in Latin America, Afghanistan or Myanmar: violence and civil war, corruption and social marginalisation, only develop in connection with drug cultivation when it is illegal and legal options for utilisation are not created.

THREE APPROACHES TO DRUG CULTIVATION AS A FIXED VARIABLE

THE CURRENT DEBATE ON DRUG POLICIES IN LATIN AMERICA

In Latin America, drug cultivation and drug trafficking have in recent decades had a devastating impact in terms of loss of life. They have also undermined democracy and functioning statehood through corruption, as well as doing untold further damage to the societies affected. This situation has sparked a political debate in the region and beyond over the currently predominant paradigm in drug policies. In 2009 a number of ex-presidents and other leading personalities from public life in Latin

America who came together to form the "Latin American Commission on Drugs and Democracy" declared the war on drugs a failure and called for a new approach. This initiative triggered a public debate that has in the meantime extended far beyond Latin America. At the heart of the debate is the question of a paradigm change in Latin America's drug policies. The declaration by the Latin American Commission was followed in 2011 by the same message from a "Global Commission on Drug Policy" that included among others Kofi Annan and Javier Solana.

In the meantime, however, current Latin American heads of state have taken up the debate, with the result that the discussion on reforming drug policies has taken on a new dimension focussing on implementation. Supposed hardliners in their approach to criminality and drugs such as the incumbent presidents of Mexico (Felipe Calderón), Colombia (Juan Manuel Santos) and Guatemala (Otto Pérez Molina) have begun to publicly advocate a rethink, or at least an open debate, on reforming drug policies. At the UN General Assembly in 2012 all three presidents used their addresses to call for a reassessment of global policies on drugs. They issued a joint statement calling for a science-based re-examination of the global paradigm on drug policies and a discussion of all reform options. The aim of such a debate would, according to its advocates, be to develop a new paradigm that would help to confront organised crime and stem its cash flow. Whilst the ideologically charged idea of the legalisation or (legal) regulation of drugs was not explicitly mentioned, it was clearly implied in the appeal in the sentence calling for all reform options to be discussed.⁴³ Guatemala's President Pérez Molina is alone in that on several occasions he issued explicit appeals for the legalisation of at least a certain number of drugs.⁴⁴

What is remarkable here is that it is not countries that might be viewed as the "usual suspects", such as Bolivia, Ecuador or Venezuela, that are the ringleaders in this debate that had for so long been dominated by voices from the left. Instead, it is more conservative forces, for so long apologists of hard-line policies towards

⁴¹ Including Colombia's ex-President César Gaviria; Ernesto Zedillo, ex-President of Mexico; Fernando Cardoso, ex-President of Brazil as well as the writers Mario Vargas Llosa and Paulo Coelho. For the commission's report cf. http://www.drogasedemocracia.org/Arquivos/declaracao_ingles_site.pdf>, accessed on 23.10.2012.

⁴² Cf. the first report issued by the Global Commission: http://www.globalcommissionondrugs.org/wp-content/themes/gcdp_v1/pdf/Global_Commission_Report_English.pdf, accessed on 23.10.2012.

⁴³ Cf. "Declaración Conjunta" (Guatemala, Colombia, Mexico), 01.10.2012, http://www.sre.gob.mx/images/stories/infografias/declaracion021012.pdf, accessed on 13.10.2012.

⁴⁴ Cf. "Molina apuesta a legalizar drogas", El Universal (Mexico), 26.09.2012.

criminals and the drug problem, who have been forcing the debate forward. While, for instance, the Morales government in Bolivia appears to be satisfied to press ahead with reforms within the framework of the global drug prohibition regime stipulated by the three UN Conventions, and the government of Ollanta Humala in Peru has so far contented itself with an approach somewhere between critical and wait-and-see, the opposite political camp has been calling for a break with the current regulatory framework. Meanwhile, supposed or real regional powers like Brazil or Venezuela have so far hardly made their voices heard in the debate.

In any case, it still remains unlikely that this debate will in fact lead to changes in the global regulatory regime or to the decriminalisation of drugs. The status quo has many advocates, not least among leading global powers and potential changes to the three almost universally valid UN Drug Conventions would require a global consensus, which does not even look likely in Latin America. In many countries of the world drug-related crimes are viewed as capital offences and in some countries they are even punished with the death penalty. The kind of shift towards decriminalisation that many voices in Latin America are currently demanding is not therefore to be expected on a global level or in the relevant UN bodies.

Potential changes leading towards the legalisation or decriminalisation of single drugs are, for this reason, more likely to take place not at the global but at the national level – either by using some of the leeway left by UN Conventions or by breaking with the spirit of those agreements. So while the full legalisation of individual drugs is not to be expected, there is a possibility of the partial legalisation or decriminalisation of individual segments of the drug economy. The focus here could be on cultivation and consumption, not however on drug trafficking, which is viewed as the most harmful element in the illicit value chain. The tendency towards more permissive legislation and jurisdiction concerning private drug consumption and possession and a health-based approach to drug addiction based on models from a number of European states has been apparent in the region for some time. 46

More radical, but in effect similar, is a draft law put forward by the government of José Mujica in Uruguay providing for state regulation of the cultivation and sale of marihuana as well as for legalising consumption of the drug.⁴⁷ The future of the cur-

⁴⁵ Cf. "La coca sigue en alza", La República (Peru), 07.10.2012.

⁴⁶ Cf. for an overview of tendencies in the region: Transnational Institute, Drug Law Reform in Latin America on the Map, http://www.druglawreform.info/en/country-information/drug-law-reform-on-the-map, accessed on 23.10.2012.

⁴⁷ Cf. "How Latin America May Lead the World in Decriminalizing Drug Use", *Time* (UK), 09.10.2012.

rent debate in Latin America is likely to lie in similar special initiatives in individual states. Current or future regulatory options on how to approach drug cultivation in the region can be incorporate into this trend. To begin with, individual countries can follow the example set by Uruguay and press for the regulation of marihuana production and commercialisation. On the other side, Bolivia and possibly also Peru might try to implement reform of their regulatory systems for the cultivation and marketing of coca, not least because these have for some time been criticised.

Regardless of what potential changes the current political debate concerning the right kind of drug policies in the region might lead to, it is likely that as a phenomenon drug cultivation will remain a fixed variable. Given that coca cultivation is deeply rooted in the region, and in view of the experiences of the past three decades, it is unlikely that cultivation is going to disappear either with a repressive or a decriminalised paradigm. By employing a range of different fictional scenarios, possible approaches to the persistent phenomenon of drug cultivation in Latin America will be briefly outlined in the following:

MAINTAINING THE STATUS QUO ON DRUG CONTROL POLICIES

The global drug control regime based on the three UN Drug Conventions remains in place because of the lack of consensus on the international level concerning a relaxation of the conventions or a fresh start in the global regulatory regime. In breach of the UN's regulatory regime, individual states in Europe and Latin America (continue to) push for the controlled liberalisation of the cultivation, commercialisation and consumption of marihuana. Strategies for dealing with coca and opium remain focussed on repressive measures and alternative development initiatives as the production of illegal drugs remains high, fuelled by continued high rates of cocaine consumption in Europe and growing demand in the south of South America.

Possible political options for controlling drug cultivation:

- A new emphasis on the paradigm of harm reduction in development policies concerning drug cultivation. Recognition of the negative social, developmental, environmental and security impact of drug cultivation for affected societies.
- Reduction of the harm caused by drug cultivation can be achieved by stabilising cultivation and concentrating it in a small number of regions in accordance with models from Bolivia and India instead of forcing the constant relocation of production through strategically ill-conceived repressive measures. "Containment instead of displacement" would be a more sustainable strategy for harm reduction.

Efforts to reduce harm caused by drug cultivation can be supported by alternative development measures that do not focus on the rapid substitution of drug cultivation, but tackle its root causes, which include poverty, existing violent economies, geographic marginalisation and low levels of rural development.

MAINTAINING THE STATUS QUO ON GLOBAL DRUG CONTROL POLICIES WHILE BUILDING MORE REFORM OPTIONS INTO THE FRAMEWORK OF THE CURRENT REGIME

The global drug control regime based on the three UN Drug Conventions remains in place as there is no consensus on an international level for a relaxation of the conventions or a fresh start in the global regulatory regime. However, as a result of the current reform debate on drug policies in Latin America, a number of states follow the example set by Uruguay and move towards introducing their own measures to legalise marihuana while other states investigate the exploration and implementation of legal options for the utilisation of coca. In this way, Bolivia and Peru reform their regulatory systems for the control and licencing of coca cultivation.

Possible political options for controlling drug cultivation:

- A new emphasis on the paradigm of "alternative development without alternatives" in development policies concerning drug cultivation. At the heart of this paradigm would be the extension of legal utilisation options for (primarily) coca for non-medical purposes and therefore the utilisation of existing traditions of cultivation, existing know-how and the proven agricultural suitability of coca in the target regions.
- The affected states could be advised on how to achieve their goal of multiplying the legal utilisation options by creating an *effective system for certification, regulation* and verification for coca cultivation based on either the Turkish or Indian models.
- The affected states could be supported in achieving their goal of multiplying the legal utilisation options by setting up the necessary *industrial infrastructure for alkaloid extraction* from coca.
- The affected states could be supported in achieving their goal of multiplying the legal utilisation options through scientific research projects as well as through public private partnerships with potentially interested companies, for example in the soft drinks sector.

THE LEGALISATION OF SINGLE DRUGS BY (INDIVIDUAL) STATES

Because of the difficulty of achieving a consensus on drug policies at the international level, individual states in Latin America decide to introduce pilot initiatives for legalising and regulating individual drugs, including in some countries coca/cocaine. Given the anticipated international tensions that might be triggered by legalisation and regulation tendencies in some countries at the same time as the upholding of the status quo on drug control policies, it might prove difficult or even impossible to provide external support to these individual states.

Possible political options for controlling drug cultivation:

- Because of the removal of the illegality of cultivation, the support provided to affected states could in future be concentrated on the negative external effects of drug cultivation on the environment, involving *environmental damage limitation* under what in future might be far more favourable conditions. The priorities would be addressing the problems arising from the clearing of primary forests and slash and burn, combatting desertification in some cultivation regions, as well as tackling soil erosion and water pollution caused by excess use of fertilisers and other chemicals.
- Because of the removal of the illegality of cultivation, the affected states could, in the same way as in scenario 2, be advised on how best to achieve their goal of multiplying the legal utilisation options by creating an *effective system for certification*, *regulation and verification* for coca cultivation based on either the Turkish or Indian models. This would provide a basis for the viable regulation of coca production and its subsequent processing into commercial secondary products, which would in this scenario include cocaine and other coca derivatives.
- Decause of the removal of the illegality of cultivation, the affected states could, in the same way as in scenario 2, be supported in achieving their goal of multiplying the legal utilisation options by setting up the necessary *industrial infrastruc*ture for alkaloid extraction from coca.

BIBLIOGRAPHY

- Brombacher, Daniel and Günther Maihold. 2012. "Das Gewaltparadox im mexikanischen Drogenkampf". In ditto (ed.). "Gewalt, Organisierte Kriminalität und Staat in Lateinamerika". Barbara Budrich. Opladen (in press).
- BROMBACHER, DANIEL. 2012. "This is what you get. Mercados ilegales y violencia en América Latina". Friedrich Ebert Foundation, Program for Regional Security Cooperation, FESCOL. Bogotá. Policy Paper Series, 43.
- 2011. "Entgrenzte Drogenökonomie and begrenzte Bekämpfungsmöglichkeiten. Von öffentlicher zu regionaler Unsicherheit in Lateinamerika". En Hans-Jürgen Burchardt, Rainer Öhlschläger and Ingrid Wehr (ed.). Lateinamerika ein unsicherer Kontinent". Nomos. Baden-Baden.
- ———. 2010a. "Organisiertes Verbrechen and Gewalt in Lateinamerika". In Thomas Roithner (ed.). Vergessene Kriege zwischen Schatten und Licht oder das Duell im Morgengrauen um Ökonomie, Medien and Politik". Austrian Centre for Peace and Conflict Resolution. Vienna.
- ——. 2010b. "Crimen Organizado en América Latina. La Perspectiva Europea". In Hans Mathieu and Catalina Niño (ed.). *Seguridad Regional en América Latina y el Caribe. Anuario 2010.* Friedrich Ebert Foundation. Bogotá.
- Brombacher, Daniel and Günther Maihold. 2009. *Kokainhandel nach Europa. Optionen der Angebotskontrolle*". Germany Institute for International and Security Affairs. Berlin. SWP-Studie 2009/S17, May.
- BOUCHARD MARTIN. 2007. "On the Resilience of Illegal Drug Markets". In *Global Crime*, 8 (4).
- Buxton, Julia. 2010. "The Historical Foundations of the Narcotic Drug Control Regime". In Philipp Keefer and Norman Loayza (ed.). *Innocent Bystanders. Developing Countries and the War on Drugs*. The World Bank. Washington.
- Caulkins, Jonathan P. and Peter Reuter. 1998. "What Price Data Tell Us about Drug Markets". *Journal of Drug Issues*, 28 (3).
- EUROPEAN MONITORING CENTRE FOR DRUGS AND DRUG ADDICTION (EMCDDA). 2012. *Statistical Bulletin, Price and Purity*. Table PPP-3. Price of Cocaine Products at Retail Level 2010. EMCDDA. Lisbon.
- FARAH, DOUGLAS AND GLENN SIMPSON. 2010. Ecuador at Risk. Drugs, Thugs, Guerrillas and the Citizens Revolution. International Assessment and Strategy Cente Washington.

- Friesendorf, Cornelius. 2005. "Squeezing the Balloon? US Air Interdiction and the Restructuring of the South American Drug Industry in the 1990s". In *Crime, Law & Social Change*, 44 (1).
- HERNÁNDEZ, ANABEL. 2010. Los señores del Narco. Grijalbo. México.
- International Narcotics Control Board (INCB). 2012. *Estimated World Requirements of Narcotic Drugs for 2012*. http://www.incb.org/documents/Narcotic-Drugs/Status-of-Estimates/2012/Est-Sep12.pdf (accessed on 12.09.2012).
- Jensema, Ernestien and Gabrielle Archer. 2005. "Licensed opium cultivation and production in the main producing countries". In The Senlis Council (today: International Council on Security and Development) (ed.). Feasibility Study on Opium Licensing in Afghanistan for the Production of Morphine and other Essential Medicines. The Senlis Council. Kabul/London.
- Kamminga, Jorrit. 2011. Opium poppy licensing in Turkey: A model to solve Afghanistan's illegal opium economy? International Council on Security and Development. London.
- MAIHOLD, GÜNTHER. 2012. Kolumbien vor Friedensgesprächen. Prekäre Voraussetzungen für einen überfälligen Verhandlungsprozess. Germany Institute for International and Security Affairs. Berlin. SWP-Aktuell 2012/A53, September.
- Mansfield, David. 2001. An Analysis of licit opium poppy cultivation: India and Turkey. Foreign and Commonwealth Office of the Government of the United Kingdom. London.
- MEJÍA, DANIEL, MARIA JOSÉ URIBE AND ANA MARIA IBÁNEZ. 2011. "An Evaluation of the Macarena Integral Consolidation Plan (PCIM)". *Documentos CEDE*. 2011/13, Centro de Estudios sobre Desarrollo Económico. Bogotá.
- REUTER, PETER. 2010. "Can Production and Trafficking of Illict Drugs be Reduced or only Shifted?". In Philipp Keefer and Norman Loayza (ed.). *Innocent Bystanders. Developing Countries and the War on Drugs*. The World Bank. Washington.
- ——. 2001. "The Limits of Supply Side Control". *The Milken Institute Review*, 1.
- ——. 1983. Disorganized Crime. The Economics of the Visible Hand. MIT Press. London / Cambridge (MA).
- RYDELL, PETER C. AND SUSAN S. EVERINGHAM. 1994. Controlling Cocaine. Supply Versus Demand Programs. RAND Corporation. Washington.
- SAAB, BILAL Y. AND ALEXANDRA W. TAYLOR. 2009. Criminality and Armed Groups: A Comparative Study of FARC and Paramilitary Groups in Colombia. The Brookings Institution. Washington.

- THOUMI, FRANCISCO. 2010. "Competitive Advantages in the Production and Trafficking of Coca-Cocaine and Opium-Heroin in Afghanistan and the Andean Countries". In Philipp Keefer and Norman Loayza (ed.). *Innocent Bystanders. Developing Countries and the War on Drugs*. The World Bank. Washington.
- TURKISH MINISTRY OF INTERIOR / TURKISH NATIONAL POLICE / ANTI-SMUGGLING AND ORGANIZED CRIME DEPARTMENT. 2010. Turkish Drug Report 2009. Istanbul.
- UNITED NATIONS OFFICE ON DRUGS AND CRIME (UNODC). 2012a. *Peru, Monitoreo de Cultivos de Coca 2011*. UNODC. Lima/Vienna.
- ———. 2012b. Colombia, Censo de Cultivos de Coca 2011. UNODC. Bogotá/Vienna.
- ——. 2012c. World Drug Report 2012. UNODC. Vienna.
- ———. 2011. *The Transatlantic Cocaine Market*. Research Paper. UNODC. Vienna.
- US GOVERNMENT ACCOUNTABILITY OFFICE (GAO). 2008. GAO Report to Joseph Biden, Chairman of the Committee on Foreign Relations, US Senate. Plan Colombia. Drug Reduction Goals Were Not Fully Met, But Security Has Improved; US Agencies Need More Detailed Plans for Reducing Assistance. <www.gao.gov/new.items/d0971. pdf> (accessed on 03.10.2012).
- Washington Office on Latin America (WOLA). *UN and US Estimates for Cocaine Production Contradict Each Other*. 31.07.2012, "> (accessed on 04.10.2012).

Policy Options for Drug Control with Reference to Trade and Consumption in Germany and Europe

Heino Stöver / Maximilian Plenert

INTRODUCTION

Forty years of the Narcotics Act in Germany, 50 years of the Narcotics Control Convention and over 100 years of attempts at global drug control form the framework for the investigation of the present report on alternative policy options for reform of drug control legislation.

Questions are increasingly being raised concerning the goals, intended and unintended health, social and legal policy consequences and the economic effects, ethical questions and, finally, the purpose of prohibition. In the face of the escalating drug war in Mexico (Heufelder, 2011; Siebert, 2011), in other Latin American states and large parts of South America (Weber, 2011; Lessmann, 2012; Villar and Cottle, 2012) and Asia (Lingens, 2011) the drug-induced geopolitical shifts, the death penalty for drug possession/dealing still imposed throughout the world (Gallahue, 2011) and the rising level of armed response in the "war against drugs" the usefulness of violent confrontation is increasingly being called into question. Many initiatives, alliances, parties and prominent figures (Nobel Prize winners and current or former state presidents) throughout the world are demanding drug control models that do not follow the criminal law approach and point to the different kinds of harm done by the current largely repressive drug policy (Declaration Conjunta sobre Crimen Organizado y Narcotráfico, 2011; Global Commission on Drug Policy, 2011), on one hand, in relation to individual drug users and the erosion of the credibility of all preventive efforts with regard to the ambiguous partial prohibition. On the other hand, societal values are coming under threat: restrictions are being imposed on freedom that are out of all reasonable proportion to the intended aims of the drug ban. We should therefore begin to handle the drug problem from a health policy rather than a criminal policy standpoint. The question is thus: can we still afford this drug policy – in every sense – and if we cannot: what are the chances of a drug-policy change at national and international level; in what direction should it be taken; and how could it be introduced and implemented?

The debate on reforming national and international drug control is thus is full swing. The statement made by Guatemalan President Otto Pérez Molina at the beginning of February 2012 represents a milestone in the reform debate. He declared the war against the transnational drug cartels a failure and thus was the first sitting head of state to open up a new debate on the possible legalisation of psychoactive substances produced, processed and transported in South and Central America. Molina pointedly did not confine his attack to the (private) consumption of illegal drugs, but opened the debate in relation to its production and trade or transport.

The "Drugs and Democracy" initiative, founded by three Latin American presidents, and the expanded Commission on Drugs and Democracy had already called for modifications in international drug policy, including exemption from punishment or decriminalisation of the personal consumption of illegal drugs and the categorisation of substance addictions as a public health problem. Furthermore, the commissions called for the revision of the international drug regime and repressive policies against production and trade of illegal drugs through application of the criterion of harm reduction, not only in relation to production, trade and consumption, but also in relation to the (negative) effects of the current policies for reducing production and consumption.

None of the abovementioned initiatives made concrete policy proposals, however. The United States immediately declared that it was opposed to any form of legalisation without entirely ruling out a debate. Various Central and South American governments at first made positive noises about President Pérez Molina's initiative, but Nicaragua, El Salvador and Honduras stayed away from a summit meeting of Central American presidents on the issue. This reflects the economic and financial consequences for these countries if states or regions try to go it alone in drug policy. The effectiveness of unilateral legislation in relation to legalisation or state regulation should receive particular attention in dealing with this point. Bilateral relations with the United States are of key significance in this respect. An additional problem is the international drug regime.

OUTLINE

To begin with, a number of concepts are explained and the frame of analysis presented. With regard to alternative courses of action there are few differences between substances. In the case of more complex issues of regulation relevance and data availability limit our choice. The debate will thus focus on the drug cannabis and its consumers.

We shall dispense with a presentation of individual substances, their effects and the associated risks since these are largely known (Schmidbauer, 1997; Julien, 1997; Nutt, 2012). More decisive is the question concerning the origins of the risks or generally drug-specific ranges of problems, as well as how society deals with them (see, for example, on cannabis: Kleiber/Soellner, 1998, 2004; Kleiber/Kovar, 1998; Grotenhermen, 2006; Krumdiek, 2006; Wurth, 2008; Kolte, 2006²).

In the sections on the status quo the "drug problem" is analysed not only as a direct consequence of the individual problem of drug consumption, but also as a consequence of the dominant repressive and prohibition-oriented drug policy.

In the absence of a generally valid schema for looking at the drug phenomenon the selection of issues to be tackled, alongside some figures and the findings of David Nutt on the measurement of the dangers of drugs, concentrates on points relevant to the policy options presented below regarding drug control with reference to trade and consumption in Germany.

An analysis of the status quo also entails consideration of current drug policy and public opinion. This is followed by a look at global drug policy, its intended and unintended side effects and, by way of examples, some selected geopolitical settings.

In the following section, which forms the empirical foundation of the subsequent consideration of different scenarios, experiences from alternative policy approaches that have been put into practice in Europe are presented. We show, using the examples of the Netherlands, Portugal, the Czech Republic, Spain and Belgium that the effects of other cannabis or drug policies are known and research is available that enables us to examine the details. The legalisation of cannabis in the United States is not dealt with here because no research data are available concerning the effects.³ Practical experiences and the achievements of drug policy pioneers from the

¹ http://www.drugscouts.de/ http://de.drogen.wikia.com http://www.dhs.de/informationsmaterial/broschueren-und-faltblaetter.html

² http://www.schildower-kreis.de/themen/Pressemitteilung_Grotenhermen_Cannabis.php

³ http://hanfverband.de/index.php/nachrichten/blog/1883-cannabis-in-colorado-und-washington-nun-offiziell-legal

http://hanfverband.de/index.php/nachrichten/aktuelles/1838-abstimmungen-in-den-usa-zwei-us-staaten-legalisieren-cannabis

http://hanfverband.de/index.php/nachrichten/aktuelles/1818-us-abstimmungen-washington http://hanfverband.de/index.php/nachrichten/aktuelles/1807-us-abstimmungen-colorado

Swiss Eidgenössische Kommission für Drogenfragen (EKDF) are addressed in the section on the normative basis of this work. The legalisation of coca in Bolivia and the resulting conflict with international law are mentioned in section 5.

Extensive experience is available on the medically controlled handling of opiates – for example, heroin – from Switzerland, the Netherlands and also Germany⁴ but they are not examined in detail here. Drug control with reference to dealing and consumption means something entirely different here than in relation to cannabis, however. The conditions of consumption and the non-commercial but medically controlled distribution of opiates or substitution substances are the focus here.

Before, finally, the specific courses of action are presented we look at the legal framework for control models in Germany. This includes the limits of national policy due to international treaties and their significance for the purchasing of drugs.

A normative foundation is presented for the evaluation of the scenarios. We attempt, based on a simple framework of theses, to develop a theoretical model on which a consensus can be achieved for dealing with drugs.

The following courses of action are discussed individually:

- three scenarios for all drugs;
- four scenarios based only on cannabis;
- a scenario that warns against defective regulation, as in the case of alcohol and tobacco;
- reflections on the need for further action.

On the basis of empirical findings from other countries the effects of the individual scenarios are relatively well described. There is systematic evaluation of the effects on the individual areas of the status quo. This core of the work concentrates on issues of the market and of criminal law. It is supplemented by a section on prevention, support and therapy.

Finally, recommendations are made for specific, realistic first steps and pointers are given for resolving the logjam in drug policy.⁵

Spelling: Please note that both sexes are implied unless specified otherwise.

⁴ http://www.akzept.org/pdf/aktuel_pdf/DKR07web.pdf http://www.spritzenautomaten.de/service/grundlagen/ http://www.heroinstudie.de/ergebnisse.html

⁵ See generally for the discussion of drug reform legislation: http://www.alternative-drogenpolitik. de/2013/03/08/abrustung-imdrogenkrieg/

FUNDAMENTALS

DEFINITIONS

The debate on drugs in Germany is characterised by a lack of conceptual clarity. The concept of "legalisation" is often associated by opponents of this option with a "total declassification" or "free, unregulated access" and evaluated as such, in other words, a policy of lack of regulation in contrast to the current control efforts. In what follows we avoid the term "legalisation" and instead talk of regulation in order to make clear that the goal is a legal, but very much controlled market provided with rules.

