



After the Drug Wars

REPORT OF THE LSE EXPERT GROUP
ON THE ECONOMICS OF DRUG POLICY



THE LONDON SCHOOL
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Report of the LSE Expert Group on the Economics of Drug Policy, February 2016

Foreword

The post-'war on drugs' era has begun. Prohibitionist policies must now take a back seat to the new, comprehensive, people-centred set of universal goals and targets that we know as the Sustainable Development Goals (SDGs).

Nation states and the global drug regulatory system must shift to principles of sustainable development that include: public health, harm reduction of consumption and supply, access to essential medicines, and scientific experimentation with strict legal regulation.

To enable this transformation, nation states should drastically deprioritise the prohibitionist goals of the past. They must implement new comprehensive development policies dealing with the root causes of problems associated with illicit drugs.

The 'war on drugs' caused the international community to prioritise prohibitionist policies over sustainable development at a terrible socioeconomic cost. As the United Nations Development Programme highlights in the discussion paper excerpted in this report, 'evidence indicates that drug control policies often leave an indelible footprint on sustainable human development processes and outcomes... [and] have fuelled the marginalisation of people linked with illicit drug use or markets.'

This report recognises that key reforms within the global regulatory system will come from changes at the national and local levels. It highlights that the UN drug control treaties recommend an approach grounded in the 'health and welfare' of mankind. Further, it emphasises that human rights obligations have absolute supremacy over drug control goals and as such there is sufficient interpretive scope within the treaties to experiment with social scientific policies that can further global health and welfare.

The world can shift away from counterproductive and ineffective drug policies. The UN General Assembly Special Session in 2016 is a key platform for driving debate. However, the ultimate impetus lies with countries to reform their policies based on evidence and local realities. This report provides a framework for achieving this shift.

Juan Manuel Santos, President of the Republic of Colombia

Professor Daron Acemoğlu, Massachusetts Institute of Technology, 2005 John Bates Clark Medal

Dr. Francoise Barre-Sinoussi, Pasteur Institute, 2008 Nobel Prize in Physiology or Medicine

Professor Erik Berglöf, Director, LSE Institute of Global Affairs

Professor Paul Collier, CBE, University of Oxford

Professor Michael Cox, Director, LSE IDEAS

Sir Thomas Hughes-Hallett, Founder, LSE Marshall Institute

Professor Gareth Jones, Director, LSE Latin America Centre

Professor Emeritus Margot Light, London School of Economics

Professor Eric Maskin, Harvard University, 2007 Nobel Prize in Economics

Professor Francisco Panizza, London School of Economics

Professor Danny Quah, Director, LSE Southeast Asia Centre

Professor Dani Rodrik, Harvard University, 2007 Albert O. Hirschman Prize

Professor Thomas Schelling, University of Maryland, 2005 Nobel Prize in Economics

Professor Vernon L. Smith, Chapman University, 2002 Nobel Prize in Economics

Dr. Javier Solana, EU High Representative for Common Foreign and Security Policy (1999-2009)

Professor Oliver Williamson, University of California Berkeley, 2009 Nobel Prize in Economics

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Contents

Executive Summary	6
Development First: Multilateralism in the Post-'War on Drugs' Era John Collins	9
Re-examining the 'Medical and Scientific' Basis for Interpreting the Drug Treaties: Does The 'Regime' Have Any Clothes? Francisco E. Thoumi	19
Regulation of Possession and the Criminalisation of Drug Users in Latin America Catalina Pérez Correa, Rodrigo Uprimny and Sergio Chaparro	30
Legalising Drugs Prudently: The Importance of Incentives and Values Jonathan P. Caulkins	40
If Tougher Enforcement Cannot Reliably Raise Drug Prices, What are Appropriate Goals and Metrics? Peter Reuter, Harold A. Pollack and Bryce Pardo	51
Drug Policing: What is it Good For? Michael Shiner	59
Uncle Sam's Cocaine Nosedive: A Brief Exploration of a Dozen Hypotheses Beau Kilmer	67
Cuidado: The Inescapable Necessity of Better Law Enforcement in Mexico Vanda Felbab-Brown	79
UNGASS 2016: The Focus on 'Harm Reduction' is Making Us Blind to Reducing the Broader Harms of Organised Crime Mark Shaw	89
Addressing the Development Dimensions of Drug Policy Javier Sagredo, Rebecca Schleifer and Tenu Avafia	97
Measuring the Impacts of Repressive Drug Policies on Women Kasia Malinowska-Sempruch and Olga Rychkova	109
Public Health Research in a Time of Changing Drug Policy: Possibilities for recovery? Joanne Csete	119
(Mis)understanding the Intersection Between Development Policies and Data Collection: Case Study, Afghanistan David Mansfield	127

Executive Summary

John Collins

The ‘war on drugs’ has been largely discredited on the international stage. Former and sitting presidents, Nobel Prize winners, heads of UN agencies and other world leaders have all in some way rubbished the idea of the international community waging war against already marginalised groups of people as a way to prevent substance use or misuse. It is for this reason that the UN General Assembly Special Session (UNGASS) in April 2016, whatever the explicit consensus outcomes, represents the global end point in a failed and counterproductive strategy. The question now is what comes after the drug wars.