Equally opaque is the concept of "decriminalisation". This includes, on one hand, every form of attenuation of punishment, for example, through §31a BtMG (German Narcotics Act) – even if it did not exist punishments could also be reduced through the general regulations of criminal law.⁶ Others use the term "decriminalisation" to refer only to when offences such as the possession of a certain amount is de facto legal, whether through a legal removal of punishability, an end to the jurisdiction of criminal courts, as in Portugal, or practical non-prosecution, as in the Netherlands. Depending on how one looks at it, the possession of a low quantity in Germany is already decriminalised (or not). In what follows, the concept of "decriminalisation" is used only in the second, narrower sense. §31a BtMG (German Narcotics Act) or a downgrading to a misdemeanour, in contrast, are designated as "depenalisation" (cf. Vogt/Scheerer, 1989: 38ff).

In the realm of so-called "drug-related crime" the police distinguish between "consumption-related offences" or "general offences" and "qualified BtM offences" (dealing offences). According to the German Federal Office of Criminal Investigation (Bundeskriminalamt or BKA):

The term "consumption-related offence" describes general violations of the Narcotics Act. They concern offences under §29 BtMG, including the possession, purchase and sale of narcotics and similar criminal offences.

The term "dealing offences" covers offences concerning illegal dealing and smuggling of narcotics under \$29 MtMG and offences concerning the illegal importation of narcotics under \$30 para 1 no. 4 MtMG.

The term "drug" here designates psychotropic substances broadly speaking in non-medical applications, in particular substances made illegal by the BtMG (German

⁶ http://www.gesetze-im-internet.de/stpo/__153.html

Narcotics Act). The realm of non-substance-related disorders and addictions, such as gambling, the internet or eating disorders, is not considered here.

The strongly substance-related and thus selective perspective on drug policy is a useful simplification, although it ignores the widespread mixed consumption. In particular with regard to the drugs cocaine and heroin, together with cannabis, alcohol and benzodiazepene users by no means confine themselves to these substances. Also, reflections tend to consider individual substances or user (sub)groups (such as psychiatrically relevant cases with regard to cannabis), thereby hindering a view of the big picture, although drug policy must be developed for society as a whole. According to Meyer-Thompson (Bundestag, 2012b):

Observations from child and youth psychiatry and the results from centres dealing with high-risk groups cannot be transferred to adult users and to consumption that in relation to all other substances would be considered moderate, regulated and temperate.

GENERAL FRAMEWORK

The BtMG (German Narcotics Act)⁷ covers more than 300 psychoactive substances. This includes substances whose use is as old as humanity, modern substances such as amphetamines and so-called "new psychoactive substances", medicines and exotic substances that in Europe – or at least in Germany – have never played much of a role. Due to the advent of these new psychoactive substances ("spice", "incense blends", "legal highs" and "research chemicals") and the state's reaction in the form of prohibitions the list will grow enormously in the coming years (cf. Werse/Morgenstern, 2012).

Between 2005 and 2011 more than 164 new psychoactive substances were notified officially through the European early warning system. The year 2011 was the third year in a row in which a record number of newly discovered substances were notified (49), following the identification of 41 new substances in 2010 and 24 in 2009. (EMCDDA, 2012)

For a discussion of alternative control models psychoactive substances covered by the BtMG (German Narcotics Act) can be classified in the following groups in accordance with their distribution:

 Heroin, cocaine, amphetamine, ecstasy and cannabis are – by far – the five most widely distributed drugs;

⁷ http://www.gesetze-im-internet.de/btmg_1981/

- LSD, magic mushrooms, crack, methamphetamine ("crystal meth"), GHB ("liquid ecstasy"), in other words, substances with a certain prominence, even though they tend to be overrepresented in the political debate in relation to their overall significance;⁸
- So-called "new psychoactive substances", such as "spice" and mephedrone;
- Prescription drugs or drugs only available in pharmacies, such as benzodiazepine, methadone, methyl phenidat ("ritalin") or morphine;
- Other substances not widely distributed and with few users in Germany (dimethyltryptamin, desomorphine);
- Substances consumed almost exclusively by particular groups, such as khat or nitrous oxide ("laughing gas");
- ♦ Legal drugs besides alcohol and tobacco, also inhalants (butane and so on).

The evaluation of their importance derives from the consumption of adults and young people (ESA 2009: 4; BZgA; Werse/Bernard/Schell 2012), data on seizures (REITOX, 2012: 192) and data from addiction treatment.⁹

This list varies worldwide only to a minor extent because the basis for the prohibition of many substances are the three key international agreements:

- ♦ The Single Convention on Narcotic Drugs of 1961;¹⁰
- The Convention on Psychotropic Substances of 1971;¹¹
- The United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988.¹²

In order to look at policy options on depenalisation, decriminalisation and regulation – such as making a substance subject to prescription, the pharmacy model, the licensing system, licensed places for sale and consumption, sale without particular authorisation restrictions¹³ – it makes sense to limit oneself to a few substances that

⁸ http://www.regensburg-digital.de/crystal-meth-forscher-widersprechen-mdb-schieder/12092012/

⁹ http://www.suchthilfestatistik.de/cms/images/dshs%20jahresbericht%202011.pdf

¹⁰ http://www.admin.ch/ch/d/sr/c0_812_121_0.html

¹¹ http://www.admin.ch/ch/d/sr/c0_812_121_02.html

¹² http://www.admin.ch/ch/d/sr/c0_812_121_03.html

¹³ http://www.akzept.org/pdf/drogenpolitik/regulierungs_modelle0612.pdf

are used by many people. The availability of empirical data from different countries is also limited to a few substances. These control models can be used as models and patterns for the control of other substances, however.

In two countries that we shall examine in due course, Portugal and the Czech Republic, decriminalisation concerns a significant number of substances.¹⁴

The drug-policy debate in Germany concerns primarily cannabis and heroin users. In the United States "public enemy number one" is crack¹⁵ or now also crystal meth. ¹⁶ The availability of data is particularly good for these two substances. The most important drug-policy efforts in recent years, going beyond mere decriminalisation, concern cannabis (the Netherlands, cannabis social clubs, cannabis as medicine, legalisation in the United States). There is also extensive experience of the legalisation of heroin for medicinal use in Switzerland, the Netherlands, but also in Germany. ¹⁷

These two substances represent both a substance in the top bracket and one from the middle of the scale of dangerous drugs according to Nutt, with regard to both an overall view and individual and social perspectives (Nutt 2007, 2010, 2012).

A debate on the coca leaf¹⁸ that is constitutionally protected in Bolivia or khat, which is relevant in Germany (REITOX, 2012: 192), as representatives of the lower end of the scale of dangerous drugs, is lacking at this point, as is a debate on alternative options for dealing with the so-called "new psychoactive substances" (and also e-cigarettes and "brain doping" (Lieb, 2010; Auf dem Hövel, 2008)), of the kind being conducted in the EU:

The survey shows that a large part of the member states regard the current lack of alternatives to criminal law control as unsatisfactory. They point out that a broader range of options can be considered, in particular temporary control and risk management measures. (European Commission, 2005)In New Zealand this is already a reality.¹⁹

¹⁴ http://www.alternative-drogenpolitik.de/2013/04/05/faq-drogenpolitik-welche-drogen-sind-in-portugal-und-der-tschechischenrepublik-entkriminalisiert/

¹⁵ http://www.spiegel.de/spiegel/print/d-13521017.html

¹⁶ http://www.spiegel.de/spiegel/print/d-66133682.html

¹⁷ http://www.heroinstudie.de

¹⁸ http://www.presidencia.gob.bo/download/constitucion.pdf

¹⁹ http://www.bbc.co.uk/news/uk-21615971 http://idpc.net/alerts/2013/03/innovative-regulation-of-legal-highs-in-new-zealand http://www.scoop.co.nz/stories/PA1304/S00130/dunne-beginning-of-end-for-an-unregulated-legal-highs.htm

Nevertheless, many considerations are transferable to other substances, in particular those with a similar level of dangerousness or common effects.

Causal research instead of a debate on the dangers or a presentation of substances

"A large proportion of the negative effects of the use of prohibited drugs, which are wrongly investigated as the primary effects of drugs in reality, prove to be secondary effects" (Baratta, 1990).

The drugs cannabis and heroin are well researched and their effects and dangers reasonably well known. This is despite the fact that here and there drug policy is plagued by a fierce "squabble" (for example, "Cannabis als Einstiegsdroge" Kreuzer, 1991; BverfG, 1994; Kleiber/Soellner, 1998; Körner, 2001; DHS, 2009; Drugcom 2011) with regard to individual risks that flies in the face of the scientific consensus: "The entry-drug thesis is enthusiastically recited in the political sphere in order to make the dangers of cannabis products more salient, despite the fact that it has been subject to criticism among experts for more than 30 years and is now unanimously rejected as unconfirmed by them" (Gaßmann, 2004). As Dr Raphael Gaßmann, director of the German Centre for Addiction Issues (Deutschen Hauptstelle für Suchtfragen – DHS), declared at the hearing on "Legalisation of cannabis through the introduction of cannabis-clubs" (Bundestag, 2012a):

From the standpoint of the German Centre for Addiction Issues the decisive question is not whether cannabis use can lead to dependency or whether it is harmful. The decisive question is that of cannabis prohibition. Does the cannabis ban have positive value? Does the ban mean that fewer people consume cannabis and that those who do use it consume less because of the ban? That is the decisive question and not the question of whether cannabis can lead to dependency.

Relevant for the question at hand are the causes of particular risks and pragmatic solutions. In this way tautological arguments are also avoided. "Thus the uncontrollability of the THC content and the admixture of extenders in relation to cannabis are a consequence of the prohibition; as a result, they can hardly be adduced as reasons or even justifications for the prohibition" (Krumdiek in Bundestag, 2012a).

HEALTH PROBLEMS OF USERS

In Germany there is a widespread belief that the repeated consumption of heroin inevitably leads to addiction and serious psychological and physiological harm. A wealth

of research shows that a not inconsiderable number of users of heroin and cocaine²⁰ are in a position to consume their drugs without suffering many adverse effects (Harding, 1981).

Users of heroin and cannabis are not as different as is generally believed. The majority of users of all drugs maintain a controlled use of their substance. This is a perceptual gap in drug policy and drug treatment that has its origin in, among other things, the pathologisation and deliberately selective view of drug users and the mystification of drugs. Science affirms the question concerning the existence of a non-addictive consumption that is barely or not harmful at all (Schippers/Cramer, 2002).

Controlled consumption of hard drugs can accordingly be defined as consumption that does not interfere with the realisation of personal goals and is directed by rules of self-control that may or may not be explicit. (Schippers/Cramer, 2002)

For people with a problematic consumption pattern effective treatment is available in principle and it is also known what form effective prevention²¹ must take (BZgA/Difu 2002: 20ff). Furthermore, drug users suffer from the consumption conditions arising from total prohibition, especially the consequences of criminal prosecution and the effects of the black market. Prevention and treatment are available and effective only to a limited extent and there is absolutely no protection of consumers or young people (Stöver/Gerlach, 2012). This applies to the users of heroin, cannabis and in fact all illegal or non-regulated substances. The intensity and distribution of these problems arising from drug policy differ from person to person and from drug to drug.

This is particularly evident in relation to certain problems. If one compares the situation of a heroin addict 20 years ago with that of an addict today the substance has not changed, but the general framework has changed enormously. The effects of HIV prevention, substitution treatment and harm reduction, in particular on the health of those concerned, but also other social and legal consequences of consumption are evident²² (cf. RKI, 2012). It was the change in policy and addiction treatment

²⁰ http://www.alternative-drogenpolitik.de/2013/04/05/zahlen-zum-kontrollierten-konsum-von-heroin-und-kokain/

²¹ http://www.daserste.de/information/wissen-kultur/w-wie-wissen/sendung/suchtbehandlung-100.html

^{22 &}quot;Intravenous drug use, with regional exceptions, is declining in significance for the HIV epidemic in Germany. In particular, the number of young intravenous drug users under 30 years of age who have been newly diagnosed with HIV has fallen in recent years. This may be considered, especially with regard to the more threatening development of new HIV diagnoses among intravenous drug

that led to enormous changes in behaviour without substantial problems. The political will alone was decisive here; the mere knowledge that, in pharmaceutical terms, pure heroin, injected with sterile disposable syringes, represents no risk of abscesses, HIV and hepatitis infections and organ damage and – subject to medical control – causes no overdoses.

THE DRUG-POLICY STATUS QUO IN GERMANY

Drug consumption and addiction give rise to considerable social, health and economic costs for society. Besides the direct spending by the state damage and financial losses arise that have to be borne by the social security and health care systems. In addition to these direct monetary effects society suffers from problems with drug-related crime. For the consumers of drugs and their environment illegality, the black market and criminal prosecution, as well as stigmatisation, also give rise to considerable disadvantages. A good drug policy should try to reduce these costs without creating new ones.

The state of current drug policy in Germany is ambivalent. While Germany is a global leader²³ in the areas of drug treatment, therapy and harm reduction through the dispensing of diamorphine, substitution programmes, consumption areas, needle exchange and a well-developed treatment system, the policy of criminal-law prohibition can be characterised as a notorious failure. Its effects are limited to a continuous increase in prosecutions and convictions without leading to a measurable reduction in demand or supply over the years (cf. Holzer, 2012; Flöter, Pfeiffer-Gerschel, 2012; Reuband, 2004; Commission for Social Security and Health). Experiences from other countries show that the number of consumers would not be higher in the absence of repression, as is often feared (cf. auf dem Hövel, 2012; Polak, 2012; Kistmacher, 2012; Radimecky, 2012). Policy, however, has often reacted to the lack of success with criminal policy with an addiction to criminal policy – "more and more of the same" – which, however, has led to victim production instead of victim protection and to more "harm production" instead of "harm reduction".

The central pillar of drug policy is the selective ban on certain substances and thus repression, the black market and the dogma of abstinence play the biggest roles. Alternatives to this repressive, prohibitive control policy go beyond policy options

users in Eastern Europe as an impressive success on the part of Germany's HIV prevention strategies with regard to drugs" (RKI, 2012: 259).

²³ http://www.eurohrn.eu/index.php?option=com_content&view=article&id=8&Itemid=11

with drug control with reference to dealing and using. There are many reciprocal and counter effects with the other pillars of drug policy prevention, therapy and harm reduction and these are discussed in a later section, along with alternatives.

The present report can only highlight part of the whole phenomenon. We try to differentiate between consequences that are caused to a considerable degree by the current drug policy approach and those that occur individually and are not always susceptible to influence. The focus of our concern is the drugs cannabis and heroin – first in Germany and then, in the following section, from a global perspective.

Besides the examination of individual phenomena an appropriate criterion for the harmful potential of drugs for the individual and society can give a sense of direction. Such a criterion, together with a first measurement – via expert interviews – is provided by David Nutt (Nutt, 2007, 2010, 2012), among others, with his evaluation criteria and definitions. Nutt divides his 16 parameters for the evaluation of individual substances into two groups:

- 1. Possible harms for users themselves and
- 2. Possible harms for society as a whole.

The nine categories of user risks include drug-specific and drug-related mortality, drug-specific damage, drug-related damage, dependence, drug-specific impairment of mental functioning, drug-related impairment of mental functioning and the loss of tangibles and relationships. The seven categories of harms to others include injury, crime, social and ecological damage to the environment, family adversities, international damage, economic costs and decline in social cohesion.

Nutt (2012) talks about both the limitations of his method and survey and the express wish to adapt individual values to new knowledge and to have them evaluated by other groups, for example, drug policymakers. In particular, he proposes that the two harm groups first be considered separately.

The relationship between specific harms, on one hand, and drug-related harms, on the other hand, can also indicate the proportion of harms that are caused by drug policy in contrast to the proportion caused by drugs themselves. Initial calculations suggest that a different drug policy, in particular in relation to cannabis and heroin, could avoid most harms since in this instance prohibition-induced harms clearly predominate.²⁴

²⁴ http://www.altern+ative-drogenpolitik.de/2012/10/25/minderung-von-drogenschaden-durcheine-legalisierung/

Alcohol Heroin Crack Metamphetamin Cocaine Tabacco Amphetamine Cannabis GHB Benzodiazepine Ketamine Methadone Mefedrona Butan Khat Ecstasy Anabolic Steroids LSD Buprenorphine 6 Pilze 0 10 20 30 40 50 60 70 80

Figure 1. Harm potential of drugs in terms of total points scored

Source: Nutt et al., 2010.

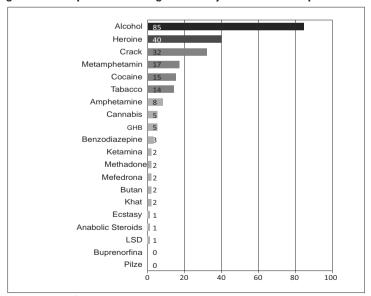


Figure 2. Harm potential of drugs for society in terms of total points scored

Source: Nutt et al., 2010.

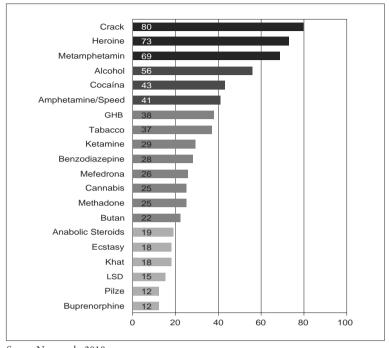


Figure 3. Harm potential of drugs for the individual in terms of total points scored

Source: Nutt et al., 2010.

DRUG USE IN THE GENERAL POPULATION

In Germany there are around 1.5 million regular and 3 million at least occasional users of illegal drugs, almost all of whom also use cannabis. Of these, 400,000 are regular and 700,000 occasional users of drugs other than cannabis. Over 90 per cent of the users of illegal drugs are 18 years of age or above.

			-
	AGE (YEARS)	PREVALENCE	TOTAL NUMBER
Lifetime	18-64	26,7%	13'812.000
	12-17	7,2%	344.000
Past 12 months	18-64	5,1%	2'638.000
	12-17	4,9%	234.000
Past 30 days	18-64	2,6%	1'345.000
	12–17	2.0%	95.000

Table 1. Prevalence of the consumption of illegal drugs in Germany

Source: Drogenaffinitätsstudie (2011); BZgA (2012a); Epidemiologische Suchtsurveys (2009); Pabst et al. (2010); cited from DBDD (2012): REITOX Bericht, 2012 (absolute figures rounded up, see also for the population figures used as a basis).

"DRUG-RELATED CRIME" AS A "THREAT TO SOCIETY"?

The Report on Drugs and Addiction by the German Drug Commissioner deals explicitly with the area of criminal prosecution. The data presented here were published in the police crime statistics. The failure to mention the pillar of repression is an example of the sectoral fixation of current drug policy. A public discussion on the possibility or impossibility of a "peaceful co-existence between control and support" (the three other pillars) almost never takes place (Sell, 2012; Krumdiek, 2012). The 2012 Report on Drugs and Addiction²⁵ is limited to general statements, such as:

Illegal drugs

The drug trade and drug-related crime represent a threat to the whole of society... (p. 88).

The often repeated assertion that drug policy and support focuses largely on prevention cannot be sustained on the basis of the figures presented here and in Section 2.4^{26}

Table 2. BKA* (2012): Police crime statistics and federal situation survey
(bundeslagebild) narcotics 2002 and 2011 ²⁷

	2011	2010	INCREASE		PROPORTION OF
	2011		NUMBER	IN %	ALL CRIMES
Total crimes	5,990,679	5,933,278	57,401	1	100%
Drug-related offences	236,478	231,007	5,471	+2.4	3.95%
Of which cannabis	131,951	128,868	3,083	+2.4	2.20%
General violations under §29 BtMG	170,297	165,880	4,417	+2.7	2.84%
Of which cannabis	101,186	99,562	1,624	+1.6	1.69%

Source: BKA, 2012.

²⁵ Drogen-undSuchtbericht2012"delaencargadadelasdrogasdelgobiernoalemánhttp://drogenbeauftragte. de/fileadmin/dateien-dba/Presse/Downloads/12-05-22_DrogensuchtBericht_2012.pdf

²⁶ http://hanfverband.de/index.php/nachrichten/blog/1714-drogen-und-suchtbericht-2012-er-schienen-von-dyckmans-nichts-neues

http://hanfverband.de/index.php/nachrichten/newsletter/1641-newsletter-des-deutschen-hanfverbandes-maerz-2012#medien

http://hanfverband.de/index.php/nachrichten/aktuelles/1629-dyckmans-stellt-nationale-strategie-zur-drogen-und-suchtpolitik-vor

²⁷ http://hanfverband.de/index.php/nachrichten/blog/1711-repressionsbericht-2011-erschienen

"General violations under §29 BtMG" includes consumption-related offences, in other words, everything apart from smuggling, dealing, organised crime or "more than a small amount". With a share of 72 per cent with regard to all drugs and 76.7 per cent with regard to cannabis they make up the bulk of police work in this area. Behind the increase of 2.7 per cent or 1.6 per cent in comparison to the previous year therefore lies an extension of repression against simple users.

Almost 3 per cent of all crime in Germany could be done away with by consistently decriminalising drug users. The proportion of so-called "drug-related offences" in total crime almost doubled between 1993 and 2002 and has remained at a high level.

The proportion of drug-related offences in total crime has grown significantly in recent years. According to the Federal Criminal Police Office (BKA) in 1993 there were 6,750,613 offences, 122,240 (1.8 per cent) of them drug-related. In 2002, drug-related offences totalled 250,969 out of 6,507,394 offences, a share of 3.9 per cent. This proportion has remained almost unchanged: in 2011 it was 4.0 per cent.

The Police Crime Statistics for the year under review 2011 registers 196,337 suspects in the context of drug-related offences. A total of 144,140 suspects were charged because of a general violation under \$29 BtMG, the largest proportion of them violations involving cannabis, with 91,590 people.

With regard to regular users of cannabis, 6 per cent become crime suspects at least once a year as a result of a consumption-related offence. With regard to the number of at least occasional users the figure is 3 per cent. Among users of drugs other than cannabis the figures are 13 per cent and 7.5 per cent, respectively.

In the drug-policy debate it is always asserted that the focus of police work is drug dealers, not drug users. A glance at the BKA figures shows that this is not the case, however:

- ♦ In 1993 the BKA counted 122,240 cases of drug-related crime, 79,631 of them consumption-related offences, a share of 65.1 per cent;
- In 2002 consumption-related offences totalled 170,629 out of 250,969 offences, a share of 68 per cent; and
- In 2011 there were 170,297 consumption-related offences out of 236,478 offences, a share of 72 per cent.

Thus the proportion of consumption-related offences in total drug-related crime rose from 65.1 per cent in 1993 to 72 per cent in 2011. No shift in the focus of police work from users to dealers can be discerned here – quite the opposite (BKA 2010, 2011). This is confirmed by Stolzenberg (2012) from the police standpoint:

the fourth pillar of drug policy contributes to the overall aim (reducing harmful consumption and dependency on addictive substances) only if there is a close intermeshing with the other pillars: prevention, exchange of information (for example, on the active ingredients or admixtures with regard to narcotics), understanding and respect for the work of others, placement of first-time drug users in the support system.

Those suspected of crimes linked to the need to finance the drug habit make up a disproportionate share of 5.7 per cent (of all suspects), who are self-confessed or suspected users of hard drugs. In terms of cleared-up cases they are to be found in particular in relation to the following offences. The losses arising as a result of this can also be evaluated through the information provided by the crime statistics:

OFFENCE	PROPORTION OF "USERS OF HARD DRUGS"	LOSSES
Theft under aggravating circumstances	18.6%	314 million €
Robbery	14.4%	7,2 million €
Theft without aggravating circumstances	9%	59 million €
Total		380,2 million €

Table 3. Data from the Police Crime Statistics 2011

It can be assumed that in particular with regard to total cleared-up theft (11.3 per cent) or robbery (14.4 per cent) drug dependency on the part of the perpetrator is not recognised. The proportion of crimes committed by ousers of hard drugs out of all cleared-up crimes thus may well be higher than the statistics indicate. (PKS 2011: 85)

Thus the abovementioned figure of 380 million euros represents only the tip of the iceberg: losses due to crime as a whole are likely to be significantly higher. With regard to cleared-up cases these three groups of offences represent 2.5 per cent of the total.

Thus at least 2.5 per cent of all crimes – but rather double that, especially with regard to theft, robbery and burglary – come under the category of crimes linked to the need to finance the drug habit. These offences could be greatly reduced by means of good drug support, in particular with regard to substitution treatment (especially including the previously high-threshold access to heroin).^{28,}

²⁸ http://www.ukb.uni-bonn.de/42256BC8002AF3E7/vwWebPagesByID/2A97416886882B45C1 25719200326041

http://www.gfi-online.de/artikel/14394

The harmful effects of another widely distributed drug²⁹ may also be found in the police statistics: in 2011 a total of 277,894 suspects (2010: 284,128 suspects) acted under the influence of alcohol (–2.2 per cent). That represents 13.2 per cent of all suspects. With regard to violent offences the proportion of suspects under the influence of alcohol totals 31.8 per cent and thus is significantly higher (BKA, 2011).

CONSEQUENCES OF PROHIBITION: DRUG ADDICTS IN THE PENAL SYSTEM

Convicted drug addicts make up a considerable part of the prison population in Germany, at 30–40 per cent. Other substance-related disorders are also overrepresented (especially with regard to alcohol and tobacco; cf. in general: Stöver, 2012).

A large proportion of the users of illegal drugs have some experience with the police, the courts or incarceration. The basic documentation for, for example, Hamburg (Oechsler et al., 2009) shows that 38 per cent of clients in 2009 had problems with the judicial authorities and 12 per cent found themselves under arrest. The group of opiate and cocaine users make up an even higher proportion: one in five users of this substance is in criminal detention. In longitudinal terms an even heavier judicial burden manifests itself: more than half (52 per cent) of supervised drug users in Hamburg have been convicted at least once, with users of opiates making up the largest share of those put in prison (70 per cent), with sentences averaging 50 months. In the Frankfurt scene survey the proportion of persons who have been in prison is as high as 78 per cent (with sentences averaging 51.9 months – Müller et al., 2010). Studies on the life situation of older drug addicts show that imprisonment is becoming more frequent among older and older people: Hößelbarth, Stöver and Vogt (2011) report that 87.8 per cent of the 74 qualitatively surveyed older drug addicts had already been in custody or in a penal institution. They spent four years in prison on average (48.8 months: women 31.6, men 55.6), with imprisonment varying between a few days and 20 years. The prison experience of drug addicts varies not only in terms of age and gender, however, but also between urban and rural areas, East and West.

According to the Federal Statistical Office,³⁰ up to 31 March 2011 60,100 people had served a prison sentence or been in youth custody in a German young offenders institution or found themselves in preventive detention (84 out of every 100,000 people of the age of criminal responsibility – 14 years of age and above). At

²⁹ http://www.aktionswoche-alkohol.de/hintergrund-alkohol/gewalt.html

³⁰ https://www.destatis.de/DE/ZahlenFakten/GesellschaftStaat/Rechtspflege/Aktuell.html

the date in question, 15 per cent of all prisoners were confined as a result of a drug offence. However, this figure represents only the lower end of drug addicts in prison. Experts assume that around 30–40 per cent of all men and more than 50 per cent of all women prisoners are intravenous drug users. That this is a conservative estimate is shown by the fact that investigations conducted in individual Länder indicate that around one prisoner in two is "at risk of using drugs" and that every third prisoner must be regarded as "in need of therapy" (Dolde, 2002).

These findings are in line with the results of two multi-centre epidemiological studies on the addiction and infectious disease situation and the care of opiate addicts in the German penal system. They give for the first time an accurate overview of the number of current/former intravenous drug users and drug-associated infected persons in German penal institutions. Radun et al. found in their cross-sectional study of 1,497 inmates of six German prisons a lifetime prevalence for intravenous drug consumption of 29.6 per cent (n=464); 17.6 per cent of all prisoners in the survey were infected with the hepatitis C virus (HCV) and 0.8 per cent with the human immune deficiency virus (HIV). Every second prisoner (50.6 per cent) who injected drugs was HCV positive and 1.6 per cent were HIV positive (cf. overview: Stöver, 2012).

In their survey of resident physicians in 31 German penal institutions with more than 14,000 prisoners in total Schulte et al. were able to confirm these results: the proportion of current/former intravenous drug users among the prisoners was, on average, 21.9 per cent, with HCV/HIV prevalence rates of 14.3 per cent and 1.2 per cent, respectively.

Table 4. Proportion of intravenous drug users and persons with infectious diseases associated with drugs in German penal institutions and in the general population (see for a general view: Stöver 2012: 76)

	IDUs	HCV	HIV
Prisons	21.9-29.6%	14.3%-17.6%	0.8%-1.2%
General population	0.3%	0.4%-0.7%	0.05%
Factor	73–98 fold	26-32 fold	16-24 fold

Source: Stöver, 2012: 76.

Both studies from 2007/2008 underline that in comparison to the general population current/former intravenous drug users and persons infected with HCV/HIV are significantly overrepresented in German penal institutions (Table 3). These figures are confirmed by the EMCDDA whose estimates imply that at least half of Europe's prison population has "experienced drugs", many of them with a problem and/or intravenous drug habit.

On the basis of the values presented in Table 1 one must assume in the case of around 60,000 prisoners (as of 31 March 2011) cross-sectionally around 15,000 (13,140–17,760) opiate users or addicts in Germany's penal system alone (without custodial sentence or police arrest) – in the course of a year, around twice as many. Approximately one in ten of the generally accepted total figure of at least 150,000 problem drug addicts is thus imprisoned. Given the 11,000 available therapy places there are thus around 15 times more drug users in prison than in therapeutic institutions.

While out of prison considerable progress has been made over the past 30 years in addiction treatment and psycho-social intervention, behind prison walls such developments have not taken place to the same extent, despite the prevalence of addictive and abusive consumption patterns. Furthermore, while out of prison the support system has undergone considerable diversification, in the penal system the emphasis has overwhelmingly been on the central abstinence strategy. In particular, access to tried and tested support and treatment methods in prison is utterly inadequate in comparison to the situation outside prison in many areas of addiction treatment (especially pharmacotherapy and infection prevention). Evidence-based core strategies for the treatment of opiate dependency (such as substitution treatment) are introduced in many penal institutions only after a delay of several years and are not comprehensive or in many Länder they do not exist at all. This leads to discontinuity of treatment, sometimes with considerable consequences for prisoners' health in and after prison.

In 2009, around 60,000 people were convicted of a BtMG violation (Federal Statistical Office, 2010a). Of these on the relevant date a total of 8,880 people found themselves in prison, in other words, around 15 per cent of all inmates. Overall in 2009 there were over 50,000 prison sentences; in other words, over 7 per cent of all prison sentences were imposed under the BtMG (Jakob, Stöver, Pfeiffer-Gerschel, 2013).

JURISPRUDENTIAL EVALUATION OF CRIMINALISATION

Repression by the state is for many drug users the worst side-effect of their consumption. The majority of users of illegal drugs practice controlled consumption and suffer few significant problems. With repression – prosecution, conviction, imprisonment and so on – all affected users, both those whose use is controlled and those who also suffer significant problems because of their use, experience the state's harshest instrument.

The social-ethical component of prosecution takes the form of stigmatisation, the withholding of social or medical benefits or services and so on. The basis for social and legal condemnation is not, for example, the otherwise usual and propor-

tionate reaction to the violation of legal rights and assets. This occurs only to a small extent (driving, violence, medical and social costs) and they could be countered with other, less draconian measures, such as drug prohibition only with regard to driving and taxation as compensation.

Each criminal charge means for the person affected contact with the police as an accused person, solely because of the fact that they have chosen, for example, cannabis rather than alcohol. Besides the criminal charge, there is also interrogation, identification procedures, house searches, "physical examinations", telecommunication surveillance and social stigmatisation.

Even though many proceedings end with a dismissal, for the person concerned that may mean being subjected to restrictions and not obtaining an acquittal. In southern Länder or for repeat offenders, too, few people are regularly punished. If drug users were really decriminalised, as is sometimes asserted, the location of the crime would play no role and one would not become more criminal than the first time because of a second "bust". Thus, according to Schäfer (2006),³¹ we cannot talk of the decriminalisation of the users of illegal drugs in Germany.

While the purpose of narcotics legislation and drug policy formulated by the legislator (health protection against the dangers of drugs) may in general be legitimate, the prohibition policy is not able either to restrict supply and demand or to solve the problems that arise with or because of drugs, but instead it is itself a cause of many problems (black market, high costs, "unintended consequences"). There is no need to counter drugs with prohibition; other options are available. Even if in some instances empirical data are only patchily available in relation to the effects of other options, even for the conservative-minded there are many much more reliable first and second steps. Finally, given the low level of harm to legal rights and assets the state reaction – among other things in the form of a (in comparison to other areas of criminal law) disproportionately harsh legal practice – is inappropriate (Krumdiek, 2006).

COSTS OF DRUG POLICY AND PROHIBITION

The costs and harm through and because of drugs are manifold and measured only in part. Many cost bearers are affected and not all harms can be attributed simply and unambiguously to drugs.

³¹ http://www.alternative-drogenpolitik.de/2013/04/09/von-geringen-mengen-und-der-nichtent-kriminalisierung-der-konsumenten/

Spending within the framework of the four pillars of drug policy was investigated by a study entitled "Estimation of spending by the public authorities due to the consumption of illegal drugs in Germany" (Mostardt et al., 2010). The result confirms that around 10 per cent of all public spending on public safety and order is related to illegal drugs. The bulk of the state's financial commitment goes on repressive measures to combat crime in connection with illegal drugs (around 70 per cent). In the social security and health care systems the proportion is only 0.3 per cent, although these sectors are over one order of magnitude larger and the availability of data is relatively poor.

The state spends 3.4 to 4.4 billion euros on repression in the area of illegal drugs. This is around 65–70 per cent of state spending on drug policy. The areas of health care and social security account for 30–35 per cent of total spending, at around 1.8 to 1.9 billion euros. The spending ratio between repression and support/therapy is thus 7 to 3. Spending per inhabitant in the area of illegal drugs thus runs at around 63–74 euros per year.

The study covers both the costs of the justice apparatus, such as the police, the prosecution service, courts and prisons on the basis of "drug-related offences in accordance with the Narcotics Act (BtMG) as ... crimes committed by drug users".

This includes the abovementioned losses due to crimes committed by hard-drug users. Not included are the consequential costs, for example, of imprisonment (unemployment, infectious diseases, stigmatisation).

It is scarcely possible to estimate the costs arising from the financing of organised crime and terrorist structures through the drug trade and offences associated with the drug trade (corruption, money laundering and gang warfare, for example). The consequences of US drug consumption for the integrity of the state in Mexico shows clearly that this can be an enormous factor.

Because of the misallocation of police resources in the form of a disproportionate prioritisation of the prosecution of drug offences with regard to own-use, other offences that are more harmful to society, such as economic and environmental crime, are not cleared up.³²

³² http://www.welt.de/regionales/berlin/article1921373/Tausende-Akten-bleiben-beim-LKA-liegen. html

http://www.alternative-drogenpolitik.de/2012/04/23/berlin-die-repressive-drogenpolitik-gefahrdet-ihre-sicherheit/

Due to the illegalisation of the drug market money not only gets into the wrong hands, but also, in contrast to legal drugs such as alcohol and tobacco, does not generate other income (taxation of drugs, VAT, jobs subject to social security contributions, income tax).

The social security and health care systems are discernibly burdened by the harm due to contaminated drugs, infectious diseases, neglect, overdoses and prostitution to finance a drug habit.

The effects were identified, for example, within the framework of the Swiss heroin pilot scheme. The final report states that not only addicts but also the general public are beneficiaries of controlled drug distribution. For example, the number of offenders and offences fell by around 60 per cent already during the first treatment phase. The Centre for Interdisciplinary Addiction Research in Hamburg (Zentrum für interdisziplinäre Suchtforschung – ZIS)³³ also draws attention to the fact that an economic analysis of the Swiss pilot scheme has shown that treatment with diamorphine brings with it a considerable benefit to the economy. Above all, 96 Swiss francs per head are saved due to crime reduction and an improvement in the health of addicts. The net benefit is around 45 Swiss francs per patient and day. This shows not only that new forms of therapy, such as the dispensing of heroin to addicts, does not represent an expensive form of treatment, but also that every hesitation and hindrance of new forms of therapy and help give rise to (avoidable) harms to society that cost billions³⁴ (cf. Bühring, 2006).

The restrictive narcotics legislation leads to less effective drug support and prevention, makes addiction treatment more expensive and restricts the use of drugs and drug plants in medicine³⁵ and partly also as a raw material. Finally, the negative consequences of prostitution for the purpose of financing a drug habit³⁶ should be mentioned.

It is difficult to measure what spending and harms could be avoided by means of a different kind of drug policy. The – without doubt – large sums involved, however,

³³ http://www.heroinstudie.de/

³⁴ http://www.cannabislegal.de/diverses/hartedrogen.htm

³⁵ http://www.hanfjournal.de/webEdition/we_cmd.php?we_cmd%5B0%5D=show&we_cmd%5B1%5D=18285&we_cmd%5B4%5D=369

³⁶ http://www.psychologie-aktuell.com/news/aktuelle-news-psychologie/news-lesen/article/2012/10/17/1350454618-drogenabhaengigkeit-beschaffungsprostitution-findet-meist-auf-derstrasse-selten-im-borde.html

should be reason enough to address these questions more intensively. Economists such as Hartwig/Pies (1992, 1995) and Sell (2012) estimate the costs to the economy of prohibition at tens of billions of euros.

The total costs of combating "drug-related crime" in the history of the Federal Republic of Germany are in the order of 200 billion euros, corresponding to the economic cost of the Chernobyl disaster or the investment needed for the energy transition in Germany.³⁷

Nevertheless, reforms should not be seen merely as budgetary consolidation, but as a wasting and misallocation of state resources that should be redirected, for example, to the utterly underfinanced area of prevention (see also the previous section).

More investment in the area of addiction prevention instead of repression would pay twofold benefits. Not only the fact that money that currently flows into repression has no positive effects: even in the best case it is ineffective, but as a rule it is harmful. But also every euro spent on prevention yields more than a euro in savings in other places. It is much more expensive to tackle harms that have already arisen than to deal with them beforehand. Prevention experts estimate that the utility factor – in other words, the "return on prevention" – is around 2.2. Every euro of prevention thus creates a utility of 2.2 euros or a profit of 1.2 euros.³⁸ Other studies even talk of a ratio of 1 to 55.³⁹

If, for example (and ceteris paribus), the existing black market for cannabis was replaced by a regulated market with protection for young people and consumers in general (control of quality and THC content) a very large sum would become available through the legalisation of the market (jobs, regular taxes and special taxes on cannabis) and the discontinuation of the costs of repression. The DHV⁴⁰ writes that "Even with very careful estimates and suppositions we can assume that in the event of cannabis legalisation at least 1.4 billion euros a year would flow directly into the coffers of the state."

This money should be invested in expanding the prevention of addiction. With revenues and savings from the legalisation of cannabis alone at least 19,000 addition-

³⁷ http://www.alternative-drogenpolitik.de/2012/01/12/ausgaben-zur-bekampfung-der-rauschgift-kriminalitat-in-der-brd/

³⁸ http://www.dguv.de/inhalt/presse/2012/Q1/return-on-prevention/index.jsp

³⁹ https://povertybadforhealth.wordpress.com/2013/04/02/the-economic-benefits-of-prevention/

⁴⁰ http://hanfverband.de/index.php/themen/drogenpolitik-a-legalisierung/981-finanzielleund-wirtschaftliche-auswirkungen-einer-cannabislegalisierung

al jobs could be funded in addiction prevention. That would represent one full-time job per 600 students, corresponding to half a job for every elementary school, every secondary school and every occupational school in Germany. If the users of all other drugs were decriminalised, too, the number of jobs would at least double.

The outcome of this scenario would be the decriminalisation of several million German citizens, the choking-off of billions in revenues for criminal organisations and instead the expansion of prevention on such a scale that a discernible effect is likely due to the significant reduction of drug problems.

HEALTH AND SOCIAL EFFECTS OF PROHIBITION

Although an expansion and differentiation of support oriented towards harm reduction has made it possible to significantly improve the health and living conditions of drug addicts in Germany over the past two decades, mortality rates in relation to people using illegalised psychotropic substances have been at a high level for decades:⁴¹ for the period between 1973 (when the documentation of drug-related deaths began) and the end of 2010, based on the data published in the annual reports on narcotics issued by the German Federal Office of Criminal Investigation (Bundeskriminalamt or BKA), a total of 40,690 deaths were associated with drug consumption – to illustrate the magnitude of this figure, it is almost the same as the population of a town such as Eisenach! In 2010, 1,237 people died: this is the equivalent of the inhabitants of a whole village, such as Mücka north of Görlitz, passing away. It should be noted in this context that during the 40 years of police drug-related crime statistics not a single case of death from cannabis has been recorded.⁴²

It is not only that repressive measures on the part of the (Federal) police fail to meet their objective of sustainably influencing market development (availability of illegalised drugs) and user demand (Gerlach, 2004; Reuter and Trautmann, 2009). Taking the example of heroin it is clear that the intensification of police repression with regard to users is more likely to lead to an increase in the number of deaths (Nordt and Stohler 2009). Furthermore, it applies to all illegalised substances that

⁴¹ Cf. overall for this section: Gerlach/Stöver (2012).

⁴² In comparison to this, the figures for legalised, state sanctioned and taxed accessible substances that are much more detrimental to health the estimated annual number of deaths due to alcohol or the "mixed consumption" of alcohol and tobacco is 74,000 (Gaertner et al., 2011), as well as 110,000 to 140,000 deaths due to tobacco smoking (Lampert and List, 2011). On this basis a large city such as Cologne would lose all its inhabitants within 10 years.

even under the heaviest repression users do not discontinue their consumption – not even behind prison walls, not even under threat of corporal punishment or the death penalty (for example, in Iran: see "drug couriers" and Harm Reduction International – report). Thus the goal of abstinence laid down in the BtMG – the utopian idea of a drug-free society – has not been a realistic option for many long-term drug users, whether in prison or at liberty.

A further "unintended consequence" is the use of extenders in drugs on the black market. It has long been known that street heroin largely consists of cutting agents, but it is becoming increasingly apparent that other drugs, such as marijuana, are affected or the impurities are highly dangerous.

The data are patchy in this area, however. The over 4,000 reports on the website of the German Hemp Association⁴³ (Hanf Verband) show, however, that instances of extenders in cannabis are not isolated cases. The consequences of the use of largely unknown and unresearched extenders in marijuana will become evident only in the coming years. The phenomenon came to public attention due to a wave of lead poisoning in Leipzig in 2007.⁴⁴ Over 100 people had to be treated – some required hospitalisation – after cannabis was contaminated with lead. It can also be assumed that not all of those who were affected received treatment. Lower Saxony's State Office of Criminal Investigations identified lead and glass as extenders.⁴⁵

Equally disturbing is the repeated discovery of anthrax spores in heroin and related deaths, both in Germany and the United Kingdom. Similarly, the appearance of the drug "Crocodile" (Krokodil) in some German cities shows that homemade drug blends and creations are widespread. In cocaine may be found, for example, levamisol that leads to necrosis and lidocaine/tetracaine that, in the case of intravenous use, leads to paralysis of the central nervous system (59 deaths in Berlin in 1994–98). It is apparent that this is a consequence of the black market and thus of prohibition, which can hardly be used as an argument for the latter. These examples also show clearly that drug checking is not only an instrument for party drugs (Schmolke et al., 2012).

The quality of any substances available on the black market is generally not known by the buyers. Again and again, there are marked fluctuations in purity –

⁴³ http://hanfverband.de/index.php/themen/streckmittel

⁴⁴ http://hanfverband.de/index.php/nachrichten/aktuelles/236-bleivergiftungen-durch-cannabis-in-leipzig

⁴⁵ http://hanfverband.de/index.php/nachrichten/aktuelles/1856-der-deutsche-hanf-verband-im-re-itox-jahresbericht-fuer-deutschland-2012

in the case of heroin it varies between 5 and 30 per cent and the danger of life-threatening overdoses, poisoning and seizures is ever-present. In accordance with market logic all illegalised substances in the dealing and intermediate sale chain up to the final retailer are adulterated umpteen times with toxic or allergenic extenders to maximise profits and thus become "poison". A number of substances used to cut heroin might be given as examples: caffeine, lactose, ascorbic acid, aspirin, paracetemol, plaster, chalk, strychnine, dextromethorphane, mannitol and food colouring. With regard to cocaine, Streetwork Zürich + Partner have documented an extensive list of dangerous extenders on the internet. ⁴⁶ The extender detector of the German Hanf Association (DBDD) ⁴⁷ currently warns of substances harmful to health used in cannabis and marijuana. It is clear that the imagination knows no bounds at the uncontrolled production, dealing and final-sale levels. Furthermore, the substances are often inadvertently contaminated with infectious and allergenic substances during the production process and in transit.

After death and life-threatening overdoses, the most serious health problem in connection with illegalised drug use is posed by microbial infections caused by a multitude of bacterial, viral, fungal and protozoan pathogens. These include diseases of the lungs, blood vessels, heart, skin, tissue, bones and joints, as well as sexually and parenterally transmissible diseases, such as HIV and hepatitis B and C infections (for details, see: Manthey and Vogt, 2011; Kaushik, Kapila and Praharaj, 2011; Ebert, 2009). Already contaminated substances are often joined by unclean utensils or needles that have already been used several times, frequently in unhygienic circumstances. In Germany, around 50–60 per cent of all intravenously injecting drug users have had a hepatitis B infection; in 3–5 per cent of cases this infection takes a chronic form (Radun, 2011). Around 50–90 per cent of opiate users are infected with the hepatitis C virus (Barnikol et al., 2011). The total number of persons infected with HIV due to intravenous administration is estimated at 10,000; annual new infections number 150–200 cases (Hamouda, 2011).

It is by no means a new insight that many of these secondary and concomitant diseases are not owing to specific properties of substances – at least if these substances were available in pure and uncontaminated form – as is the case with alcohol and tobacco (see, for example, Schmerl, 1984). Risky forms of consumption are promoted and users, as described, are exposed to many dangerous, even life-threatening

⁴⁶ http://www.saferparty.ch/download/file/Warnungen%20PDF%202011/Kokain_Streckmittel_ August_11.pdf

⁴⁷ http://hanfverband.de/index.php/themen/streckmittel

illnesses. On top of this often come a lack of personal hygiene, unhygienic living and sleeping conditions, malnutrition and undernourishment or delays in or no treatment of illnesses (Bornemann and Gerlach, 1999).

Against this background, prior to their appearance in the criminal justice system drug users are stigmatised and marginalised as "drug addicts" in need of advice and treatment (cf. Antistigma, 2004). Particularly evident is the stigmatisation process in school and in the family: those affected become the centre of attention and can either conform – that is, end their drug use – or live up to the advance condemnation (in the sense of a "self-fulfilling prophecy"). Projections of guilt are implicit in this way of addressing the problem.

School and family develop exclusion strategies: from expulsion from school to drastic punishments and breaking off of contact on the side of parents. These reactions lead, on the side of those affected, to heightened drug use. Thus a vicious circle is set in motion that leads both sides to dig in their heels and, above all, to a fixation on the drug consumption and the banned drug. In such a situation it is difficult for parents, teachers and instructors to comprehend young people's drug use – with a lot of patience – as an almost inevitable part of growing up in the risky period of adolescence or as self-medication that makes sense to the user, which can be dealt with rather in a non-drug-specific way by boosting and supporting the resources, interests and inclinations of those affected so that this period of growing up can be navigated without social or health ill effects (cf. Stöver, 2008). In order to counter a widespread view of the problem it should also be said that, naturally, there can be illegal drug use in which positive effects predominate. The conditions necessary for this include a social environment in which drug use is tolerated as generally transient behaviour, no major financial problems, reliable suppliers and the possibility of controlled handling of the drug to achieve the intended effects. These conditions generally exist only in certain social classes and during particular life phases. Long-term drug use, however, can have negative and unintended social or health consequences.

Long-term drug addicts, especially of opiates or cocaine, are seldom able to maintain their consumption without damage to their health or social exclusion. In order to be able to pay black market prices they need to engage in procurement activities. While men primarily finance their drug use by means of theft, receiving stolen goods and drug dealing, women are often reliant on selling their bodies (among women it is estimated that over 50 per cent and among men around 10–20 per cent finance their habit through prostitution; cf. Zurhold, 2005). Injurious social and health effects are entirely predictable. Although there is oversupply of heroin and cocaine only a few people are able to consume their drug of choice. Supply bottlenecks and withdrawal symptoms are bridged with alcohol and/or medication (especially

benzodiazepine). Mixed drug use is widespread, sometimes dependencies on several substances co-exist, harbouring considerable health risks (for example, alcohol and stupefying medicines heighten the effects of heroin and cocaine). Overall, the state of health and social circumstances of many – so far not reached by treatment – drug users have deteriorated in the past 20 years. Examples of this include the following:

- Neglect of basic personal care and hygiene (eating, washing, clothes, personal hygiene);
- High levels of mental stress due to fear of prosecution or the pressure to procure drugs;
- Serious health and social problems due to prostitution that often occurs under unprotected and degrading circumstances;
- Homelessness or frequently changing short-term accommodation with acquaintances from the drug scene or prostitution clients (linked to difficulties obtaining or keeping a flat);
- Social isolation and loneliness that, due to social exclusion, reduce and eventually break contacts with the family, friends and acquaintances outside the drug scene. Social relations in the drug scene are strongly determined by the constraints and circumstances of drug procurement;
- Lack of job and social prospects and employment difficulties. The low level of education, the consequence of dropping out of school and training early, leads to a deterioration of opportunities on the labour market. Long-term unemployment often leads to loss of social status, impoverishment (for example, long-term Hartz IV status) and thus, in turn, to more intense drug consumption;
- Lack of self-esteem due to social exclusion and health deprivation, few experiences of "self-efficacy": the loss of faith in one's ability to fundamentally improve one's life situation through one's own efforts, after withdrawals or attempts at therapy are repeatedly unsuccessful;
- People from a migrant background are under particular pressure from racist prosecution, especially if they are black.