This report suggests a new set of guiding policy principles for both the national and international levels. First, replace prohibitionist drug policy goals with the Sustainable Development Goals (SDGs). Second, drastically expand public health approaches, including harm reduction services. Third, apply the principles of harm reduction to supply-side policies and management of illicit markets. Fourth, utilise inherent flexibilities within the conventions to engage in rigorously monitored social scientific policy experimentation, conforming to strict public health and human rights principles.

THE ROLE FOR MULTILATERALISM

In the first two chapters John Collins and Francisco Thoumi discuss the UN drug conventions and the role of multilateralism after the drug wars. Both argue for a more nuanced implementation of the international drug control treaties with much closer regard to local development, welfare, public health and human rights. They also highlight innate flexibilities within the treaties.

John Collins demonstrates that a ‘development first’ approach to drug policy reigned prior to the declaration of the ‘war on drugs’ in the 1970s, and he calls for a return to this principle. He highlights that the UN drug conventions were not written as a ‘prohibition regime,’ and instead their core ‘intent’ and ‘purpose’ was ‘an international trade regulatory framework’ with broad national scope for interpretation and implementation. Collins highlights that extreme prioritisations of prohibitionist policies produced the modern ‘war on drugs,’ but this can be rolled back through prioritising development and welfare policies, outlined in the SDGs.

Francisco Thoumi explores the logical consistency of the conventions. He highlights that, despite limiting drug uses to ‘medical and scientific purposes,’ these key terms are not defined in the conventions and current interpretations exclude any contribution of the social sciences. Consequently, because these ‘key determinants of the allowed drug uses are not defined, it is logically impossible to know if any specific policy complies with the conventions, and it is not possible to rule out any policy as ‘unscientific,’ including those based on ‘social scientific’ experimentation.

REGULATING DRUG CONSUMPTION AND SUPPLY

There is a clear policy consensus in favour of decriminalising drug consumption to reduce the harms of drug prohibition and support public health. **Catalina Pérez Correa, Rodrigo Uprimny and Sergio Chaparro** highlight that, despite the overt reformist discourse, ‘Latin American governments maintain a predominantly punitive and repressive approach to illegal drugs and their use.’ Their paper seeks to explain why, and analyses some of the moral and theoretical problems implied by criminalisation. They argue that ‘with little in its defence, regulation of possession must be revised’ in order ‘to protect users from the application of unjust and disproportionate laws and practices.’

Jonathan Caulkins examines the legalisation of cannabis and, potentially, other currently illicit substances. Leaving aside the question of whether legalisation is a good idea, he focuses on principles for how best to implement it. He highlights that, (1) Heavy users are prone to abuse dependence-inducing intoxicants; (2) Industry prioritises profit over protecting customers, recognising that most sales and profits flow from the minority of heavy consumers; (3) Regulatory bodies are prone to industry capture. As such, the regulatory architecture should be stacked in favor of protecting public health, most notably the welfare of the heavy users who lose control over their consumption.

TOWARD 'HARM REDUCTION' FOR THE SUPPLY-SIDE

Given the continued existence of an enormous illicit drugs market, whatever the outcome of small scale regulatory experimentation, the following five papers examine the role of supply-side policies within the SDGs. Three focus explicitly on applying the concept of 'harm reduction' to supply-side policies, while two examine case studies.

Peter Reuter, Harold Pollack and Bryce Pardo examine the 'classic and critical assumption of the "war on drugs," namely that more stringent enforcement would raise price.' They highlight that 'there is minimal evidence' in favour of that assumption, although warning that the research base is so weak as to make a firmer statement 'unwarranted.' They suggest explanations for why enforcement fails at the margins to raise prices. Further, they elaborate a set of metrics for policing as well as concluding that 'harm reduction' is most helpful in identifying a set of guiding questions which ought to inform drug policy and drug law enforcement.'

Michael Shiner points to 'a central paradox of drug policing - what is politically acceptable cannot be achieved, but what is achievable is not politically acceptable.' He highlights that prevalence of drug use varies sharply between countries, but is not causally related to the severity of the local drug policy regime. He warns that inappropriate policing increases market violence, health harms and damages police legitimacy. He suggests harm reduction policing can tackle underlying problems rather than simply responding to specific incidents.

Even in the case of specific market shifts, the causes are unclear and rarely causally attributable to supply interventions.