The social consequences can also be discerned with regard to democratic institutions, however: more and more cases of corruption among the police and customs officers are being reported. Even usually law-abiding people can succumb to the promise of quick money. A high rate of criminalisation especially of drug users leads to work overloads among judges, lawyers and probation officers, as well as receiving of stolen goods and gang membership, often triggering family tragedies. The global

consequences of prohibition are reflected in drug wars, like the one in Mexico (see Justice in Mexico Project, 2010) or even massive geopolitical changes. Accompanying this development is an erosion of the rule of law: no more press freedom because journalists are threatened by drug dealers, threats to courts, the police and the whole justice system, kidnappings, assaults, murders (in the Mexican drug war alone around 70,000 people died between 2006 and 2012 and another 26,000 are missing – mainly non-participants – amounting to a humanitarian catastrophe (Belaunzáran, 2013).

EXCURSUS: DEATHS FROM DRUGS OR FROM DRUG POLICY?

Every year in Germany around 1,000 people die as a consequence of the use of illegal drugs (Drug and Addiction Report, 2011⁴⁸). Regardless of the fact that the definitions used are based on police regulations and massive blindspots because autopsies are not obligatory this fluctuating figure – sometimes rising, sometimes falling – is used as an indicator of successful or unsuccessful drug policy. At the same time, there is no systematic research into causes and well-evidenced knowledge concerning the options for reducing the number of deaths is ignored (for example, with the help of naloxon; cf. Dettmar, Saunders and Strang, 2001).

The effects of drug consumption rooms, for example, are clear and well researched (Poschadel, 2003). At the same time, there is a corresponding State Ordinance only in Berlin, North Rhine-Westphalia, Hamburg, Hesse, Lower Saxony and the Saarland that permits municipalities to establish a consumption room (Deutsche AIDS-Hilfe, Akzept e.V., 2011, Drogenkonsumräume in Deutschland – Eine Bestandsaufnahme des AK Konsumraum [Drug Consumption Rooms in Germany. A Situational Assessment by the AK Konsumraum]). In Bavaria, Baden-Württemberg, Bremen, Rhineland-Palatinate, Schleswig-Holstein and the whole of eastern Germany there is not a single instance of this life-saving establishment.⁴⁹

Likewise the risk factors involved in a "drug death", such as (forced) abstinence, especially after release from prison, therapy or hospital are known (WHO, 2010). Nevertheless, consistent substitution treatment is rare. Supplementary measures, such as emergency training for drug users, relatives and people who have to deal with drug users (streetworkers, police, prison officers) with opiate antagonists, such

⁴⁸ http://drogenbeauftragte.de/presse/pressemitteilungen/2011-02/drogen-und-suchtbericht-2011. html

⁴⁹ http://konsumraum.de/dta/rechtsverordnung.html

as naloxone, are practically non-existent. In this area, a number of other European states and even the United States are far ahead of Germany (Dettmar, Saunders and Strang, 2001; Keppler, Knorr and Stöver, 2011).

EXCURSUS: (COMPULSORY) EMETICS TO PRESERVE EVIDENCE

Among the most extreme excesses of the criminal prosecution of (alleged) drug users and dealers is the use of emetics to secure evidence, as well as the contamination of drugs with extenders.

It took two deaths – in Hamburg and Bremen – to bring the use of emetics to professional and public attention. The failure of experts, drug support institutions and political parties to question the practices of the medical preservation of evidence and to indicate the known risks is also clear. Only after the two deaths were alternatives for securing evidence discussed at the political level, which in most other Federal States have already been used successfully for years but have been introduced in Bremen only now. These alternatives are both acceptable from the standpoint of medical ethics and much less risky for those concerned. But the fact that the risky method of forced application of an emetic was practiced for over a decade illustrates the repressive approach of the policy of drug supply reduction hitherto. With this practice the policy is clearly targeted at small-scale dealers who in any case can be dealt with by means of criminal prosecution only with difficulty and who merely serve existing demand. This practice smacks of policy symbolism and does nothing to change the existing structures.

In retrospect, Germany's international isolation with regard to the administration of emetics is clear – to our knowledge, this is practiced in no other European country. Amnesty International has complained of this scandalous practice in Germany for years. ⁵⁰ But at least the extensive public discussion in Bremen has led to the renunciation of this practice. We can only hope that the further course of this process of change will be monitored critically.

The debate on the administration of emetics in Germany in general, as well as its practice were characterised by the racist undertones of many actors. Its application – almost all those affected were dark-skinned – is tainted by racism, like the general prosecution practice with regard to alleged drug dealers (Sorgalla/Stöver, 2005). It was long tolerated under the Constitution despite several deaths and its use by drug

⁵⁰ http://www.amnesty-polizei.de/2011/06/prozesse-und-revisionen-im-brechmittelfall-in-bremen/

policy was something that the European Court of Human Rights in 2006 had declared to infringe human rights and characterised as "using force verging on brutality" (Judgment of 11 July 2006, 54810/00). Legal evaluation of the cases involving deaths show easily how the court came to this assessment (see also Löhr, 2007).

ON THE STATE OF THE DRUG-POLICY DEBATE

The size of repression as a pillar of policy on illegalised drugs has already been portrayed. It is responsible for a large part of state spending.⁵¹ Two-thirds of suspects investigated by the police are drug users. Nevertheless, the pros and cons of drug policy in Germany are almost never discussed:

German officials take a decidedly cool stance toward these developments. No top politician with a major German party is about to call for a new drug policy or even the legalization of marijuana. Drugs are not a winning issue, because it's too easy to get burned. [...] The subject is still completely taboo. When someone tries to relax the rules, he is immediately accused of not protecting our children, says Gerhart Baum, the German interior minister from 1978 to 1982. During his tenure, Baum experienced the so-called heroin years, when the number of addicts in Germany exploded, images of young junkies were on cover pages and the film Christiane F – Wir Kinder vom Bahnhof Zoo (Christiane F – We Children from Zoo Station) was playing in theaters. [...] This period shaped German drug policy, and it also affected how Germans feel about drugs: anxious, for the most part. [...] For many people, legalization sounds like an invitation to more drug use and addiction, as well as a capitulating country that no longer performs its protective function. (Gutsch/Moreno, 2013)⁵²

Besides the failure to mention the consequences of prohibition and prosecution in the Drug and Addiction Report the national strategy⁵³ on drugs and addiction policy contains only general statements, such as:

Another element of drugs and addiction policy are legal regulations on reduction of supply and general prohibitions. These include, for example, laws protecting non-smokers, the youth protection act and narcotics legislation. Combating drug crime is of major, even international importance.

⁵¹ http://www.spiegel.de/international/world/global-support-grows-for-legalizing-drugs-a-884750. html

⁵² http://hanfverband.de/index.php/nachrichten/blog/1840-video-keine-bewegung-in-der-drogen-politik-woran-haengt-es-expertengeben-antworten

⁵³ http://drogenbeauftragte.de/presse/pressemitteilungen/2012-01/pm-nationale-strategie.html

This example shows clearly that drug policy itself is part of the problem. Thus a study on sustainable and realistic policy options cannot avoid some remarks on the role of policy.

In this area we can speak of a "drug-policy problem".⁵⁴ The total failure of criminal law prohibition and its massive unintended consequences should long ago have led to a change of course or at least a critical debate in this policy area (Hess, 2012). In scarcely any other policy field is there so little questioning and criticism of the risks and side effects of current policy. Instruments that are standard in other policy areas, such as policy impact assessment or evidence-basing are not applied here.⁵⁵ The causes of this problem are manifold. The area of drug policy research is significantly underdeveloped. In the absence of an effective critical counter-discourse in relation to official government failures those affected are marginalised, stigmatised or simply frightened. "Researchers" are dependent on public funds and do not want to attract attention by non-conformity. State agencies servilely perpetuate traditional drug policy. As a result of the strong sectoral orientation of drug policy based on "pillarisation" there is a series of massive individual interests. Drug prohibition is now so internalised that researchers and helpers do not question the repressive framework and even drug users accept it as their apparently inevitable fate.⁵⁶

The "drug problem" appears – in contrast to the 1980s and 1990s – to be more or less under control, the support institutions are very sophisticated and clearly successful⁵⁷ and there appears to be little public pressure. In general, the issue is not very attractive politically; the lobby for drug dependent prisoners is fairly manageable. A number of smaller organisations, such as JES, DHV, Akzept (Federal Association for acceptance-oriented drug work and humane drug policy), Deutsche AIDS-Hilfe (DAH), Deutsche Gesellschaft für Suchtmedizin (DGS – German Association for Addiction Medicine), Bundesverband akzeptierender Eltern (Federal Association for accepting parents) and the Schildower Kreis are mobilised against prohibition.

Drug policy is made to an unusual degree by non-scientifically based administration, courts and associations and not by party politics. The restrictive narcotics legislation threatens many of those who would like to try something new.

⁵⁴ http://www.schildower-kreis.de/themen/die-politik-hat-ein-drogenproblem.html

⁵⁵ http://hanfverband.de/index.php/nachrichten/blog/1834-von-hanf-ist-die-rede-anmerkungenzum-wissenschaftlichen-undpolitischen-diskussionsstand-in-deutschland

⁵⁶ http://www.welt.de/print/die_welt/hamburg/article109096762/Suchtexperten-gegen-liberalere-Drogenpolitik.html

⁵⁷ http://tagesschau.de/ausland/suchtbericht100.html

There is little appetite for policymaking. The view is widespread that drug policy issues play no role in election campaigns – this is a clear indication of the relative importance of the issue. At the central annual DHS conference in Leipzig in 2012 there were no representatives of the dominant drug policy from the Bundestag. ⁵⁸

Kalke (2005) calls for more federalism in the areas of prevention, support and therapy. Experiences from the United States show that freedom in the areas of repression, market regulation and cannabis as medicine have led to remarkable results.⁵⁹ In Germany more competences on the part of Federal States could lead to a wide range of experiments and constructive competition between different drug policy concepts.

In retrospect drug policy has become a victim of its own success. The positive results of drug support between 1982 and 2012 have taken the issue out of the public eye and thus from the public consciousness. The advent of HIV in the 1980s created an urgent pressure for the introduction of substitution treatments, needle exchange programmes and drug consumption rooms. Since the third amendment to the BtMG (legalisation of consumption rooms⁶⁰), however, progress has been more gradual. The expansion of diamorphine distribution after the pilot scheme is also making only modest progress.⁶¹

The numerous debates on cannabis after the judgment of the German Constitutional Court in 1994, the proposal of the health ministers conference, Schleswig-Holstein's "Cannabis in pharmacies" motion and Akzept's "DieCannabisKampagne" have had few measurable results. Progressive proposals by the SPD, 63 PDS 4 and the

⁵⁸ http://www.alternative-drogenpolitik.de/2012/11/19/dhs-kongress-forum-mit-politikern-fallt-aus/ http://hanfverband.de/index.php/nachrichten/blog/1840-video-keine-bewegung-in-der-drogenpolitik-woran-haengt-es-expertengeben-antworten

⁵⁹ http://en.wikipedia.org/wiki/Medical_cannabis_in_the_United_States

⁶⁰ http://www.rechtliches.de/info_Drittes_BtMG-Aenderungsgesetz.html

⁶¹ http://www.abendblatt.de/ratgeber/gesundheit/article112664783/Hamburger-Suchtforscherfordert-Heroin-auf-Kassenkosten.html

 $http://www.aerztezeitung.de/politik_gesellschaft/berufspolitik/article/821263/suchtmedizinsuedwesten-fordert-wenigerbuerokratie.html\\$

http://www.aerztezeitung.de/politik_gesellschaft/medizinethik/article/829601/kommentar-hero-in-zuegel-lockern.html

⁶² http://www.akzept.org/dascannabisforum/ziele.html

⁶³ http://cannabislegal.de/politik/spd-btmg96.htm

⁶⁴ http://dip.bundestag.de/btd/14/016/1401695.pdf

Greens⁶⁵ have come only from the opposition side. Even with regard to the SPD one can be sure that such proposals as Rhineland-Palatinate's legislative proposal 58/93 ("Handling of smaller amounts of cannabis shall be classified as a misdemeanour"⁶⁶) and Hesse's proposal 582/92 (Hans Eichel: Bundesmonopol für Cannabis & Heroinabgabe [Federal monopoly on cannabis and heroin distribution]⁶⁷) would not find a majority for simple implementation. Since then, what constitutes a "small amount" has gone up and down depending on the State government and their liberal or non-liberal drug policy orientation.

Even reforms on the issue of cannabis as medicine have not made any headway, despite formidable headlines. 68

PUBLIC OPINION

Drug policy plays a marginal role not only in politics but also in the media. There are reports on drugs and drug problems but there is little critical reporting. ⁶⁹ Police reports are printed verbatim, the development of "drug death" figures is accepted (and not even put into the context of deaths from alcohol and tobacco) and ticker reports are used as filler with a snappy headline. Whether it be "binge drinking young people", the "smoking pot makes people stupid" study or "crystal meth, a killer drug", drug reports are seized upon for good quotes, but at that point interest wanes rapidly. In the case of crystal meth the questionable notion that decriminalisation in the Czech Republic is responsible for it is simply accepted. Concerning the effects of decriminalisation in Portugal until recently there has been almost nothing in German-language newspapers. Only "die tageszeitung – taz" and online media stand out a little in this respect. The backbone of critical reporting on drug policy is made up of scene media and blogs.

⁶⁵ http://cannabislegal.de/politik/gruene-btmg96.htm

⁶⁶ http://hanfverband.de/index.php/themen/drogenpolitik-a-legalisierung/1529-bundesratsantragzur-entkriminalisierung-voncannabis

⁶⁷ http://hanfverband.de/index.php/themen/drogenpolitik-a-legalisierung/1541-bundesratsantragzur-cannabislegalisierung

⁶⁸ http://hanfverband.de/index.php/nachrichten/aktuelles/1322-bundesregierung-qlegalisiertq-cannabis-als-medizin-wahrheit-unddichtung

⁶⁹ http://hanfverband.de/index.php/nachrichten/blog/2016-drogenpolitik-wenn-die-zeitungen-schweigen

We shall list only some of the critical reports that have appeared in recent years, because they represent exceptions:

- Gute Drogen, schlechte Drogen? [Good drugs, bad drugs?], Frankfurter Rundschau 28.12.2012;⁷⁰
- Gastbeitrag "Krieg gegen Drogen ist gescheitert" [Guest contribution: The war on drugs has failed], Tom Koenigs, Frankfurter Rundschau;⁷¹
- ♦ Legalität als letzter Ausweg Machen wir Frieden mit den Drogen [Legalisation as a last resort let's make peace with drugs], FAZ 02.05.2012;⁷²
- ♦ Ist der Krieg gegen die Drogen zu gewinnen? Tagesspiegel Berlin, 20 May 2012,⁷³
- Kommentar "Legalise it", E + Z Entwicklung und Zusammenarbeit, 3 May2012;⁷⁴
- Legalisierung des Drogenkonsums als Ausweg [Legalisation of drug use as a way out], Die Welt, 19 April 2012;⁷⁵
- Drogenpolitik Dein Joint ist mir egal [Drug policy your joint doesn't make any difference to me], Der Spiegel, 19 May 2012;⁷⁶
- Amerika-Gipfel [America Summit] Drogenkrieg [Drug War] Legalize it, Barack Obama! Die Welt, 14 April 2012;⁷⁷
- ♦ Amerika-Gipfel [America Summit] Wir sind am Ende [We have reached the end], Die Zeit, 14 April 2012;⁷⁸

⁷⁰ http://www.fr-online.de/meinung/leitartikel-gute-drogen--schlechte-drogen-,1472602,11362922. html

⁷¹ http://www.fr-online.de/meinung/gastbeitrag-krieg-gegen-drogen-ist-gescheitert,1472602,4812886

⁷² http://www.faz.net/aktuell/feuilleton/legalitaet-als-letzter-ausweg-machen-wir-frieden-mit-den-drogen-11734267.html

⁷³ http://www.tagesspiegel.de/politik/ist-der-krieg-gegen-die-drogen-zu-gewinnen-/6651300.html

⁷⁴ http://www.dandc.eu/articles/220461/index.de.shtml

⁷⁵ http://www.welt.de/debatte/kolumnen/Maxeiner-und-Miersch/article106204213/Legalisierung-des-Drogenkonsums-als-Ausweg.html

⁷⁶ http://www.spiegel.de/kultur/gesellschaft/sibylle-berg-ueber-drogen-a-833449.html

⁷⁷ http://www.welt.de/politik/ausland/article106183508/Drogenkrieg-Legalize-it-Barack-Obama.

⁷⁸ http://www.zeit.de/2012/16/Drogenkrieg/komplettansicht

Der Spiegel: "War on Drugs" (issues 8, 9, 10, 11 and 12, 2013), as well as Spiegel Online International.⁷⁹

The central print medium for international drug policy is the British daily newspaper The Guardian, in which regular features and guest contributions on British, European, US and global drug policy appear. On the Internet the Huffington Post plays a similar role. In Germany, there is no comparable newspaper.

But how does public opinion stand with regard to cannabis legalisation? The population is now far in advance of the drug policy of political parties. A majority of people – relatively independent of their demographic characteristics – favour, according to an EMNID poll, a liberal cannabis policy. Eul/Stöver (2013) report, based on two EMNID surveys carried out in 2002 and 2010, that less than 40 per cent of the German population favour maintaining the status quo, namely prosecution even of simple cannabis possession. In total, over 60 per cent of the German population favoured a downgrading of simple cannabis possession to a simple misdemeanour (punished by a fine), no longer subject to legal sanctions or even for legal equality for cannabis with alcohol and tobacco (in other words, legalisation) (see Eul and Stöver, 2011, 2012).

Individual risk assessment with regard to cannabis is of key importance with regard to first-time and subsequent use of this drug. The threshold falls with increasing experience on the part of users. That risk assessment also determines the desired legal position of this drug. The majority of people are against legal equality for cannabis with regard to alcohol because they consider cannabis to be 60–70 per cent riskier than alcohol. However, for the past 10 years or so around 60 per cent of the German population has favoured decriminalisation of cannabis for personal use (see Eul and Stöver, 2011, 2012).

⁷⁹ http://www.spiegel.de/international/europe/evaluating-drug-decriminalization-in-portugal-12-years-later-a-891060.html

 $http://www.spiegel.de/international/germany/drug-war-failing-in-germany-a-889826.html \\ http://www.spiegel.de/international/europe/the-winners-and-losers-of-drug-liberalization-in-the-czech-republic-a-888618.html$

http://www.spiegel.de/international/world/violence-plagues-african-hub-of-cocaine-trafficking-a-887306.html

http://www.spiegel.de/international/world/failing-drug-war-when-cops-become-criminals-a-886441.html

⁸⁰ http://guardian.co.uk/politics/drugspolicy

STATUS QUO - WORLDWIDE AND REGIONAL

Claims and reality with regard to international drug control efforts

Drug policy was one of the first international and global policy areas. Starting from the opium conferences the prohibition-based policy approach shaped and imposed by the United States has been anchored in international agreements that apply throughout the world and has taken on an almost universal character (cf. Holger, 2012). Although international control is the only way of clearly identifying trading links and achieving international cross-border control agreements and cooperation global drug controls have not achieved their aim of reducing consumption. This applies particularly in Europe, where the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has identified a growing proportion of people who have experience of drugs and an increasing proportion of drug offences (EMCDDA, 2012: 40) in Europe.⁸¹

The UN estimates of annual drug consumption in the period 1998–2008 show that, despite increasing drug control efforts, there has been a considerable increase in drug use worldwide (see Table 5).

	OPIATES	COCAINE	CANNABIS
1998	12.9 million	13.4 million	147.4 million
2008	17.35 million	17 million	160 million
% increase	+34.5%	+27%	+8.5%

Table 5. UN estimates of annual drug consumption in the period 1998–200882

Despite the worldwide drug prohibition and billions spent on security and drug control efforts the outcome of this policy is sobering. Not only have the prices of drugs fallen in Europe (source: EMCDDA) and the rest of the world, but never have so many people throughout the world taken drugs as today. There is no evidence of a general preventive effect due to prohibition: "A connection cannot be established between drug policy, measured in terms of the legal framework and the practice of prosecution, and the diffusion of cannabis use" (Reuband, 2004).

⁸¹ EMCDDA Annual Report 2012, p. 15. http://www.dhs.de/fileadmin/user_upload/pdf/EBDD_ Jahresberichte/Jahresbericht_EBDD_2012_deutsch.pdf

⁸² http://www.globalcommissionondrugs.org/wp-content/themes/gcdp_v1/pdf/Global_Commission_Report_German.pdf

The Swiss National Council's Commission for Social Security and Health came to the conclusion in a report published on 30 April 1999 that: "The widespread assumption of a substantial general preventive effect of prosecution of consumption cannot be proven and appears barely plausible ... All empirical research and statistical data, in terms of both international and inter-cantonal cross-comparison, consistently indicate that there is no significant relationship between the distribution/ frequency of drug consumption and criminal prosecution and sanctioning".

LIST OF UNINTENDED SIDE-EFFECTS

The initiative "Count the Costs" divides the costs of the war against drugs into seven areas:

- Undermining development and security, intensification of conflicts;
- Harms to public health, distribution of diseases and death;
- Violation of human rights;
- Increasing stigmatisation and discrimination;
- Generation of crime and enrichment of criminals;
- Deforestation and environmental pollution;
- Wasting billions on prosecution.

An overview of the global effects of all this is provided by The Alternative World Drugs Report – Counting the Costs of the War on Drugs.⁸⁴

IMPORTANT VOICES DEMANDING CHANGE

The debate on reform of global drug control reached a new level with the foundation of the Global Commission on Drug Policy in 2011. It brings together former UN Secretary General Kofi Annan, former NATO Secretary General Javier Solana, former chair of the Federal Reserve Board Paul Volcker, British entrepreneur Richard Branson and former heads of state of Brazil, Columbia and Mexico. The film Breaking the Taboo, narrated by Morgan Freeman, portrays the work of the Global Commission.⁸⁵

⁸³ http://www.countthecosts.org/

⁸⁴ http://www.countthecosts.org/sites/default/files/AWDR.pdf

⁸⁵ http://blog.zeit.de/netzfilmblog/2012/12/07/breaking-the-taboo-drogenkrieg-film/

Previously, it was mainly national commissions, individuals and researchers who called for reform of the prohibitive orientation of drug policy (cf. Milton Friedman⁸⁶; Werner Pommerehne / Albert Hart⁸⁷).

The four principles of the report by the Global Commission on Drug Policy⁸⁸ (2011: 5ff) are pathbreaking and indicative also for the present report, as are its recommendations:⁸⁹

- Drug policy must be based on solid empirical and scientific evidence. The main yardstick with regard to success should be the reduction of harm to health, security and the wellbeing of individual persons and society.
- 2. Drug policy must be based on human rights and the principles of protection of public health. We should stop stigmatising and excluding people who consume certain drugs or who are involved at the lower levels of cultivation, production and distribution, and we should not treat drug addicts as criminals, but rather as sick people.
- 3. The development and implementation of drug policy should be a common task undertaken worldwide, taking into account different political, social and cultural circumstances. Policy should consider the rights and needs of people affected by the production, illegal trade and consumption of drugs, as explicitly recognised in the 1988 agreement on the illicit trafficking of narcotic drugs.
- 4. The aim must be a comprehensive drug policy that includes families, schools, public health and development cooperation experts, as well as leading actors in civil society in partnership with the law enforcement authorities and other competent state authorities.

⁸⁶ http://folio.nzz.ch/1992/april/drogenkonsum-ist-privatsache http://www.spiegel.de/spiegel/print/d-13682584.html

⁸⁷ http://www.zeit.de/1992/13/teures-politikversagen/komplettansicht
"A free drug market in no way hindered by the state would scarcely differ from the markets for many other goods", Pommerehne, Werner W. and Albert Hart (1992), Drogenpolitik aus der Sicht des Ökonomen [Drug policy from an economist's standpoint], Universitas, Vol. 47, pp. 539–550.

⁸⁸ http://www.globalcommissionondrugs.org/wp-content/themes/gcdp_v1/pdf/Global_Commission_Report_German.pdf

⁸⁹ http://www.alternative-drogenpolitik.de/2013/04/05/empfehlungen-der-global-commission-on-drug-policy/

EXAMPLES OF UNINTENDED CONSEQUENCES OF CURRENT DRUG POLICY FOR THE DRUG MARKET

The study carried out at the request of the European Commission on global illegal drug markets (Reuter and Trautmann, 2009) showed that drug control has a series of unintended consequences. These include:

- Larger and larger seizures on trade routes probably lead to greater export demand:
- Violence among producers, dealers and users is largely to be explained by heightened control measures:
- A larger black market generates/encourages corruption;
- Environmental and health problems arise as a result of combating methamphetamine production, as a result of which large methamphetamine laboratories are replaced by smaller ones that use very variable ingredients.

Control measures do not have substantial effects on the size of the supply side, but they do lead to relocation of production sites and trade routes: from countries with intensive and effective controls to countries with less strict control. The possible consequences of this market-leading effect remain unconsidered, however. Small countries, such as in West Africa, are almost overwhelmed by cocaine smuggling running into billions.90

In weighing up the intended and achieved and the unintended effects the report comes to the following conclusion: "The international efforts to stem the worldwide drug market have been - measured in terms of the targets of the United Nations General Assembly Special Session (UNGASS)⁹¹ – unsuccessful. There is no evidence of a reduction of the worldwide drug problem in the period 1998-2007. A debate is needed on the sense of current drug policy and possible alternatives" (Trautmann, 2010).

⁹⁰ http://www.tagesschau.de/ausland/drogenhandel102.html

⁹¹ UNGASS's declaration at the 20th Special Session of the General Assembly of the United Nations on global drug problems in 1998 resulted in a draft of a comprehensive list of measures for the control and combating of drug cultivation, drug production and drug demand. The aim of the declaration was to eliminate or at least reduce demand and supply by 2008. The motto of the then UNDCP director was: "A drugfree world, we can do it".

Drug Policy Hotspots

It is evident that some states have already been weakened by drug crime⁹² or that a large part of GNP comes from drug production and trade (for example, Afghanistan: around 25 to 40 per cent of GNP⁹³).

Mexico

The clearest manifestation of global prohibition policy is the drug war in Mexico. This conflict can be traced back to the attempt by President Calderón (2006–2012) to solve the drug problem by military means. The drug cartels financed by billions from the cocaine trade also armed themselves, 94 sometimes with German weaponry. 95 The result was a wave of violence, human rights violations and erosion of the rule of law. This experiment shows very clearly where a policy of "more and more of the same" can lead.

The cost of this domestic war to date is 70,000 dead, 26,000 missing⁹⁶ and 1.6 million refugees. Generally speaking, the drug cartels have not been weakened. Drug smuggling to the United States continues at a high level. Furthermore, Mexico has become the third biggest opium-growing country with 3 per cent of global production.⁹⁷

The power of the drug cartels has grown so much that police corruption has become widespread,⁹⁸ the police are attacked directly,⁹⁹ press freedom is under threat¹⁰⁰ and two-thirds of the legal economy has been infiltrated.¹⁰¹ Sometimes, members of

⁹² http://de.ria.ru/crime/20120130/262574240.html

⁹³ http://www.alternative-drogenpolitik.de/2009/09/11/afghanistan-und-die-opiumfrage/

⁹⁴ http://www.20min.ch/panorama/news/story/Mit-U-Booten-in-den-Drogenkrieg-13818309

⁹⁵ http://nachrichten.rp-online.de/politik/schmuggler-nutzen-deutsche-schiffe-1.2692160

⁹⁶ http://www.zeit.de/news/2013-02/21/mexiko-hrw-prangert-verschwinden-von-menschen-in-mexiko-an-21084207

⁹⁷ http://www.unodc.org/documents/data-and-analysis/WDR2011/The_opium-heroin_market.pdf

⁹⁸ http://www.tagesanzeiger.ch/ausland/Viele-haben-mehr-Angst-vor-der-Polizei-als-vor-der-Drogenmafia/story/25703409

⁹⁹ http://de.euronews.com/2010/12/29/mexiko-ortschaft-ohne-polizei/

¹⁰⁰ http://www.sueddeutsche.de/medien/reporter-morde-in-mexiko-zeitung-kapituliert-vor-drogen-kartellen-1.1622013

¹⁰¹ http://www.handelsblatt.com/politik/international/mexiko-warum-sich-der-drogenkrieg-ausweitet-seite-all/3193680-all.html

the drug cartels even attack the army. ¹⁰² Central state tasks, such as security and law enforcement no longer exist in parts of Mexico. Rampant corruption and restrictions on press freedom underline the image of Mexico as a "failed state" (Maihold/Brombacher, 2013).

This war is our war, too: both its causes and its effects lie in the consuming countries. Furthermore, it is financed by cocaine consumption in the United States and Europe. The weapons used in the drug war also generally come from the consuming countries, sometimes even from Germany.¹⁰³

Iran

Another example of misguided drug policy is the Islamic Republic of Iran. While the smoking of opium in the region has a long tradition and has never been considered a serious problem, the effects of drugs on a transit country have become very evident in Iran. Out of 74 million inhabitants 3.7 million are opioid-dependent (5 per cent). Out of these, 800,000 are intravenous opioid users and this despite the application of the death penalty to drug smuggling of more than 500 grammes. Even these draconian punishments and their dramatic staging – 399 public executions in 2009¹⁰⁴ – have not put a brake on smuggling and consumption. Around 200,000 prison inmates – more than half of the total – are there for drug offences.

Europe

The influence of the cartels is not confined to other continents, but also may be found in Germany and neighbouring European countries. Germany has already

¹⁰² http://www.stern.de/panorama/drogenkrieg-in-mexiko-zwoelf-polizisten-gefoltert-und-getoetet-706295.html

¹⁰³ http://jungle-world.com/artikel/2013/09/47219.html http://www.zeit.de/2012/07/Ruestungsfirma-Heckler-Koch/komplettansicht http://www.taz.de/!64145/

http://derstandard.at/1319182464108/Verdacht-der-Bestechung-Justiz-filzt-Waffenschmiede-Heckler--Koch

¹⁰⁴ http://hanfverband.de/index.php/nachrichten/blog/1535-keine-todesstrafe-fuer-drogendelikte http://idpc.net/publications/2012/11/the-death-penalty-for-drug-offences-global-overview-2012 http://www.heise.de/tp/artikel/36/36085/1.html http://www.schildower-kreis.de/themen/Zum_Internationalen_Tag_gegen_die_Todesstrafe_2012.php

been described as a "mafia stronghold".¹⁰⁵ Although the cartels' money laundering does not result in dead bodies it does have a detrimental effect on the economy. Rival syndicates also engage in fierce struggles on European soil.¹⁰⁶

It is also becoming clear that the cartels already control parts of the drug supply in certain settings, such as prisons, ¹⁰⁷ and that corruption does not stop at the prison gates. ¹⁰⁸

ALTERNATIVE POLICY APPROACHES IMPLEMENTED IN EUROPE

The temporal and spatial dimensions of prohibition, not to mention the polarisation that characterises the issue, have tended to obscure the fact that current drug policy is anything but devoid of alternatives. Before we present theoretical considerations with regard to drug control models we shall first look at what is being put into practice in other countries.

Data are now available from around Europe, where other drug control models are being implemented. We can learn from an analysis of these experiences.

Given the considerable economic, political, social and cultural similarities within Europe the transfer of tried and tested models is eminently conceivable.

Besides the examples listed here of drug policy liberalisation – for example, the decriminalisation of users – there are also countries that have chosen the opposite way. Even though the consequences are usually not as serious as the mili-

¹⁰⁵ http://www.augsburger-allgemeine.de/politik/SPD-Deutschland-ist-eine-Mafia-Hochburg-id21440861.html

http://www.spiegel.de/panorama/justiz/sonia-alfano-ueber-die-mafia-deutschland-ist-zweite-heimat-der-ndrangheta-a-864260.html

http://www.bundestag.de/presse/hib/2012_10/2012_460/01.html

¹⁰⁶ http://www.focus.de/panorama/welt/tid-27830/report-tatort-marseille_aid_842905.html

¹⁰⁷ http://www.sueddeutsche.de/bayern/kartelle-im-gefaengnis-wie-die-russenmafia-den-knast-kontrolliert-1.1512244

http://www.faz.net/artikel/C31399/mafia-die-oekonomie-der-kriminellen-dienstleistung-30451675.html

http://www.aargauerzeitung.ch/aargau/kanton-aargau/drogen-im-gefaengnis-sind-das-normalsteder-welt-121928624

¹⁰⁸ http://www.general-anzeiger-bonn.de/lokales/region/Vollzugsbeamter-soll-wegen-Drogenhandels-sechs-Jahre-in-den-Knastarticle723431.html

tary option selected in Mexico, more repressive drug policies have not succeeded anywhere.

Thus France has among the toughest drug laws in Europe. Even the public depiction of a hemp leaf can result in a fine and the consumption of drugs is also a criminal offence. The punishments for "normal" offences are higher than in Germany and for cultivating a single cannabis plant the penalty is up to 20 years in jail. Nevertheless, cannabis consumption in France is not lower than in neighbouring countries (cf. EMCDDA, 2012: 40).

The progressive approach to drug policy¹⁰⁹ in Switzerland is addressed in Section 6. The experiences from the period of quasi-legality of cannabis, as well as its end are also instructive.¹¹⁰

THE NETHERLANDS

Almost in parallel with Germany¹¹¹ modern drug policy in the Netherlands began in 1976. In contrast to Germany and the international treaties, however, a distinction was drawn between "soft" and "hard" drugs. Possession and sale to adults was decriminalised within the framework of the "gedoogbeleid" (policy of tolerance).

Within this legal framework the so-called "coffee shops" emerged, with regard to which local mayors, the public prosecutors and the police decided how things would be organised at local level. Besides a ban on advertising important conditions attached to this policy are that there must be no disturbance of public order and sale should be specifically to Dutch citizens.

Besides the decriminalisation of the possession and sale of cannabis, drug policy in the Netherlands differs little from that in other EU countries. As a result, for exam-

¹⁰⁹ http://www.bag.admin.ch/shop/00035/00081/index.html?lang=de
http://www.bag.admin.ch/shop/00010/00565/index.html?lang=de
http://www.dbs.de/fileadmin/user_upload/pdf/Veranstaltungen/Fachkonferenz_2012/Te

 $http://www.dhs.de/fileadmin/user_upload/pdf/Veranstaltungen/Fachkonferenz_2012/Text_Leipzig_van_der_Linde.pdf$

¹¹⁰ http://www.aargauerzeitung.ch/schweiz/repression-fuehrt-im-cannabis-geschaeft-zu-mehr-ge-walt-123568744

 $http://www.hanfjournal.de/hajo-website/artikel/2012/142_maerz/s46_0312_mehr_gewalt_durch_repression.php$

¹¹¹ The modern basis of drug legislation, the BtMG as successor to the opium law of the Weimar Republic, comes from 1972.

ple, with regard to heroin or public spending the same problems exist as in Germany. The Netherlands introduced the prescription of heroin under medical supervision a few years before Germany. Generally speaking, pragmatism in the Netherlands has led to harm reduction measures being introduced earlier there than in Germany. Drug checking measures have also been introduced in the Netherlands. The liberal cannabis policy in the Netherlands is a centrist policy. Furthermore, there is a disparity between national and local level, as in Germany: while at the Federal level in recent years the government has tried to introduce tougher laws, policy at local level has been more liberal (solution of the "backdoor problem") and pragmatic. Ideologies and party manifestos play less of a role here.¹¹²

From the very beginning the Coffeeshop experiment was subject to criticism by individual countries. The INCB criticised it regularly.

The consumption of cannabis has risen since 1976, as in the rest of Europe. The figures for consumption but also the abuse of cannabis are close to the EU average (EMCDDA, 2012). The absence of serious problems with regard to cannabis is the simplest evidence that the drug prohibition policy based on international conventions must be revised since its basic assumption – that prohibition is necessary to protect public and individual health – is not valid.

Two problems remain in the Dutch model, however: drug tourism and the "back-door problem". Since the Dutch model represents an isolated application it had to be assumed that interested buyers from neighbouring countries would also buy cannabis in the Netherlands. The plan was to provide the model to Dutch citizens, but this was difficult to implement in practice for a long time. Recently, however, there have been renewed efforts to implement it (for example, through the payment system). Municipalities were split on the issue of drug tourism. The main problem was that of noise in downtown areas due to additional traffic. Thus other solutions than coffeeshops were introduced outside the city. However, the emerging street trade¹¹³ and related negative effects soon showed that the "wietpass" represents only an apparent solution. ¹¹⁴ The cultivation of cannabis remains illegal and is liable to criminal prosecution.

Summarising, the Dutch model continues to show after a number of decades that, despite its weaknesses, (tolerated) retail sale of cannabis is possible and does not

¹¹² http://vorige.nrc.nl/article2066650.ece

¹¹³ http://www.derwesten.de/panorama/seit-coffeeshops-kein-hasch-mehr-an-auslaender-verkaufen-brummt-der-strassenhandelid7114852.html

¹¹⁴ http://hanfverband.de/index.php/nachrichten/aktuelles/1913-niederlande-verwirrung-nach-jahreswechsel

lead to serious consequences. With regard to prevalence of use there are no substantial differences between the Netherlands and neighbouring countries (cf. Hibell et al. 2012) with regard to cannabis consumption in the case of consumption within the past 30 days:

Table 6. Prevalence of cannabis consumption in the general population (temporal framework of production)

	LIFETIME	PAST 12 MONTHS	PAST 30 DAYS	
Age group 15				
N	28	11	5.	
Europ	30 %	15.	8.0 %	

Source: http://www.alternative-drogenpolitik.de/2012/04/06/pravalenz-des-cannabiskonsums-in-der-allgemeinbevolkerung-in-deutschlandfrankreich-den-niederlanden-und-im-europaischen-durchschnitt/

The age at which cannabis is first consumed measured as a proportion of those 14 years of age or below using the drug for the first time is above average by ESPAD comparison and consumption prevalences are significantly above that. If one compares the figures for the Netherlands with the weighted mean of neighbouring countries the gap between prevalences and this average shrinks and with regard to age of first use Dutch young people are then over the average.¹¹⁵

PORTUGAL

In 2001, there was a paradigm change in drug policy in Portugal. The country decided to end criminalisation of drug users and to adopt a public health approach to the drug problem.

Besides the expansion of substitution treatments and needle exchange the main feature of the Portuguese model is that the criminal courts no longer have jurisdiction over users, although all drug-related activities remain illegal. The law explicitly provides that people found with drugs by the police are summoned to appear before a committee comprising a lawyer, a social worker and a psychologist. This committee can impose certain punishments – fines, street bans, restrictions on the right to possess weapons – and conditions such as therapy. Representatives of the health

¹¹⁵ http://www.alternative-drogenpolitik.de/2012/04/07/niederlandische-jugendliche-im-vergleich-zum-europaische-durchschnitt-imespad-report-2007/

authorities regret the fact that the police continue to confiscate drugs. In contrast to other countries in which certain offences are no longer prosecuted or punished, in Portugal the parliament has explicitly adopted legislation, while the toleration of cannabis social clubs in Belgium or Spain, for example, is based on legal practice and court judgments.

The borderline between users and dealers is drawn at 10 daily rations, for example, 25 grammes of marijuana, 2 grammes of cocaine or 1 gramme of heroin. The following drugs were taken into consideration: marijuana, hashish, cannabis oil, pure THC, LSD, MDMA, cocaine, heroin, methadone, morphine, opium, amphetamine and PCP.

Twelve years after decriminalisation in Portugal there have been a number of significant evaluations of the policy. Policy in Portugal, its origins and conditions as well as its results are specific to that country, but can also be transferred to other countries. The high proportion of intravenous drug consumption and the sharply increasing HIV transmission rates were both the motivation for the drug control reform legislation and the yardstick of their success. The success of the decriminalisation policy and harm reduction in Portugal has shown that such measures are not confined to rich and/or liberal countries, such as Germany and the Netherlands, but can also be implemented successfully in societies with fewer resources and younger democracies. The fact that Portugal has not become "Europe's drug paradise" and a mecca for drug users shows once again that fears of dambursts are not sustainable.¹¹⁶

Drug-related crimes have receded. Consumption has developed along the same lines as in neighbouring Spain and Italy. The number of young and problem users has fallen. The market for drugs such as cannabis remains completely illegal.

Summarising, the repressive clamp has been loosened without notable negative effects, and there have been positive developments in the number of prison inmates sentenced for drug use, possession or dealing (Domosławski 2011).¹¹⁷

¹¹⁶ http://derstandard.at/1363705675165/Portugals-liberale-Drogenpolitik-Der-Konsument-ist-kein-Krimineller

http://www.spiegel.de/panorama/gesellschaft/drogenpolitik-portugal-streicht-strafen-fuer-denkonsum-von-drogen-a-888188.html

¹¹⁷ http://drogriporter.hu/en/portugal10

http://www.druglawreform.info/en/weblog/item/4003-portugal-progresses-toward-integrated-cannabis-regulation

CZECH REPUBLIC

Far more attention has been paid in the press and German politics to drug policy in the Czech Republic. Following Portugal's lead since 1 January 2010 the possession of small amounts of marijuana, hashish, cannabis plants, magic mushrooms, peyote, LSD, ecstasy, amphetamine, methamphetamine, heroin, coca plants and cocaine has been decriminalised. Punishment is at the level of a misdemeanour such as illegal parking – the police can look the other way.¹¹⁸

While German politicians seek to link decriminalisation and the production and export of crystal meth, crystal meth as "pervitin" has a long tradition as a self-made drug behind the Iron Curtain. 119

Since the cultivation of up to five cannabis plants has also been decriminalised, consumers also have the possibility of cultivating cannabis and supplying themselves. In 2013, the legalisation of cannabis as a medicine and its distribution via pharmacies was adopted.¹²⁰

http://hanfverband.de/index.php/nachrichten/aktuelles/1929-studie-qdrogenpolitik-in-portugal-die-vorteile-einerentkriminalisierung-des-drogenkonsumsq

http://www.emcdda.europa.eu/html.cfm/index5174EN.html?pluginMethod=eldd.countryprofiles&country=P

http://www.emcdda.europa.eu/publications/drug-policy-profiles/portugal

 $http://www.news.ch/Portugals+Entkriminalisierung+von+Drogen+zeigt+Erfolg/501361/detail.htm \\ http://www.heise.de/tp/artikel/34/34857/1.html$

http://www.alternative-drogen politik.de/2012/04/05/der-erfolg-von-entkriminalisierung-und-harm-reduction-in-portugal/

http://www.linksfraktion.de/im-wortlaut/drogenpolitik-portugal-abkehr-repression/

http://en.wikipedia.org/wiki/Drug_policy_of_Portugal

http://www.telegraph.co.uk/news/politics/9916345/Liberal-Democrat-minister-on-drugs-fact-finding-mission.html

http://www.spiegel.de/panorama/gesellschaft/drogenpolitik-portugal-streicht-strafen-fuer-denkonsum-von-drogen-a-888188.html

- 118 http://www.np-coburg.de/meinung/meinung/np/meinungenhinp/Das-Drogenparadies;art 83488,2089412
- 119 http://www.augsburger-allgemeine.de/bayern/Crystal-Meth-Tschechische-Drogenkuechen-fuer-Bayern-ein-Problemid23875071.html
 - http://www.schwaebische.de/region/wir-im-sueden/bayern_artikel,-Bayerns-Innenminister-Herrmann-wirft-Prag-mangelnden-Einsatz-im-Kampf-gegen-Drogen-vor-_arid,5301820.html
- 120 http://hanfverband.de/index.php/nachrichten/aktuelles/2000-tschechien-legalisiert-cannabis-alsmedizin

The possession of small amounts of drugs was decriminalised after the transition in the 1990s, but the precise quantification in the legal text is new (Tomáš Zábranský, a doctor specialising in addiction and co-founder of the Czech National Drug Monitoring Centre "Klinika adiktologie").

The production, dealing and smuggling of drugs are still prosecuted normally.

The figure of 30–35,000 "problem users" remains as high as before 2010. A key advantage for users is that the adopted legislation gives them legal security.¹²¹

According to Jakub Frydrych¹²² of the Anti-Drug Authority: "We have long observed a tendency to treat marijuana consumption as a matter of personal freedom, in the media, in politics – in public space as a whole".

Addiction researcher Tomáš Zábranský has stated that "criminal penalties have a much more deleterious effect on young people than occasional marijuana consumption". ¹²³

According to experts, there has been little opposition to the legislative reform of 2010, neither in society nor in politics. ¹²⁴ In the Czech Republic the liberal drug policy is regarded as a success story. ¹²⁵

CANNABIS SOCIAL CLUBS IN BELGIUM AND SPAIN

In 2005, the organisation European Coalition for Just and Effective Drug Policies (ENCOD) proposed the model of the "Cannabis Social Club" (CSC). This model envisages a legal, non-commercial distribution of cannabis to adults. A CSC is an association that collectively cultivates cannabis. The number of plants is above the number of decriminalised plants per person in the respective country and the number of members is limited. Furthermore, the cultivation may be used to supply the personal needs of the members and may not be sold or passed on to minors.

¹²¹ http://derstandard.at/1358305302941/Tschechiens-feiert-liberale-Drogenpolitik-als-Erfolgsgeschichte

¹²² Colonel Mgr. Jakub Frydrych has been Director of the Czech National Anti-Drug Authority (Národní protidrogová centrála) since 2009.

¹²³ Dr Tomáš Zábranský PhD is co-founder of the Czech National Drug Monitoring Unit "Klinika adiktologie". He is a member of the International Society for Study of Drug Policy and the Reference Group to the United Nations on HIV and injecting drug use.

¹²⁴ http://www.emcdda.europa.eu/html.cfm/index191768EN.html

¹²⁵ http://www.praguepost.com/news/3194-new-drug-guidelines-are-europes-most-liberal.html

The Cannabis Social Club itself controls security and quality with regard to the cultivation, transportation and distribution of the cannabis. No advertising is permitted. Sometimes, new members are admitted only on the recommendation of existing members. Labour and costs are divided among the members.

In Spain, legal judgments and in Belgium legal judgments and a legal ordinance that decriminalises one plant per person have enabled the emergence of CSCs, not the legislature. The legality of hempseed in Spain and Belgium is also a condition. In the Netherlands and the Czech Republic it would also be possible. The supply of cannabis patients in the United States is sometimes also regulated via a similar system.

The Belgian club ("Trekt Uw Plant" 126) has around 150 members and to date has functioned without legal problems - the last trial took place in 2010. During this time the clubs have operated in cooperation with the authorities at eight established locations where each consumer maintains his or her cannabis plant. That is now no longer a problem.

In Spain, the number of clubs is unknown since there are neither statistics nor a land register in which they are recorded. It is estimated, however, that the number of clubs is around 200, perhaps even 300. It is true that most cannabis social clubs - though not all - are in the Basque Country. However, there are clubs throughout Spain, many of which operate officially and openly and are not bothered by the authorities. Although it has been claimed that the clubs would operate in a grey area, in other words, semi-legally, I do not see it that way. It is true that there is no cannabis social club law that precisely regulates how the clubs have to function, but in the Basque Country such a regulation is planned. Since the clubs have won their court cases, in principle the matter has been judicially decided. To that extent, one can scarcely talk of a grey area with regard to 200 clubs with a changing membership who grow cannabis legally. There has been no academic evaluation to date.

The benefits of the clubs are that consumers receive a clean product and are decriminalised. They are not prosecuted by the police and the criminal justice system and, in turn, the police saves a lot of resources if they leave users alone. Nothing is

¹²⁶ http://www.hanfjournal.de/hajo-website/artikel/2011/134_sa_hanfparade/s15_sa_hapa_11_belgien.php

http://hanfverband.de/index.php/nachrichten/aktuelles/1738-zdf-der-belgische-cannabis-clubtrekt-uw-plant

known of disadvantages or negative consequences, such as the emergence of a criminal milieu or growing cannabis consumption.¹²⁷

It has been reported that some time ago in Bilbao two cannabis social clubs were to be closed. But that is out of around 60 clubs in total. The clubs are monitored and if irregularities occur they are closed. This means more control. Control is not lost because of the clubs; certain regulations also offer control possibilities. Theft of plants appears to be the biggest problem. In some regions of Spain there is a debate on far-reaching legalisation. 128

FRAMEWORK CONDITIONS

INTERNATIONAL FRAMEWORK AGREEMENTS: LIMITS AND POSSIBILITIES

The framework within which countries can make drug policy is staked out by international agreements to a greater extent than virtually any other area. Transitional Provisions 61, 71 and, in particular, 88, as well as international agreements at the EU level (Schengen I and II, EU treaties and so on) prohibit certain policy options, such as uncontrolled distribution. Nevertheless, many reforms are possible under the agreements. If one comes up against their limits one can ignore them (the Netherlands); they can be invalid because there is a constitutional reservation; or one can try to change the treaties. If this is not successful exit and re-entry with reservations is possible. Bolivia took this path with the legalisation of coca plants.

In Transitional Provision 71 §49 transitional periods of up to 25 years are provided for countries with traditional drug consumption, such as coca chewing. These ended in 1989 and have since been a disputed issue. Bolivia, whose new constitution of 2009 explicitly protects coca, proposed the striking of coca from international agreements. This failed due to the US veto. As a result, Bolivia exited and applied for re-entry with the reservation that the sections on coca would not be accepted. There was no majority against this (there were only 15, including Germany; one-third out of 184 would have been necessary). This is the first time in the history of UN drug control agreements that such a thing has happened. 129

¹²⁷ http://www.encod.org/info/ENDLICH-LEGALEN-CANNABIS-IN.html http://www.undrugcontrol.info/en/weblog/item/4408-how-does-a-cannabis-social-club-work

¹²⁸ http://www.aerztezeitung.de/news/article/683403/basken-wollen-cannabis-legalisieren.html

¹²⁹ http://amerika21.de/meldung/2013/01/75569/koka-bolivien-uno http://www.guardian.co.uk/world/2013/jan/13/bolivia-drugs-row-chew-coca

Since a possible collision with international law is politically significant the compatibility of control models is a decisive parameter of their evaluation. The guardian of the agreements is the INCB, which in the past has generally applied a very restrictive interpretation of the agreements. Thus heroin distribution in Switzerland or the German drug consumption rooms were initially considered a violation and only subsequently did the INCB come to the view that these instruments did not constitute a loss of control and were appropriate for protecting health. Against this background a certain readiness to do battle for serious reforms is necessary (Dreifuss, 2012).

Depenalisation right up to far-reaching decriminalisation, as in Portugal, are reconcilable with international drug agreements. The conventions do not require criminal sanctions; illegality under administrative law is sufficient. The World Drug Report 2009 by the United Nations Office on Drugs and Crime (UNODC) states: "The International Narcotics Control Board [...] said the practice of exempting small quantities of drugs from criminal prosecution is consistent with the international drug control treaties".

Krumdiek cites the constitutional reservation anchored explicitly in Article 3 XI of the Transitional Provisions 88 II, coming to the conclusion that: "thus from an international legal standpoint there are no substantial arguments against the legalisation of cannabis called for in the proposal through the introduction of cannabis clubs".

The use of cannabis as a medicine or generally the use of substances for scientific and medical purposes is explicitly permitted under Transitional Provision 61. The INCB, however, has expressed the suspicion that "so-called medical use initiatives were little more than a backdoor to legalisation for recreational use". ¹³¹ An academic pilot scheme thus presents no problem.

There were no legal issues with regard to international narcotics control agreements against the intended model of cannabis availability in pharmacies that was to have been tried out in Schleswig-Holstein in the 1990s: "There are no objections to a positive decision on the proposal from opposing international agreements or legal acts of organs of the European Union. In particular, the sale of cannabis products is to take place only in a temporally and physically restricted framework and under

http://www.drogenmachtweltschmerz.de/2013/02/12/bolivien-tritt-wieder-in-un-drogenkonvention-ein/

¹³⁰ http://www.alternative-drogenpolitik.de/2012/08/17/die-entkriminalisierung-in-portgual-ist-vereinbar-mit-den-internationalendrogenvertragen/

¹³¹ http://www.guardian.co.uk/society/2013/mar/05/relaxation-cannabis-laws-us-un

controlled conditions" (proposal of Federal State Schleswig-Holstein concerning the pharmacy model¹³²).

In order to avoid conflict with the framework decision to Article 31 e TEU the distribution of cannabis products must be under state supervision and may take place only with the relevant approval.

In summary, personal cultivation, alone or in non-profit oriented cannabis social clubs and sale for medical purposes in pharmacies do not violate international agreements. These agreements should be changed, terminated or terminated with re-entry with reservations for the purpose of the regulated and licensed sale of drugs for consumption.

The extent to which the constitutional reservation holds can be shown only by a new judgment by the German Constitutional Court.¹³³

Source of drugs

If there is to be a regulated market the production of drugs must also be regulated. Existing regulations from the pharmaceutical sector can be used for this purpose. New substances should be subject to an approval procedure. Cannabis cultivation for personal use in Germany would be possible. Most drugs are produced in Germany. The mechanisms of the international agreements can also be used for the distribution of drugs.

NORMATIVE BASES FOR CONTROL MODELS IN GERMANY

While our remarks so far have been primarily descriptive, no evaluation of different drug policy scenarios can do without a normative basis. Here we shall outline a set of theses that deviate somewhat from the familiar in order to reach the broadest possible consensus. It is sometimes sufficient to apply values that in other policy fields are absolutely normal, but this is possible only if moralism and ideologies, such as the abstinence dogma are overcome.

¹³² www.drogenpolitik.org/download/sh/Antrag_SH.pdf

¹³³ http://www.alternative-drogenpolitik.de/2012/09/12/dr-krumdiek-zur-frage-ob-man-wegen-can-nabis-vor-dembundesverfassungsgericht-klagen-sollte/

¹³⁴ http://hanfverband.de/index.php/themen/drogenpolitik-a-legalisierung/975-cannabisbeschaffung-fuer-das-berliner-modellprojekt

MINIMAL CONSENSUS

In "Tools for the debate" (Transform¹³⁵) six theses are presented for a minimal consensus in the discussion on drugs:

- All drugs are potentially dangerous and all drug use is intrinsically risky;
- Drug policy should be based on evidence of effectiveness;
- Drug policy should offer good value for money;
- Policy should be based on reality and adapt to changing circumstances;
- Drug policy is primarily a public health issue;
- Policy should seek to reduce drug-related harm.

Furthermore, in this report we have established that:

- There is no evidence that selective drug prohibition protects people and keeps them from using;
- Prohibition creates an uncontrollable black market and makes drugs more dangerous than they need to be;
- Prohibition ties up resources and prevents credible prevention (among other things because of the unrealistic goal of abstinence);
- Prohibition is detrimental to public welfare (crime, cost and so on).

As a result, although the consumption of narcotic substances is not risk-free, a drug-free society is clearly not an option. Drug policy must thus accept drug use and react in terms of health policy, not penal policy.

The consequences of drug policy measures must be assessed regularly, practically and in accordance with scientific criteria. The most important benchmarks in this respect are harm, dependency-related illnesses and the side-effects of drug policy.

MINIMISING HARM

Following the Swiss basic drug policy model the proposals here are based on the model of "minimising harm" (Bundesamt für Gesundheit, 1991).¹³⁶ This model rec-

¹³⁵ http://www.tdpf.org.uk/tools-for-debate.htm

¹³⁶ All scenarios (Bundesamt für Gesundheit 1991):

ognises that there exists moderate and from a medical point of view unharmful use of drugs. Its aim is to help to make the consumption of drugs as unharmful as possible, in particular among people with a problematic consumption pattern, such as an addiction, which is harmful for society as well as for the user. Help and therapy are given to those who need and want them. A policy of "harm minimisation" is interested in tangible results in contrast to the moral goal of a drug-free society. Abstinence in this respect can only be a means to an end, for example, among children and young people or in relation to driving or at work. The promise of a drug-free society must be renounced. The attempt to impose such a thing smacks of totalitarianism: "Abstinence as a subjective personal decision is to be respected, as is a group decision, for example, in a religious community. As a goal for society, however, abstinence is an expression of a totalitarian fantasy" (Günther Amendt). 137

The model best satisfies the requirement of a pluralistic and liberal society without losing sight of solidarity and social justice. Such a model is also not the same thing as arbitrariness or irresponsibility. It does not simply restrict itself to simple moral goals. It needs a state that is functional and flexible, but which also knows its limits. Prohibitions can be justified only if the dignity and freedom of other people are affected. Responsibility for his or her own life lies first and foremost with the individual; state and society can and may only lay down the framework. Drug policy must be adaptive.

Current drug policy in Germany follows the therapeutic model and the model of social control, largely oriented towards abstinence, dependency and criminality. This pathologised viewpoint belies the reality that most drug users handle the substances they take responsibly.

The "harm minimisation" model is now to be found only under the pillar of the same name in Federal German drug policy. The potential for conflict inherent in this approach is indicated by the ideological boycott by conservative governments

Scenario 1: Medically, therapeutically oriented drug policy ("Therapy" scenario)

Scenario 2: Abstinence-oriented drug policy ("Abstinence" scenario)

Scenario 3: Repression-oriented drug policy ("Repression" scenario)

Scenario 4: Drug policy oriented towards a drug-free society ("Drug-free society" scenario)

Scenario 5: Drug policy oriented towards risk reduction and minimising harm ("Risk reduction" scenario)

Scenario 6: Drug legalisation and state regulated distribution ("Differentiated drug legalisation" scenario)

Scenario 7: Deregulation of drug trafficking and consumption ("Deregulation" scenario)

¹³⁷ www.jesbielefeld.de/jesjournal/down/baz_amendt.pdf

of tried and tested instruments, such as consumption room regulations, methadone treatment in law enforcement or needle exchange. 138

Table 7. Main characteristics of harm reduction in the basic model

MAIN GOAL	MINIMISATION OF PROBLEMS CAUSED BY ADDICTION	
Fundamental value	Integrity of the individual	
Prevention	 Goal: responsibility Pluralistic approach Differentiated prevention Harm minimisation 	
Care	 Support (stabilisation) Diverse therapy options Rehabilitation Substitutive medicines Street work 	
Control	 Repression of organised drug trafficking Toleration of small-scale dealing and consumption Therapy as an alternative to prison 	
Coordination	Intensive coordination between different areas Institutionalised conflict-resolution bodies	
Policy style	 Responsibility of the individual "Trial and error" policy Experimenting state or "Anreizstaat" Participation of private organisations 	
Main strengths	Pluralistic and flexible answers Integration of state and society	

Source: Bundesamt für Gesundheit, 1991.

Even though a lot has been achieved in the area of harm reduction, there will be a lot of discussions with the representatives of other models in future. Even abstinenceoriented representatives of prevention, therapy and support recognise that Safer Use

¹³⁸ http://www.nuernberg.de/imperia/md/gruene/dokumente/pm_2012/pm_drogenkonsum_02_07_12.pdf

http://www.aidshilfe.de/de/aktuelles/meldungen/pressemitteilung-bayern-missachtet-rechte-gefangener

http://www.aidshilfe.de/de/aktuelles/meldungen/pressemitteilung-bayerische-drogenpolitik-kostet-immer-mehr-menschenleben

http://www.taz.de/!92098/

training courses with regard to all drugs, a needle vending machine on the premises of the rehabilitation clinic or the use of drug consumption rooms by those in substitute treatment programmes are necessary and effective. Take-home regulations and the PSB must be oriented to the needs of addicts, as is perfectly normal in the case of other medical treatments.¹³⁹ Harm reduction comes into conflict with a repressive control policy, for example, drug checking. Here a harm reduction instrument is directly hindered by the penal provisions of the BtMG.

Harm reduction – in contrast to moralising approaches – focuses on the consequences of behaviour and less on the behaviour itself. Harm reduction is realistic and assumes that drugs are in any case consumed excessively in many societies and that for some individuals, but also for some societies this generates problems. Harm reduction does not take a moral stance with regard to drug use but focuses on the reduction of problems that may arise. Harm reduction is pragmatic: it tries to avoid strategies and policies whose goal is unachievable or might do more harm than good. Harm reduction is based on human rights and the acceptance of individual integrity and self-responsibility (Schmidt-Semisch/Stöver, 2012).

Prospectively, harm reduction at the individual level could become a complementary strategy with regard to measures of supply regulation and demand limitation at the level of the market.

DRUG CONTROL SCENARIOS WITH REFERENCE TO TRAFFICKING AND CONSUMPTION

The benchmark for evaluation is as follows: a good drug policy should try to reduce costs, not to create new ones. There is no universal solution for all drug-related problems. If one tried to transfer the simplistic model of a drug-free society to other issues – for example, the threat of punishment for sex before marriage to protect against HIV – it would rapidly become clear that we are dealing with a doctrine of salvation rather than a realistic concept. In contrast, the scenarios are based on empirical experience from the Netherlands, Portugal and elsewhere and on realistic and effective ideas for ameliorating drug problems. No more, but also no less.

The evaluation criteria for the scenarios are thus the effects on the status quo, for example, cost savings in the areas of prosecution, decriminalisation, fewer health and social harms and the more effective use of state resources.

¹³⁹ http://www.dhs.de/fileadmin/user_upload/pdf/Veranstaltungen/Fachkonferenz_2012/Pr%C3%A4sentation_Prof._St%C3%B6ver.pdf

Based on experiences from the Netherlands, Portugal and the Czech Republic we can say that the main effect of decriminalisation of drug users would be the end of criminalising users. In the absence of negative effects there is scarcely any conflict of interests. Decriminalising millions of citizens would certainly be a good thing, but it would have to be discussed how many other problems would arise as a result.¹⁴⁰

We have no reliable data on the question of possible substitution effects. If one looks at the motivation for taking legal highs similar to cannabis one finds a substitution of cannabis among them (presumably also in the case of other legal highs). From the standpoint of harm reduction there arises the paradox that the state's drug prohibition drives people from well-researched traditional drugs to new, unresearched substances. To that extent a re-substitution by means of a liberalisation of consumption, cultivation and dealing of cannabis and so on would be plausible and welcome (Werse/Müller, 2009).

In its annual report (2012) the EMCDDA writes that relatively few prevalence data are available concerning new psychoactive substances, which also frequently come up against methodological limitations, such as the lack of generally valid definitions or the application of self-chosen or unrepresentative samples.

The available data specifically concerning spice/synthetic cannabinoids indicate that in Poland, Germany and the United States consumption is higher than in countries with a more liberal attitude to cannabis, such as Spain and the Czech Republic (EMCDDA, 2012).

The effect of cannabis as a withdrawal drug and a substitute for drugs such as heroin, alcohol and benzodiapine gives us reason to hope for substitution effects. This is also expected by drug researcher David Nutt: "A regulated market for illicit drugs would be the best way and we could reduce alcohol consumption by as much as 25% if we had the Dutch model of cannabis cafes". 142

Positive effects of decriminalisation are also expected by the police. Even the North Rhine-Westphalian branch of the police trade union supports¹⁴³ a "rational

¹⁴⁰ http://hanfverband.de/index.php/nachrichten/aktuelles/1924-save-the-date-anhoerung-zu-cannabis-entkriminalisieren-adrogenpolitik-evaluieren-sowie-crystal-eindaemmen-a-neue-psychoaktive-stoffe-bekaempfen

¹⁴¹ http://www.alternative-drogenpolitik.de/2013/04/09/cannabis-als-ausstiegsdroge-linksammlung/

¹⁴² http://www.guardian.co.uk/science/2012/jun/19/david-nutt-alcohol-cannabis-cafes?fb=native&C MP=FBCNETTXT9038

¹⁴³ http://www.freitag.de/autoren/der-freitag/einkaufen-im-staatlich-lizenzierten-haschladen

drug policy" in the face of the dubious prohibition strategy and the massive prosecution and conviction of users. 144

After proposals concerning the liberalisation of the treatment of users follow scenarios concerning the control of cultivation and trafficking. These proposals are related first and foremost to cannabis and most experiences come from abroad. Prospectively, benchmarks such as those of David Nutt serve to enable a coherent and comprehensible assignment of individual substances to different restrictive regulation possibilities (for example, cannabis to 5, heroin to 5a and coca leaves to 6).

At the beginning of 2013 a research project on cannabis legalisation was set up that will deliver more insights into policy options. 145

For further reading "After the War on Drugs: Blueprint for Regulation" (German translation: akzept 2012) might be mentioned. In this publication of the British organisation Transform (translated by Akzept) that appeared in London in 2009 five proposals for regulation are made. Without referring to specific substances it describes what instruments are conceivable and have more or less been tried with other things (such as alcohol, weapons, medicines, food). We differentiate between regulatory models: prescription, the pharmacy model, the license system, licensed places for sale and consumption and sale without particular licensing restrictions. The basis for the evaluation of individual substances could be the above-mentioned scale developed by David Nutt. Then finally we would have a coherent policy.

SCENARIO O: APPARENT REFORMS

The demonstrable lack of a uniform approach to drug offences that has been called for since 1994 leads to extremely unequal treatment of drug users by the German legal system. National standardisation of how small amounts of drugs are dealt with

¹⁴⁴ http://www.dhs.de/fileadmin/user_upload/pdf/Veranstaltungen/Fachkonferenz_2012/Fachvortrag_Drogen_Leipzig_Wimber.pdf

http://ufafo.de/blog/2011/12/drogen-legalisieren-munsters-polizeiprasident-und-derindro-chefim-ufafo-interview/

http://grow.de/88.0.html?&tx_ttnews[tt_news]=220&cHash=2954a1ac7bd1dfff37c5141934be77f2 http://hanfverband.de/index.php/nachrichten/aktuelles/1705-polizeipraesident-wimber-zum-polizeipraesidenten-vorsitzendengewaehlt

¹⁴⁵ http://www.nzz.ch/aktuell/zuerich/stadt_region/schritte-zur-legalisierung-von-cannabis-1.17930764

¹⁴⁶ http://www.akzept.org/pdf/drogenpolitik/regulierungs_modelle0612.pdf

is probably out of reach. Another apparent reform would be regulations on the application of "small amounts" or, in the area of legislation, the downgrading of selected substances from felonies to misdemeanours or the subdivision in the BtMG into "hard" and "soft" drugs. 147 Neither significant positive nor negative effects are to be expected from this. In practice, the already differentiated application of the law decides, beginning with the emphasis of the police and extending to the legal interpretation of the judge and public prosecutor within the limits of their discretion.

As long as the duty of inquiry is maintained with regard to all dealings with narcotics we can scarcely expect any relief for law enforcement and judicial bodies.

"This relief is not perceptible with regard to the police to the desired degree, however. In every case, charges must be brought, the accused must be questioned and the things in their possession and their homes must be searched for suspicious substances. On top of this comes an investigation of whether the suspicious substances are drugs. Within the framework of the inquiry only the hearing of witnesses and forensic investigation are dispensed with, as long as it only concerns the accusation of a consumption offence. This applies to both cannabis and small amounts of heroin, cocaine and amphetamine. Ecstasy to date has not been subject to any limit with regard to the tolerated amount.

The desired effect of freeing up resources for combating drug dealing is thus achieved only to a limited extent", according to Mr Rogge of the State Office of Criminal Investigation, Schleswig-Holstein. 148

Raising the "small amount" from 6 to 10 grammes is often confused with legalisation, as well as non-prosecution of dealers. The formulation of §31a is very clear on this. 149

SCENARIO 1: DEPENALISATION - MISDEMEANOUR/REFRAINING FROM CRIMINAL PROCEEDINGS

The first smallest possible step away from the status quo that could be taken seriously would be to give the police the possibility of refraining from instituting criminal pro-

¹⁴⁷ http://www.cannabislegal.de/politik/gruene-fach.htm#boellinger

¹⁴⁸ http://www.landtag.ltsh.de/export/sites/landtagsh/infothek/wahl15/aussch/sozial/nieder-schrift/2002/15-036_01-02.pdf

¹⁴⁹ http://www.wolfgang-neskovic.de/artikel/dealer-ersten-gramm-bestraft

ceedings. This demand – made among others by the trade union of the North Rhine-Westphalia police¹⁵⁰ and chief of police Hubert Wimber¹⁵¹ – could be achieved most simply and neatly (in the sense of not creating a special law in the area of drugs) by a change of classification of certain acts, for example, consumption-related offences (general violations under §29 BtMG) or those cited in §31a BtMG to misdemeanours. The prosecution of smuggling, dealing, possession of a firearm, organised crime or criminal offences with "not small" amounts would continue.

The effect of this scenario would depend on police practice. We can assume that the regional differences between city and rural areas or north and south will increase further. In particularly liberal Federal states it may amount simply to a normalisation of what is already the case de facto since the public prosecutors practically always close proceedings under certain conditions anyway. While in cities such as Berlin larger grey areas of de facto decriminalisation could emerge, for users in, for example, Bavaria, little would change. Expenditure in particular with regard to prosecution, but also the administration of justice, would fall somewhat. It is to be feared that the intensity of repression would depend on the financial situation or police resources.

The black market, with all its drawbacks, would remain, as would stigmatisation.

SCENARIO 2: DECRIMINALISATION - AN END TO PROSECUTION

After the example of Portugal the prosecution of consumption-related offences could be replaced by a summons to a drug counselling interview or dropped altogether. The purpose of the drug counselling interview would be to mediate assistance to people with problem habits and in borderline cases to impose minor penalties.

Besides the Portuguese solution the restriction of the prosecution of illegal acts or forgoing prosecution under certain objective conditions, such as more than, for example, 10 grammes is conceivable. Or prohibition and prosecution of cannabis could be limited to handling cannabis in non-small amounts or as an occupation or criminal liability could apply only to certain threshold quantities, in other words, by limiting the elements of the crime.

¹⁵⁰ http://www.gdp.de/id/DE_GdP-NRW_Polizei_braucht_Ermessensspielraum_bei_der_Drogen-bekaempfung

¹⁵¹ http://www.dhs.de/fileadmin/user_upload/pdf/Veranstaltungen/Fachkonferenz_2012/Fachvortrag_Drogen_Leipzig_Wimber.pdf

"The possession of narcotics in small amounts only for personal use, as well as their cultivation, production, introduction, import, export, transport or advertising or otherwise providing or possessing them shall not incur any penalty." A "small amount" should be laid down for all relevant drugs; all other narcotics could be subsumed under a definition of "10 units of consumption". Amounts can be determined with reference to the regulations pertaining to \$31a or the amounts from Portugal or the Czech Republic, that is, 30 grammes of cannabis (a limit that existed in Schleswig-Holstein until 2006¹⁵²), 3 grammes of cocaine¹⁵³ or 1 gramme of heroin.¹⁵⁴

To the extent that cultivation and production can be part of decriminalisation the effects of scenarios 3 and 4 could filter through here. In addition, it should be examined which other paragraphs – for example, free distribution or passing on to adults or the granting of an opportunity – would also have to be changed. Drug consumption rooms would be possible almost everywhere. By linking such rooms for all drugs with drug support a new dimension would be possible in respect of reaching users.

Elisabeth Pott, director of the German Federal Centre for Health Education, decries this lack of provisions close to the drug scene, for example, in coffeeshops in the context of specific prevention and has expressed envy of the situation in the Netherlands (Gaßmann, 2004: 110f). Gaßmann comes to the conclusion that "on the question of prevention I can say that in Germany there is no cannabis prevention" and points to what is done in the Netherlands. "There is nothing like this in Germany because we cannot do this kind of prevention" (Bundestag, 2012a).

The black market would remain largely unaffected. The relaxation of the narcotics law would make harm reduction easier, including such measures as drug checking. Support provisions and the police would be more clearly separated. The stigmatisation of users would decrease. By imposed ordered drug counselling interviews the state would make it clear that drug consumption is not without risks and that leading users to counselling and therapy can be necessary. Those without a problem are not punished.

As already mentioned, up to 3 per cent of all offences included in police statistics would be abolished. By the optimal provision of substitution substances and other support, drug-related crime and thus such crimes as robbery and theft, that make up

¹⁵² http://hanfverband.de/index.php/sitemap/1273-protestmailer-7-inhalt-und-feedback

¹⁵³ http://www.drug-infopool.de/gesetz/schleswig-holstein.html

¹⁵⁴ http://www.drug-infopool.de/gesetz/hessen.html

at least 2.5 per cent of all crime, could be significantly reduced. Up to 15 per cent fewer people would be arrested. The cost for the police and judicial administration would fall and the areas of counselling and therapy would have to be expanded. Savings are to be expected in the medium term. No drug tourism is to be expected.

SCENARIO 3: PARTIAL LEGALISATION

In addition to the previous scenarios the sale of cannabis to adults could also be made penalty free. The extent to which a transposition of the Dutch model to the German legal system or a homegrown model yet to be developed in detail would be more appropriate should be clarified in a special legal report. Besides the constitutional differences – the legality and the opportunity principles – between Germany and the Netherlands, political and cultural attitudes to drugs are also very different and the deliberate creation of grey areas is less common in Germany.

The Dutch concept of municipal finetuning of cannabis dealing would permit local experimentation with different approaches. Besides proper handling of drug tourism the source of drugs must also be regulated in order to avoid the backdoor problem encountered in the Netherlands. Consumer protection with regard to active-ingredient and quality control, as well as appropriate prevention for users, such as the idea of safer drug use, could reduce the risk of cannabis consumption and related problems.

The black market would be discernibly undermined and, depending on the model, revenues via coffeeshops would be possible.

State expenditure in the area of public order and safety would fall further in comparison to the previous scenario. As already in that scenario, users and support provisions would be brought much closer together. If private cultivation remained illegal this would lead to the commercialisation of the market.

SCENARIO 4: DECRIMINALISATION OF SELF-CULTIVATION

If the individual or collective cultivation of cannabis were to be free of legal penalty the black market would be considerably weakened. Quality would not have to be controlled since it would no longer be attenuated by market logic. The yield of one or a few plants can easily surpass any reasonable "small amount" and thus a practical legal solution would have to be found.

Drug tourism could be significantly attenuated through a member principle, as in the case of cannabis social clubs. Depending on the model, revenues would also be possible in this case. Linking cannabis social clubs with support provisions would also be possible, even though a somewhat looser relationship than in the case of coffeeshops would be more realistic. In Germany, the prohibition of hemp seeds would have to be lifted for this scenario.

Even though no experiences are yet available from other countries it is easily imaginable that scenarios 3 and 4 could be applied to other drugs. In particular, easily producible drugs such as magic mushrooms suggest themselves, in common with substances that are legal in neighbouring countries and could be easily imported, such as khat.

Whether scenarios 3 or 4 – whether singly or in combination – would yield the best results is unclear.

SCENARIO 5: STRICT REGULATION AND LICENSING

Starting out from scenarios 1 to 4 and 7, which are backed up by empirical experience – with regard to alcohol and tobacco – as well as the work of Schmidt-Semisch (2002), DHV (2003), VfD (2004) or RAND (2004) here we present a proposal for the next major step. Sale should take place exclusively in specialist establishments with specialist employees. This would enable stricter youth protection, as well as active-ingredient and quality control. Besides the fact that a significant portion of the costs of repression would no longer be necessary tax revenues could be generated. Furthermore, there should be an advertising ban and perhaps price fixing.

Specialised cannabis shops should provide information and integration with drug support should be stipulated. Licensing would make possible a limitation to one place of sale per natural person with personal responsibility for violations of youth protection. In the medium term, a certain amount of training could be a condition. Alternative drug legislation and support should be subject to constant evaluation. This would show what kind of adjustment would be necessary.

Licenses would allow only personal sale in a fixed establishment. Internet or street sale or even vending machine sale are not envisaged since in this instance no contact with advisory possibilities could be ensured between dealers and customers.

As the age threshold, 18 years is proposed, as in the case of tobacco and alcohol. On one hand, a late entrance age is desirable, on the other hand, it is problematic to expose young people in particular to a black market on which they could expect neither quality nor advice. There should be no further conditions for purchase other than age; registration is not necessary.

Specialist cannabis shops could be part of pharmacies and chemist shops. Advertising for products and shops apart from these should be prohibited. An estimation based on the situation in the Netherlands minus the drug tourism there results in 2,000 places of sale for Germany, on average one for every 40,000 inhabitants or six per administrative district.

Each sales unit would have information on year of production, variety, price, weight, approximate THC and CBD content, mode of cultivation and source of the product, as well as an instruction leaflet with information on the pharmacology, effects, dosage, side effects and risks of cannabis use. These should be not only informative but also attractively designed. A particular emphasis should be the issue of safe use and less harmful forms of consumption (tobacco- and nicotine-free, for example, vaporiser).

Quality control would establish that cannabis products are free of harmful residues, such as herbicides and pesticides.

There could be a voluntary drug permit to promote safer drug use (drug lore, enjoyment capacity, risk capacities and critical faculty).

Specialist cannabis shops should be closely integrated with readily accessible addiction prevention, early intervention and safer drug use services.

The expected effects of the implementation of this scenario would be the collapse of the black market for cannabis and thus, instead of billions in profits for organised crime, tax revenues, as well as an almost total evaporation of repression costs in the area of cannabis, as well as savings due to a reduction in the harm caused by low quality drugs, impurities and misuse.

SCENARIO 6: NO PROFITS = STATE TRAFFICKING OR A THIRD WAY?

Among the advocates of a more liberal drug policy there is a not unjustified fear that a legal drug market could exhibit a close similarity to the current markets for alcohol, tobacco and medicines. In these free and profit directed markets there is persuasive advertising, massive violations of youth protection laws, dumping prices and teaser offers, massive political influence through lobbying, playing down of the consequences of consumption for the individual and society, not to mention market and price control through oligopolies.

All this precludes the ideal of an emancipatory and scientifically founded drug policy with the goal of self-determined drug use. Besides the hope of a strongly regulated market, which would undoubtedly be better than an illegal one and in relation

to medicines and food is not so bad, there is the possibility of nationalisation or a third way for the drug market.

As a counter-pole to a still liberal solution, as described under scenario 6, here a conception of specialist cannabis shops as non-profit-oriented public organisations and consumer cooperatives far from the market – and perhaps also the state – will be described. Scandinavian alcohol policy can serve as a model for a state drug market. In Sweden, despite the compulsory liberalisation of production, import and export, as well as distribution due to EU accession, retailing of alcohol lies mostly in the hands of the state. The state Systembolaget monopoly¹⁵⁵ is well designed to eliminate the many disadvantages of the market, although, at the same time, because of its difference from the market and thus its distance from the needs of consumers it is unpopular among consumers and, despite its monopoly, its market share is only 30 per cent due to foreign imports, smuggling and home distilling. On a positive note, according to an ECJ judgment the Systembolaget monopoly is in accordance with EU law, a legal opinion that is consistent with the coffeeshop judgment. Here Advocate General Bot also pointed out that "cannabis is not just any good and its sale does not fall under the freedoms of movement guaranteed by EU law". Also speaking against state drug retailing is the fact that it would be a playground for control freaks of every variety who would try to educate people to become better, using chip cards and so on. In general, we can say that drug taxes would have a corrupting influence on the drug policy of the state, which, on one hand, would like to maximise direct revenues for the budget, and on the other hand should protect health. A third way in the drug economy besides a (free) market and state monopoly, which tries to bring together the advantages of both systems, would also be conceivable. Specialist drug shops as non-profit oriented organisations under public law, together with consumer cooperatives on the model of cannabis social clubs, could represent such a way. 156

SCENARIO 7: DECLASSIFICATION/REGULATION AS IN THE CASE OF ALCOHOL AND TOBACCO

The discussion on sensible regulation of the market for cannabis also invites us to rethink our existing model for dealing with alcohol and tobacco. In relation to these two substances we know fairly well, based on the wide variety of policies worldwide,

¹⁵⁵ http://www.systembolaget.se/English/

¹⁵⁶ http://www.alternative-drogenpolitik.de/2011/07/18/der-dritte-weg-in-der-drogenokonomie/

what would help; there is much in favour of the proposals described in scenarios 5 and 6. Thus the DHS's 2008 alcohol action plan calls for: 158

- ♦ Uniform tax rates for alcohol of 15 euros per litre;
- Adaptation of the tax rate to changes in the cost of living. Alcohol should not be cheaper in comparison to other consumer goods;
- ♦ The sale and serving of alcohol must be licensed;
- Introduction of a general prohibition of alcohol advertising;
- The density of sales outlets should be reduced by a limit on the number of licenses.

The need for action with regard to alcohol is clear¹⁵⁹ and not only with regard to young people. Thus every second euro spent on alcohol comes from someone with

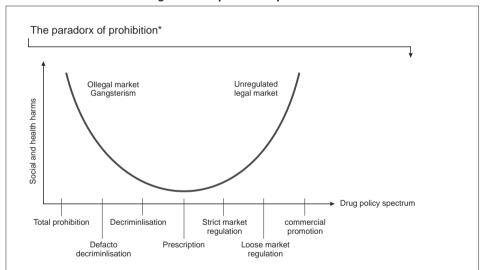


Figure 4. The paradox of prohibition

Source: http://www.tdpf.org.uk/tools-for-debate.htm

¹⁵⁷ http://www.n-tv.de/wissen/Lizensierter-Alkoholhandel-article218397.html

¹⁵⁸ http://www.dhs.de/fileadmin/user_upload/pdf/dhs_stellungnahmen/aktionsplan_alkohol_der_dhs_2008final_din.pd

¹⁵⁹ http://www.dhs.de/fileadmin/user_upload/pdf/news/2013-04-02_PM_Alkohol.pdf http://www.dhs.de/start/startmeldung-single/article/aktionswoche-alkohol-vom-25-mai-bis-2-juni-2013-pressemeldung-kopie-1.html

a problematic or addictive pattern of consumption.¹⁶⁰ Nevertheless, the negative effects of too much freedom are always less than the consequences of a black market, as alcohol prohibition showed.

The establishment of a regulated market for cannabis and simultaneous tightening up of the regulations on alcohol and tobacco in accordance with the same objective measures is not a contradiction, but rather the expression of a coherent policy.

Policy Option A: Academic Pilot Scheme on the Controlled Distribution of Cannabis Products

Beyond the seven scenarios for legislative reform described above a pilot scheme in accordance with §3 (2) BtMG to test the effects of legal sale of cannabis would probably be the most obvious and realistic policy option. Similar to the heroin pilot scheme such a pilot scheme would not primarily serve the purpose of acquiring new knowledge but the development of a – in the full sense of the word – tangible and vivid model that would show politicians, journalists and the general public how it could work.

The proposal of the state of Schleswig-Holstein of 10 February 1997 is to be considered in the wake of the judgment (BVerfGE 90, 145 (183)) of 1994: "The crime policy discussion on whether a reduction of cannabis consumption and a separation of drug markets could be achieved through the general preventive effect of penal law or through the declassification of cannabis has not yet been concluded. Scientifically based knowledge that would decisively favour one or the other way is not available." ¹⁶¹

The state of Schleswig-Holstein wanted to close these knowledge gaps with its pilot scheme. The proposal to the BfArm¹⁶² states: "The aim of the model project is to examine to what extent the general preventive effects aimed for by the comprehensive prohibition of trafficking with cannabis (marijuana) and cannabis resin (hashish) in accordance with Annex I of the BtMG in relation to the consumption of illegal drugs can be achieved equally well or better through the controlled distribution of cannabis and a separation of drug markets that would be the expected result of that."

¹⁶⁰ http://www.alternative-drogenpolitik.de/2012/05/26/jeder-zweite-euro-der-fur-alkohol-ausgegeben-wird-stammt-von-einemmenschen-mit-problematischem-konsumverhalten/

¹⁶¹ http://www.servat.unibe.ch/dfr/bv090145.html

¹⁶² www.drogenpolitik.org/download/sh/Antrag_SH.pdf

The idea was realised by means of the proposal "New Ways in Drug Policy I – Pilot Scheme Controlled Distribution of Cannabis Products" made by Bündnis 90/ Die Grünen on 2 September 2003 in Berlin:¹⁶³

The Senate is asked.

- 1. in cooperation with Berlin or other universities and research institutions to develop a pilot scheme Controlled distribution of cannabis products in licensed premises in Berlin to acquire scientific knowledge, among other things on:
 - The effects of cannabis consumption as an entry drug;
 - The separation of narcotics markets, in particular with regard to designer drugs;
 - Price development, consumption patterns and sales markets;
 - Revenue expectations of the state of Berlin from the taxation of the sale of cannabis products;
 - The influence of cannabis consumption on performance in light of dominant consumption habits in Berlin;
 - The use of cannabis products for medical purposes, in particular for pain relief.

The effects would probably be similar to those of scenario 5 "Strict regulation and licensing". 164

Sponsors other than federal states could also launch new pilot schemes. Cities such as Zurich or Copenhagen are also trying to take this path. 165

Policy Option B: Cannabis as a Medicine

Besides new regulations for recreational consumers of cannabis the availability of cannabis as a medicine should also be promoted. The problems here have long been known: cannabis is practically unavailable or too expensive; consumers suffer from prosecution and self-cultivation is not possible. 166

¹⁶³ http://www.akzept.org/dascannabisforum/download/Kontrollierte%20Abgabe.pdf

¹⁶⁴ http://www.cannabislegal.de/politik/be-040108.htm

¹⁶⁵ http://cphpost.dk/news/local/legal-cannabis-rejected-government

http://www.nzz.ch/aktuell/zuerich/stadt_region/schritte-zur-legalisierung-von-cannabis-1.17930764

http://cphpost.dk/local/copenhagen-looking-import-cannabis-us

¹⁶⁶ http://www.bundestag.de/bundestag/ausschuesse17/a14/anhoerungen/Archiv/u_cannabis/Stellungnahmen/index.html

Besides the effects for the patients concerned (0.1–1 per cent of the population could benefit: see Grotenhermen 2013) steps made in this area also contribute to normalising dealings with cannabis. In this area there is general agreement among the population, 167 but despite the need for action politicians are virtually inactive. 168

Further Need for Action

Besides the repressive-prohibitive drug market control policy there are other areas in which the users of illegal drugs are discriminated against in comparison to the consumers of alcohol and tobacco, namely being punished more harshly or having fewer rights than is justified with regard to other criminal acts and the consequences of consumption. Our presentation here will be limited to the areas of licensing law, labour law, support provisions and stigmatisation.

First, let us look at the licensing problem. 169 Wurth (Bundestag, 2012a) states that: "In my view, discrimination against sober cannabis users in road traffic is massive and systematic. Every year thousands of people are hit by fines, "medical and psychological assessments" (MPU) and loss of driving license, although they do not drive under the influence."

Instead of traffic safety, licensing law is used as a substitute criminal law against drug users. ¹⁷⁰ Anyone who is positively intoxicated due to the consumption of drugs - whether it be alcohol, cannabis or another substance - and thus whose ability to drive is hampered must count on legal consequences with regard to their license if they are checked or in case of an accident.

¹⁶⁷ http://www.pharmazeutische-zeitung.de/index.php?id=34885

¹⁶⁸ http://hanfverband.de/index.php/nachrichten/aktuelles/1322-bundesregierung-qlegalisiertq-cannabis-als-medizin-wahrheit-unddichtung

¹⁶⁹ http://hanfverband.de/index.php/themen/drogenpolitik-a-legalisierung/1877-georg-wurth-beider-anhoerung-qlegalisierung-voncannabis-durch-einfuehrung-von-cannabis-clubsq

http://hanfverband.de/index.php/themen/konsumentenhilfe/1000-verkehrssicherheit-unddrogenkonsum

http://linkedrogenpolitik.twoday.net/stories/2509066/

http://www.bundesverfassungsgericht.de/entscheidungen/rk20041221_1bvr265203.html

¹⁷⁰ http://www.cannabislegal.de/recht/fs-hettenbach.htm

http://www.frank-tempel.de/lesen/items/krieg-gegen-die-drogen-wird-willkuerlich-im-verkehrsrecht-weitergefuehrt.html

Further examples of unequal treatment of users of legal drugs and of illegalised drugs are to be found in labour law. Here consumption or narcotics offences lead to terminations or de facto bans on working in the public service, the police or the army. Doctors' licenses to practice medicine can also be taken away.

Medical and social support are sometimes tied to constraints in relation to the users of illegalised drugs and addicts, which would be unthinkable in the case of other chronic illnesses, such as diabetes.

Support provisions may not be taken up due to self-stigmatisation or by others.

The phenomena described here are sometimes covered by legislation and legal practice, others owing to social reality.

Finally, we should mention the negative effects due to restrictions on industrial hemp and medical use of cannabis and other substances, although they shall not be further elaborated.

EFFECTS ON THE OTHER PILLARS OF DRUG POLICY

Besides the control of drug consumption and dealing themselves, necessary reforms and reciprocal effects with the other pillars should be considered. Another form of prevention, therapy and harm reduction will be necessary and possible when the straightjacket of repression is removed.

On one hand, this drug work will be put on a realistic basis.¹⁷¹ In contrast to the current dogma of abstinence with regard to illegal drugs an acceptance- and problem-oriented approach could be brought to bear. The goal of this work would no longer be exclusively abstinence, but a controlled consumption through safer drug use.¹⁷² In the area of prevention the opinion of the Drug and Addiction Commission on improving addiction prevention¹⁷³ could provide a basis for this.

By redistributing resources from repression to prevention funding at the requisite level could at last be possible. The Deutsche Hauptstelle für Suchtfragen (DHS

¹⁷¹ http://www.suchtmagazin.ch/tl_files/templates/Suchtmagazin/user_upload/texte_old/text3-04. html

¹⁷² http://www.psychologie-aktuell.com/news/aktuelle-news-psychologie/news-lesen/article/2011/11/14/1321256586-suchtpraevention-mit-drogen-toleranz-soziologin-fordert-von-der-paedagogik-erziehung-zur-d.html

¹⁷³ http://hanfverband.de/download/themen/stellungnahme_der_drogen-_und_suchtkommission_ zur_verbesserung_der_suchtpraevention.pdf

	SCENARIO	APPROACH	ADVANTAGES	DISADVANTAGES
0	Pseudo reforms	Standardisation of "a small amount"	Slightly less repression of users	No improvement in access to users
1	Depenalisation	No longer a criminal offence	Less	No improvement in access to users
2	Decriminalisation	End of liability to punishment	No repression of users	
3	Partial legalisation	Creation of quasi-legal sales possibilities	Weakening of the black mar- ket	No improvement in access to users
4	Self-cultivation	Legalisation of self-cultiva- tion	Weakening of the black mar- ket, better quality, youth protection	No improvement in access to users
5	Regulated market	Creation of a market for adults	Massive weakening of the black market, assured quality, youth protection	
5A	Regulated supply	Without market logic	Massive weakening of the black market, assured qual- ity, stricter youth protection	State market intervention
6	Like alcohol and tobacco	Liberal market, as in the case of alcohol and tobacco	Massive weakening of the black market, assured quality	Advertising, commercialisation
A	Model project	Pilot scheme to test regulatory scenarios	Optimal planning, organisation and evaluation possible	Not a final solution
В	Cannabis as medicine	Make it available to all patients	Clearly defined category of people, control by doctors	Only a small portion of those concerned

Table 8. Scenarios at a Glance

– German Centre for Addiction Issues) is calling for a massive increase in spending from 30 million euros a year to 1 billion euros a year.¹⁷⁴ This corresponds to a quarter of spending on the repression of illegal drugs and is far less than the estimates of the DHV on the financial effects of cannabis legalisation.

Due to drug prohibition and the abstinence dogma the drug issue has become taboo and subject to moralisation with regard to the state and labour law (doctors, teachers, police officers, drug counsellors) or social-normative (parents, dependents). Users, in particular especially vulnerable groups such as children and young people, are forced to lie about their drug use and to keep it secret. With regard to drug-specific and drug-related problems (overdoses, addiction, psychoses, HIV infections, injuries to self or others while high) help is not taken advantage of. In contrast to such issues as sexuality or violence there is no exchange of experiences, no passing on of information or, generally, the otherwise obligatory monitoring by parents, teachers or even peers with regard to drugs. Thus there arises a gap between prevention

¹⁷⁴ http://www.derwesten.de/politik/eine-milliarde-euro-gegen-die-sucht-id7310334.html

and therapy. This set of problems would also be resolved through a different legal approach to drugs such as cannabis.

RECOMMENDATIONS FOR ACTION

Besides the question of what could and should be done the entirely practical question arises of "how can this be achieved?" with regard to the dogged and reform-resistant drug policy in Germany. Given the polarisation that characterises this issue it is necessary to build bridges, despite or even because of the massive differences. Each faction must have the opportunity to admit to mistakes without losing face. This requires, as already mentioned, flexible solutions in order to do justice to the pluralism of the situation.

On the theoretical level well prepared regulation of, for example, the cannabis market would be a coherent model. In practice, there is no policy from a single source. A gradual approach is recommended with constant evaluation of new policy in order to recognise possible undesirable developments and unintended (negative) side-effects and reciprocal consequences and perhaps to be able to counteract them.

The decriminalisation of the users of all drugs is here a possible, sober and long overdue step. In parallel with this cannabis as a medicine, easily accessible heroin treatment for addicts and pilot schemes, such as legal distribution of cannabis, can be tried. These approaches all have the advantage of conforming with international agreements. A solid accompanying scientific evaluation could then provide the basis for reform of the treaties at international level or for dealing with them single-handedly. Scientific grounding of drug policy is absolutely necessary, accompanied by an advisory board, a commission of inquiry¹⁷⁵ or a re-established government drug and addiction commission.

LITERATURE

Auf Dem Hövel, Jörg. 2012. "Das normalisierte Drogenparadies am Ende Europas". In R. Gerlach y H. Stöver (comp.). *Entkriminalisierung von Drogenkonsumenten – Legalisierung von Drogen*. Fachhochschulverlag. Frankfurt am Main.

———. 2008. Pillen für den besseren Menschen. Wie Psychopharmaka, Drogen und Biotechnologie den Menschen der Zukunft formen. Verlag Heinz Heise.

¹⁷⁵ http://www.jura.uni-augsburg.de/fakultaet/lehrstuehle/rosenau/download/entwuerfe_resolutionen/00-00-ResolutionBTEnqKomm.pdf

http://www.schildower-kreis.de/themen/pressemitteilung-2009-11-24.html

- BARATTA, A. 1990. "Rationale Drogenpolitik? Die soziologischen Dimensionen eines strafrechtlichen Verbots". Kriminologisches Journal, 1.
- Belaunzáran, F. 2013. Statement auf der International Expert Conference "Being tough is not enough – Curbing transnational organized crime". Berlin, 28.2. 2013.
- BKA Bundeskriminalamt. 2002 + 2011. Bundeslagebild Rauschgift 2002 und 2011. http://www.bka.de/DE/ThemenABisZ/Deliktsbereiche/Rauschgiftkriminalitaet/ Lagebilder/lagebilder__node.html?__nnn=true
- —. 2011. Polizeiliche Kriminalstatistik 2011. http://www.bka.de/nn 205960/ DE/Publikationen/PolizeilicheKriminalstatistik/pks__node.html?__nnn=true
- BÜHRING, P. 2006. Heroinbehandlung von Opiatabhängigen: Die letzte Chance. http://mobile.aerzteblatt.de/print/53503.htm
- Bundesamt für Gesundheit, Subkommission Drogenfragen der Eidgenös-SISCHEN BETÄUBUNGSMITTELKOMMISSION. 1991. Drogenpolitische Szenarien. Eigenverlag. http://www.eve-rave.net/abfahrer/berichte.sp?text=5&page=0
- BZGA/DIFU. 2002. Vorbildliche Strategien kommunale Suchtprävention. Dokumentation. Berlin. http://edoc.difu.de/edoc.php?id=QS1HUZ4R
- DBDD. 2012. Bericht 2012 des nationalen REITOX-Knotenpunktes an die EBDD. Deutschland. Neue Entwicklungen, Trends und Hintergrundinformationen zu Schwerpunktthemen. Drogensituation 2011/2012. IFT. Múnich http://www.dbdd.de/images/2012/ar_2012_de.pdf
- Declaración Conjunta sobre Crimen Organizado y Narcotráfico. 2011. XIII Cumbre de jefes de estado y de gobierno del Mecanismo de diálogo y concertación de Tuxtla. Mérida, Yucatán. 5 de noviembre de 2011. http://saladeprensa. sre.gob.mx/index.php/es/comunicados/912-sre. (letzter Zugriff: 15.02.2012.)
- DETTMAR, K., B. SAUNDERS, J. STRANG. 2001. "Take home naloxone and the prevention of deaths from opiate overdose: Two pilot schemes". BMJ. 322 (7291).
- Deutsche aids-Hilfe; akzept e.V. 2011. Drogenkonsumräume in Deutschland -Eine Bestandsaufnahme des AK Konsumraum. www.akzept.org
- Deutscher Bundestag. 2012a. Protokoll. http://www.bundestag.de/bundestag/ ausschuesse17/a14/anhoerungen/Archiv/p_Cannabis/062_25_01_2012_Cannabis-Clubs.pdf Offentliche Anhörung zum Antrag der Abgeordneten Frank Tempel, Dr. Martina Bunge, Jan Korte, weiterer Abgeordneter und der Fraktion DIE LINKE. "Legalisierung von Cannabis durch Einführung von Cannabis-Clubs", BT-Drucksache 17/7196.

- ———. 2012b. Protokoll. http://www.bundestag.de/bundestag/ausschuesse17/a14/anhoerungen/Archiv/u_cannabis/075_09_05_12_Zugang_med__Cannabis.pdf Öffentliche Anhörung zum Antrag der Abgeordneten Dr. Harald Terpe, Birgitt Bender, Maria Klein-Schmeink, weiterer Abgeordneter und der Fraktion BÜNDNIS 90/DIE GRÜNEN "Zugang zu medizinischem Cannabis für alle betroffenen Patientinnen und Patienten ermöglichen", BT-Drucksache 17/6127.
- ———. 2011. Protokoll. http://www.bundestag.de/bundestag/ausschuesse17/a14/an-hoerungen/Archiv/k_Drugchecking/050_28_09_11_Drugchecking.pdf Öffentliche Anhörung zum Antrag der Abgeordneten Dr. Harald Terpe, Birgitt Bender, Katrin Göring-Eckardt, weiterer Abgeordneter und der Fraktion BÜNDNIS 90/DIE GRÜNEN "Gesundheitliche Risiken des Drogengebrauchs verringern Drugchecking ermöglichen", BT-Drucksache 17/2050.
- DOLDE, G. 2002. "Therapie in Untersuchungs- und Strafhaft". In R. Gassmann (Hrsg.). Suchtprobleme hinter Mauern. Lambertus. Freiburg.
- Domosławski, A. 2011. *Drug Policy in Portugal: The Benefits of Decriminalizing Drug Use*. Open Society Foundations. Warsaw http://www.opensocietyfoundations.org/sites/default/files/drug-policy-in-portugal-english-20120814.pdf
- Dreifuss, R., L. Grossmann. 2012. In *Drogenpolitik als Gesellschaftspolitik*. Seismo Verlag.
- EMCDDA. 2012. Annual report on the state of the drugs problem in Europe. Lisbon.
- EU-KOMMISSION. 2005. Bericht der EU-Kommission über die Bewertung der Wirksamkeit des Beschlusses 2005/387/JI des Rates betreffend den Informationsaustausch, die Risikobewertung und die Kontrolle bei neuen psychoaktiven Substanzen. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011DC0430:DE:NOT
- Eul., J., H. Stöver. 2012. "Gebrauch und vergleichende Bewertung von Cannabis in der deutschen Bevölkerung". *Suchttherapie*, 13. 4 November 2012. https://www.thieme-connect.de/ejournals/pdf/10.1055/s-0032-1311599.pdf
- ——. 2011. Gebrauch und Bewertung von Cannabis und anderen Drogen bei der Bevölkerung in Deutschland. Ergebnisse von zwei Emnid-Umfragen sowie einer Internet-Befragung. Teil 1: Konturen 32, 5/2011, p. 34-40; Teil 2: Konturen 33, 1/2012, p. 36-43. Georg Thieme Verlag KG. Stuttgart und New York.
- Flöter, Pfeiffer-Gerschel. 2012. "Ökonomische Auswirkungen der Prohibition" In R. Gerlach/H. Stöver (eds.). *Entkriminalisierung von Drogenkonsumenten Legalisierung von Drogen*. Fachhochschulverlag. Frankfurt am Main.

- Gallahue, P. 2011. The Death Penalty for Drug Offences Global Overview 2011. Harm Reduction International. London.
- GERLACH, R., H. STÖVER. 2012. "Gesundheitliche und soziale Auswirkungen der Prohibition". In R. Gerlach, H. Stöver (ed.). Entkriminalisierung von Drogenkonsumenten – Legalisierung von Drogen. Fachhochschulverlag. Frankfurt am Main.
- GLOBAL COMMISSION ON DRUG POLICY. 2011. War on Drugs. Report of the Global Commission on Drug Policy. www.globalcommissionondrugs.org/Report. Last accessed 15.02.2012.
- GROTENHERMEN/DR. KURT BLAAS, MEDIZINER, VORSITZENDER DER ARGE CAM (Cannabis als Medizin), Vienna.
- GROTENHERMEN, FRANJO. 2013. "Der Stand der medizinischen Verwendung von Cannabis und Cannabinoiden in Deutschland". 15 March 2013. Unpubished.
- GUTSCH, J.-M., J. MORENO. 2013. "Our Right to Poison: Lessons from the Failed War on Drugs". Der Spiegel. 22.2.2013. http://www.spiegel.de/international/world/ global-support-grows-for-legalizing-drugs-a-884750.html
- HARDING, W. M. 1981. "Kontrollierter Heroin-Genuß". In G. Völger (ed.). Rauch und Realität. Rowohlt. Reinbeck.
- HARTWIG, K.-H., I. PIES. 1995. Rationale Drogenpolitik in der Demokratie. J. C. B. Mohr. Tübingen.
- 1992. "Plädoyer für eine rationale Drogenpolitik. Ein Beitrag zur ökonomischen Aufklärung". In J. Neumeyer, G. Schaich-Walch (eds.). Zwischen Legalisierung un Noramlisierung: Ausstiegszenarien aus der Repressiven Drogenpolitik. Marburg.
- Hess, H. 2013. "Welche Konsequenzen könnte eine Legalisierung haben?" In R. Gerlach, H. Stöver (eds.). Entkriminalisierung von Drogenkonsumenten – Legalisierung von Drogen. Fachhochschulverlag. Frankfurt am Main.
- Heufelder, J.E. 2011. *Drogenkorridor Mexiko*. Transit Buchverlag. Berlin.
- Hibell, B. et al. 2012. The 2011 ESPAD Report. Substance Use Among Students in 36 European Countries Stockholm. http://www.espad.org/Uploads/ESPAD_reports/2011/ The_2011_ESPAD_Report_FULL_2012_10_29.pdf
- HOLZER, T. 2012. "Geschichte der Prohibition". In R. Gerlach, H. Stöver (eds.). Entkriminalisierung von Drogenkonsumenten – Legalisierung von Drogen. Fachhochschulverlag. Frankfurt am Main.

- HÖSSELBARTH, S., H. STÖVER, I. VOGT. 2011. "Lebensweise und Gesundheitsförderung älterer Drogenabhängiger im Rhein-Main-Gebiet". In I. Vogt (ed.). *Auch Süchtige altern. Probleme und Versorgung älterer Drogenabhängiger*. Fachhochschulverlag. Frankfurt.
- Jakob, J., H. Stöver, T. Pfeiffer-Gerschel. 2013. "Suchtbezogene Gesundheitsversorgung von Inhaftierten in Deutschland Eine Bestandsaufnahme". In *SUCHT Zeitschrift für Wissenschaft und Praxis / Journal of Addiction Research and Practice*, 59 (1).
- Kalke, J. 2005. "Mehr Macht den Ländern. Die Übermacht des Bundes ist für viele ungelöste Fragen der Drogenpolitik verantwortlich". *Das Parlament*, 55.
- Keppler, K., B. Knorr, H. Stöver. 2011. "Substitutionsbehandlung in Haft". In I. Hönekopp, H. Stöver (comp.). *Beispiele Guter Praxis in der Substitutionsbehandlung*. Lambertus. Freiburg.
- KISTMACHER, R. 2012. "Drogenpolitik und Drogenhilfe in Spanien". In R. Gerlach, H. Stöver (eds.). *Entkriminalisierung von Drogenkonsumenten Legalisierung von Drogen*. Fachhochschulverlag. Frankfurt am Main.
- KLEIBER, D., R. SOELLNER. 1998. Cannabis-Konsum. Juventa-Verlag. Weinheim.
- Kolte, B., H. Schmidt-Semisch, H. Stöver. 2006. Was tun, wenn Cannabis zum Problem wird? Fachhochschulverlag. Frankfurt am Main.
- Kreuzer A., R. Römer-Klees, H. Schneider. 1991. *Beschaffungskriminalität Drogenabhängiger*. Band 24 der BKA-Forschungsreihe.
- KRUMDIEK, N. 2012. "Rechtliche Folgen der Prohibition". In R. Gerlach, H. Stöver (eds.). *Entkriminalisierung von Drogenkonsumenten Legalisierung von Drogen.* Fachhochschulverlag. Frankfurt am Main.
- ——. 2006. Die national- und internationalrechtliche Grundlage der Cannabisprohibition in Deutschland. Lit Verlag. Münster.
- Kubicki, W. 2012. "Wortbeiträge in der ZDF-Sendung "Markus Lanz". 1.03.2012. http://www.zdf.de/zdfmediathek/beitrag/video/1582068/Markus-Lanz-vom-1.-Maerz-2012#/beitrag/video/1582068/Markus-Lanz-vom-1.-Maerz-2012
- LESSMANN, R. 2012. Politik der verbrannten Erde. "Der War on Drugs ist gescheitert und geht dennoch weiter". *Informationszentrum*. iz3w. 328.
- LIEB, KLAUS. 2010. Hirndoping: Warum wir nicht alles schlucken sollten. Artemis & Winkler, Mannheim.
- LINGENS, P. M. 2011. Drogenkrieg ohne/mit Ausweg. Kremayr & Scheriau. Vienna.

- LÖHR, T. 2007. "Späte Erkenntnis: Brechmitteleinsätze sind menschenrechtswidrig". In *Grundrechte-Report 2007*.
- NUTT, D. J. 2012. Drugs Without the Hot Air: Minimising the Harms of Legal and Illegal Drugs. UIT. Cambridge.
- NUTT, D. J. et al. 2007. "Development of a rational scale to assess the harm of drugs of potential misuse". *Lancet*, 369 (9566). DOI: 10.1016/S0140-6736(07)60464-4. PMID 17382831.
- NUTT, D. J., L. A. KING, L. D. PHILLIPS. INDEPENDENT SCIENTIFIC COMMITTEE ON DRUGS. 2010. "Drug harms in the UK: a multicriteria decision analysis". Lancet, 376 (9752). DOI:10.1016/S0140-6736(10)61462-6. PMID 21036393.
- Maihold, G., D. Brombacher. 2013. Gewalt, Organisierte Kriminalität und Staat in Lateinamerika. Verlag Barbara Budrich. Leverkusen/Berlin.
- Meessen-Hühne, H. 2012. "Thesen zur Prävention illegaler Drogen: Was ist möglich, wünschenswert und legitim?". Vortrag auf 52. DHS-Fachkonferenz: Die vier Säulen der Suchthilfe und Suchtpolitik auf dem Prüfstand. Forum 102. Leipzig, 21.11.2012. http://www.dhs.de/fileadmin/user_upload/ pdf/Veranstaltungen/Fachkonferenz_2012/DHS_FK_WS_Forum102_Meessen-Huehne_2012_%C3%B6.pdf
- Mostardt, S., S. Flöter, T. Pfeiffer-Gerschel, A. Neumann, J. Wasem. 2009. "Schätzung der Ausgaben der öffentlichen Hand durch den Konsum illegaler Drogen in Deutschland". Gesundheitswesen, 71 (8-9). DOI: 10.1055/s-0029-1239240.
- Müller O., B. Werse, C. Schell. 2011. MoSyD Szenestudie. Die offene Drogenszene in Frankfurt am Main 2010. Centre for Drug Research, Goethe-Universität Frankfurt. Frankfurt am Main.
- POLAK, F. 2012. "Two fronts of the fight to abolish drug prohibition". In R. Gerlach, y H. Stöver (eds.). Entkriminalisierung von Drogenkonsumenten – Legalisierung von Drogen. Fachhochschulverlag. Frankfurt am Main.
- Poschadel, Sebastian et al. 2003. Evaluation der Arbeit der Drogenkonsumräume in der Bundesrepublik Deutschland. Endbericht im Auftrag des Bundesministeriums für Gesundheit. Nomos. Baden-Baden.
- RADIMECKY, J. 2012. "Marijuana Somersaults in the Czech Basin of Drug Politics". Entkriminalisierung von Drogenkonsumenten – Legalisierung von Drogen. Fachhochschulverlag. Frankfurt am Main.

- REUBAND, K.-H. 2004. "Legalisierung oder Repression als Mittel der Drogenprävention? Variationen der Drogenpolitik in Westeuropa und ihre Effekte". In Deutsche Hauptstelle gegen die Suchtge-fahren und R. Gaßmann (eds.). *Can*nabis - Neue Beiträge zu einer alten Diskussion. Lambertus Verlag. Freiburg.
- REUTER, P., F. TRAUTMANN. 2009. A Report on Global Illicit Drugs Markets 1998-2007. European Commission. Brussels.
- ROBERT-KOCH INSTITUT. 2012. Epidemiologisches Bulletin, 28.
- Schäfer, C., L. Paoli. 2006. *Drogenkonsum und Strafverfolgungspraxis*. Duncker & Humblot Verlag. Berlin.
- Schippers, G. M., E. Cramer. 2002. "Kontrollierter Gebrauch von Heroin und Kokain". *Suchttherapie*, 3. https://www.gk-quest.de/download/pdf/kiss_Schipper_Cramer.pdf
- Schmidbauer, W., J. vom Scheidt. 1997. *Handbuch der Rauschdrogen*. Fischer Taschenbuch Verlag. Frankfurt am Main.
- Schmidt-Semisch, H. 2002. In *Drogenpraxis Drogenrecht Drogenpolitik*. Fachhochschulverlag.
- Schmidt-Semisch, H., H. Stöver. 2012. "Harm Reduction und Alkohol Zur Einführung". In H. Schmidt-Semisch y H. Stöver. (eds.). Saufen mit Sinn? Harm Reduction beim Alkoholkonsum. Fachhochschulverlag. Francfurt am Main.
- Schmolke, R., H. Stöver, T. Harrach. 2012. "Drug Checking in der Diskussion Eine Bestandsaufnahme der Situation in Deutschland und Europa". *Konturen*, 33. 2/2012.
- SELL, S. 2012. "Legalisierung aus wirtschaftswissenschaftlicher Sicht". In R. Gerlach,
 H. Stöver (eds.). Entkriminalisierung von Drogenkonsumenten Legalisierung von Drogen. Fachhochschulverlag. Frankfurt am Main.
- SIEGERT, T. 2011. Mexiko im Drogenkrieg: Akteure und Strukturen. AVM. München.
- Sorgalla, H., H. Stöver. 2005. Emetika als Instrument zur Beweissicherung bei Verdacht auf Drogenhandel/-besitz Praxis, Risiken und Alternativen einer umstrittenen Politik. Eine Dokumentation. BISDRO-Universität Bremen. Bremen.
- STOLZENBERG, K. 2012. "Repression: Die "ungeliebte" vierte Säule. Strategien der Ermittlung von Drogendelikten: Ziele und Effekte". KPI-Dezernat 2, Polizeidirektion Leipzig, Polizei Sachsen. http://www.dhs.de/fileadmin/user_upload/pdf/Veranstaltungen/Fachkonferenz_2012/Vortrag_Katja_Stolzenberg.pdf

- STÖVER, H. 2012. "Drogenabhängige in Haft Epidemiologie, Prävention und Behandlung in Totalen Institutionen". Suchttherapie, 13 (2). DOI: 10.1055/s-0032-1311600.
- Stöver, H., R. Gerlach, R. 2012. "Gesundheitliche und soziale Auswirkungen der Prohibition". In R. Gerlach y H. Stöver (eds.). Entkriminalisierung von Drogenkonsumenten – Legalisierung von Drogen. Fachhochschulverlag. Frankfurt am Main.
- Trautmann, F. 2010. "Internationale Drogenpolitik weltweiter Drogenmarkt". Suchtmagazin Ig., 6.
- Verthein, Uwe, Eike Neumann, Sven Buth, Marcus-Sebastian Martens. 2010. Ambulante Suchthilfe in Hamburg. Statusbericht 2009 der Hamburger Basisdokumentation. Zentrum für Interdisziplinäre Suchtforschung der Universität Hamburg (ZIS). Hamburg.
- Weber, J. 2011. Der War on Drugs in der Andenregion: Weshalb die Drogenpolitik der USA gescheitert ist. Grin Verlag. München.
- Werse, B., C. Morgenstern. 2012. "Legalisierung über das Internet Legal Highs als Herausforderung für das System der Drogenprohibition". In R. Gerlach y H. Stöver (eds.). Entkriminalisierung von Drogenkonsumenten – Legalisierung von Drogen. Fachhochschulverlag. Frankfurt am Main.
- Werse, Bernd, Oliver Müller. 2009. "Spice, Smoke, Sence & Co. Cannabinoidhaltige Räuchermischungen: Konsum und Konsummotivation vor dem Hintergrund sich wandelnder Gesetzgebung". Centre for Drug Research.
- Werse, B., C. Bernard, C. Schell. 2012. Jahresbericht MoSyD. Drogentrends in Frankfurt am Main 2011. Unter Mitarbeit von C. Morgenstern. Centre for Drug Research, Goethe-Universität. Francfurt.
- Wurth G., S. Geyer. 2008. Rauschzeichen: Cannabis: Alles, was man wissen muss. Ki-Wi-Paperback. Köln.
- Zurhold, H. 2005. Drogenprostitution zwischen Armut, Zwang und Illegalität. Sexarbeit. Prostitution - Lebenswelten und Mythen. E. v. Dücker and Museum der Arbeit. Edition Temmen. Bremen.

Annex 1

Public policy scenarios, differentiated by type of illicit drug:

HARD AND SOFT

SCENARIO	PRODUCTION	WHOLESALE	RETAIL SALE	CONSUMPTION
Status quo				
	Prohibited, criminal- ized, repressed by force	Prohibited, criminalized	Prohibited, crimi- nalized	Prohibited, criminalized
	Mandatory alternative development		Prohibited, decriminalized	Minimum dose decriminalized/de- penalized
Variations			Community service	Treatment/community service
Vai		Income: organized crime, margin mainly from trade, low in- come from production and retail sales		
	Current example: al- most all illicit drugs			
Regulation				I
Strict (hard drugs)	Regulated, registered and controlled production (an alternative is state monopoly) to regulate demand, all additional production remains prohibited, criminalized and repressed (Differentiated alternative development)	Regulated, registered and controlled trade (an alternative is state monopoly) to regulate demand, all additional production remains prohibited, criminal- ized and repressed	As above and whole-sale	Regulated, registered and controlled consumption of minimum dose, registration and treatment of addicts
Strict ()	Current example: opioid medications, Uruguay's proposal for marijuana	High and prohibitive taxes, with the exception of addicts in treatment, significant level of smuggling		

SCENARIO	PRODUCTION	WHOLESALE	RETAIL SALE	CONSUMPTION
	Regulated, registered	Regulated, registered	As in wholesale trade	Regulated, regis-
	and controlled, but	and controlled trade		tered and controlled
	competitive, produc-			consumption for
	tion, smuggling (pro-			personal use, with
	hibited, sanctioned			restrictions regard-
(8,	and repressed tax eva-			ing age of users,
lrug	sion and avoidance of			handling of the
tt d	quality controls)			substance and place
Open (soft drugs)				of consumption
pen		High taxes to maxi-		
		mize collection, smug-		
		gling		
	Current example:			
	marijuana for medical			
	use in California and			
	other US states			
Liberalizati	ion			
	Free	Free	Free or specialist	Free use, but with
			shops	restrictions regard-
				ing age of users and
_				place of consump-
Regulated				tion
gul		High taxes without		
%		maximizing collection,		
		increased taxes lead to		
		increased smuggling		
	Current example: alco-			
	hol and tobacco			
	Free	Free	Free	Free
		No special taxes		
I		no, or low-level		
93				
Free		smuggling		
Free	Current example: tea	smuggling		

Annex 2 LEGISLATION ON DRUGS IN LATIN AMERICA

COUNTRY	LAW	PURPOSE	COMMENTS
Bolivia	Law 1008 of 19 July 1988.	Law on the regime applicable to coca and controlled substances.	Allows coca leaf production, subject to certain limitations regarding the area of cultivation and the volume produced. Supports reclaiming coca leaf for cultural and social uses, as well as its industrialization. "Drug-dependent persons or non-habitual consumers apprehended in the possession of controlled substances in minimal quantities that are presumed to be intended for their own immediate personal consumption shall be detained in a public or private institution for drug-dependence to receive treatment until such time as certainty regarding their rehabilitation has been established. The minimum quantity for immediate personal consumption shall be determined through a ruling by two experts from a public institution for drug-dependence. If the quantity held is greater than the minimum quantity, it shall fall under the provisions of article 48 [on Trafficking] of this Law." (Article 49).
Peru	Decree Law 22095 of 21 February 1978.	Law on illicit drug trafficking that outlines the crop eradication program and offers peasants incentives to join it; bans entry into sites partly or entirely dedicated to the cultivation of coca. ENACO SA is the only entity allowed to commercialize coca leaf, both internally and externally, and the industrial products it uses to manufacture drugs are subject to controls.	The production of new coca leaf crops, even the renewal of existing ones is prohibited. Law 27634 of 15 February 2002, which modified Articles 41 and 68.

COUNTRY	LAW	PURPOSE	COMMENTS		
	Criminal		The National Coca Company (Empresa Na-		
	Code of		cional de la Coca, ENACO) was established		
	1996.		in 1949. It is the only Peruvian company li-		
			censed to commercialize coca leaf and its de-		
Peru			rivatives. Since 1982, ENACO SA has been		
			a state-owned limited company under pri-		
			vate law, whose goal is to help preserve the		
Pe			health of the population through the com-		
			mercialization of coca leaf and its deriva-		
			tives, as well as its industrialization for non-		
			commercial purposes, based on the current		
			legal framework.		
	Supreme Decree 123-2001-PCM of 30 November 2001.				
	Law 28002 of 17 June 2003, which modified the Criminal Code.				
	Law 30 of	National Narcotics Statute	Dose for personal use is the amount of drugs		
	5 February	(Estatuto Nacional de Es-	1		
	1986.	=	tion. The following doses are considered		
		regulates the dose for per-	for personal use: no more than twenty (20)		
ia.		sonal use.	grams of marijuana; no more than five (5)		
mb			grams of hashish; no more than one (1)		
Colombia			gram of cocaine or any other cocaine-based		
0			substance; and no more than two (2) grams		
			of methaqualone. Any drugs carried with		
			the intention to supply or sell will not be		
			considered for personal use, regardless of the		
			amount.		

COUNTRY	LAW	PURPOSE	COMMENTS
Ecuador	Law 108 of 1990.	Law on Narcotic Drugs and Psychotropic Substances that aims to eradicate the produc- tion, supply, improper use and illicit trafficking of nar- cotic and psychotropic sub- stances to protect the com- munity from the dangers that stem from these activities.	Prohibits the production of plants from which controlled substances could be extracted.
Argentina	Law 23.737 of 11 Octo- ber 1989.	Law on narcotic and psychoactive substances that identifies and penalizes crimes related to narcotic and psychoactive substances. Version of a Criminal Code on narcotic and psychoactive substances.	Sets prison sentences of four to 15 years for those who "grow or cultivate plants or store seeds that could be used to produce narcotics, or raw materials, or elements intended for their production or manufacture []" (Article 5). Further, "The possession and consumption of coca leaf in its natural state, destined for the practice of "coqueo" or chewing, or its use as an infusion, will not be considered as possession or consumption of narcotics" (Article 15).
Chile	Law 20000 of 2 February 2005. Decree 867 of 19 February 2008.	Law that punishes illicit trafficking of narcotic and psychotropic substances, and decriminalizes personal use. Decree that specifies those drugs, plants and substances whose use is considered illicit.	"Individuals who, without due authorization, possess, transport, hold or carry on their person small quantities of drugs that produce physical or psychological dependency, or the raw materials used to obtain these drugs, will be punished with no less than 541 days and up to five years in prison, unless they can justify that it is for medical treatment or exclusively for personal use or consumption in the short term" (Article 4).

	PURPOSE	COMMENTS
Law 1340 of 27 October 1988.	Drug control law that sets penalties for trafficking, selling and promoting the use of drugs. It prohibits the cultivation of plants that could be used to produce drugs; however, it does not penalize personal use.	"Whoever possesses substances referenced in this Law prescribed by a doctor or whoever possesses them exclusively for personal consumption, will be exempted from punishment. However, possession of an amount of drugs greater than that prescribed, or than that deemed necessary for personal use, is punishable with two to four years' imprisonment and seizure of the drugs. It will be considered of drug users' exclusive personal use, the possession of substances amounting to a daily dosage, as determined in each case by the Forensic Doctor and a specialized Doctor designated by the Public Health and Social Welfare Ministry, and, if so requested, by another one designated by the defendant, at his/her own expense. In the case of marijuana this shall not surpass ten grams and in the case of cocaine, heroine, and other opiates, two grams" (Article 30).
Law 17016 of 28 Octo-	Law that regulates the use and sale of narcotic substances and establishes measures against illicit trade in drugs. It prohibits the cultivation of any kind of plant from which substances that cause physical or psychological dependence can be extracted. However, it does not criminalize personal use. Law that modifies the previous drug law.	"Whoever, without the relevant legal authorization, imports, exports, transits, distributes, transports, is found in possession of, holds, stores, possesses, offers to sell, or in any other way trades in the raw materials or the substances mentioned in the previous article, will be subject to the penalties established in that article. Whoever is found in possession of a reasonable amount of drugs meant exclusively for personal consumption, as determined in good faith by a judge, will be exempt from punishment; the judge must substantiate the reasoning behind his/her ruling" (Article 31)
	Law 14294 of 23 Octo- ber 1974.	ing and promoting the use of drugs. It prohibits the cultivation of plants that could be used to produce drugs; however, it does not penalize personal use. Law 14294 of 23 October 1974. Law that regulates the use and sale of narcotic substances and establishes measures against illicit trade in drugs. It prohibits the cultivation of any kind of plant from which substances that cause physical or psychological dependence can be extracted. However, it does not criminalize personal use. Law 17016 of 28 Octo-

COUNTRY	LAW	PURPOSE	COMMENTS
	Law 39546	Organic Law on Psychotro-	In 1993, Venezuela's Organic Law on Psy-
	of 5 Novem-	pic and Narcotic Substances	chotropic and Narcotic Substances replaced
	ber 2010.	that aims to establish mech-	prison sentences with 'social security mea-
		anisms and measures to con-	sures' for possession of up to 2 grams of
ıela		trol, supervise and oversee	cocaine and 20 grams of cannabis. Posses-
Venezuela		narcotic and psychotropic	sion for personal use is punishable with re-
Ver		substances, as well as chemi-	ferral to treatment, which can still lead to
		cal precursors that might be	obligatory internment in specialized centers.
		diverted to manufacture ille-	However, the new 2010 legislation reintro-
		gal drugs.	duced prison penalties of one to two years
			for possession for personal use.

 ${\it Source}. \ {\it Prepared by José Carlos Campero, based on information from: http://www.druglawreform.info/es/informacion-por-pais/}$

Annex 3 Summary of legal frameworks for coca leaf and cocaine

COUNTRY	PRODUCTION OF SEEDS AND PLANTS	PRODUCTION AND TRAFFICKING OF DRUGS	PRODUCTION, TRAFFICKING, AND DIVERSION OF PRECURSORS FOR PRODUCTION OF DRUGS	PERSONAL DRUG USE
Bolivia ¹	Legal coca leaf production within a re- stricted number of hectares and geographical areas	Illegal	Illegal	Illegal, with obligatory internment and treatment
Peru ²	Illegal	Illegal. However, ENARCO SA may legally export for pharmaceutical purposes	Illegal	Legal, up to a maximum of 2 grams
Colombia ³	Illegal	Illegal	Illegal	Legal (legal doubts about the minimum dose)
Ecuador ⁴	Illegal	Illegal	Illegal	Illegal, penalty for addicts may be curative security measures
Argentina ⁵	Illegal	Illegal	Illegal	Illegal, penalty for addicts may be curative security measures
Chile ⁶	Illegal	Illegal	Illegal	Legal for private use. Illegal for public or group use
Paraguay ⁷	Illegal	Illegal	Illegal	Legal, up to 2 grams
Uruguay ⁸	Illegal	Illegal	Illegal	Legal
Venezuela ⁹	Illegal	Illegal	Illegal	Illegal, with obligatory treat- ment and internment

- 1 http://www.druglawreform.info/es/informacion-por-pais/bolivia/item/241-bolivia
- 2 http://www.druglawreform.info/es/informacion-por-pais/peru/item/251-peru
- 3 http://www.druglawreform.info/es/informacion-por-pais/colombia/item/245-colombia
- 4 http://www.druglawreform.info/es/informacion-por-pais/ecuador/item/246-ecuador
- 5 http://www.druglawreform.info/es/informacion-por-pais/argentina/item/238-argentina
- 6 http://www.druglawreform.info/es/informacion-por-pais/chile/item/244-chile
- 7 http://www.druglawreform.info/es/informacion-por-pais/paraguay
- 8 http://www.druglawreform.info/es/informacion-por-pais/uruguay/item/252-uruguay
- 9 http://www.druglawreform.info/es/informacion-por-pais/venezuela

Source: Prepared by José Carlos Campero based on data from the Transnational Institute (TNI)*.

^{*} Drug law reform in Latin America: http://www.druglawreform.info/es/informacion-por-pais/

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