Beau Kilmer examines the US cocaine market, which appeared to shrink by roughly 50% from 2006 to 2010. He explores twelve hypotheses for the market reduction and concludes that it is too early to determine the cause. However, if further research points to supply-side policies, 'this does not mean that supply reduction is the optimal approach for reducing problem consumption; much depends on the particular drug, stage of the epidemic, characteristics of the country and the perspective of the decision maker. It would, however, challenge the conventional wisdom that supply-side interventions can do little to influence mature consumption markets.'

Vanda Felbab-Brown examines the security situation in Mexico. She highlights that major human rights violations and drug violence persist. Security policy remains focused on the military and Federal Police, with a lack of planning and operational design. Criminalisation has fuelled low-level incarceration. Meanwhile, the Supreme Court is moving towards marijuana legalisation. She highlights that decriminalisation and legalisation will need to be coupled with comprehensive law enforcement (beyond high-value targeting), extending state presence, developing socioeconomic anti-crime efforts and strengthening citizen-state bonds.

Mark Shaw warns the emerging public health consensus towards consumption comes at a risk if it allows a return to established law enforcement practices further down the supply chain. He reiterates that the harms from criminal networks are frequently only exacerbated by hard-line criminal justice and militarised approaches. He examines 'widening the scope of the harm reduction concept to the drugs supply chain in its entirety, and to organised crime itself.' Shaw highlights that UNGASS and the SDGs can help make a linkage between security and development issues and thereby help protect development interventions from criminal exploitation – and to deliver services where they are needed most. That, he points out, is the route to undercutting criminalised violence.

operate in isolation or at cross-purposes. They argue that to succeed in meeting the SDGs and drug control goals, UN entities and Member States must commit to a sustainable development approach to drugs.

Kasia Malinowska-Sempruch and Olga Rychkova examine the impact of repressive drug policies on women and 'the children for whom women are often the principal caregivers.' They highlight that incarceration of women for drug offences is increasing rapidly in many parts of the world, including Latin America, with broader societal impacts. Further, punitive drug laws result in children being taken from mothers, reduce access to essential health and treatment services and stigmatise vulnerable populations placing them at much higher risk of HIV, HCV and other health-related issues. They highlight that less punitive laws for minor and non-violent drug infractions are the best single means of reducing incarceration of women and thus incarceration-related abuse. They suggest new policies, targets, metrics and indicators to reverse or at least mitigate these impacts.

Joanne Csete examines a sustainable and effective public health approach to drugs. She highlights that aggressive policing and incarceration results in higher HIV, hepatitis C and tuberculosis risks. She then looks 'beyond the impact of drug policy on the health of the individual,' to examine the ways a focus on repressive drug policies has distorted and limited public health science, research and practice as tools to address drug problems. Further, she shows the need for greater scepticism about the supposed effectiveness of drug courts and highlights that UN agencies and treaty bodies, 'which should promote evidence-based best practices in research and programmes, have too often been silent or complicit with questionable research (and programme) directions.'

David Mansfield examines rural development and drug control. He highlights that illicit crop production often represents 'a dual edged sword,' generating both benefits and costs for producer countries, while 'Alternative Development' achieves very limited results and fails on pro-poor development outcomes. As a result, development organisations are often ill at ease when engaging with the challenges of illicit drug production in the global south and tend to ignore the illicit economy altogether. He subsequently highlights that many drug control statistics are methodologically weak and ignore the wider socioeconomic, political

TOWARDS SUSTAINABLE DRUG POLICIES & THE SDGS

The final four chapters examine how key development issues intersect with drugs, peace and security policies.

Drawing on the UNDP discussion paper on the development dimensions of drug policy, **Javier Segredo, Rebecca Schleifer and Tenu Avafia** highlight that repressive and prohibitionist drug policies have frequently been implemented irrespective of development goals. Further, these policies have had little effect in eradicating production or problematic drug use, while exacerbating poverty, impeding sustainable development and threatening the health and human rights of the most marginalised people. Further drug control agencies and development institutions have tended to

and environmental context. This reinforces the tendency towards simplistic models of rural development where development assistance is a means to leverage reductions in drug crop cultivation from rural elites and power brokers while development outcomes go largely unnoticed.

ON METRICS AND INDICATORS

Each chapter includes a discussion **on metrics and indicators**. John Collins writes that to 'walk into a discussion on the direction of drug policy in any meeting is to walk in on a discussion of the need for new metrics, indicators, or in some circles, for new data. The assertion is rarely followed by any tangible elaboration of actual metrics and indicators.' In this report most authors offer a critique, furtherance of or greater level of specificity to the metrics debate in a purposely informal and discursive manner.

CONCLUSION

The international community's great mistake over the past few decades has been to treat drugs as a singular issue, independent of broader socioeconomic determinants. The result has been policies fixating on greater repression on the demand or supply side as a means to eradicate the problem, with occasional funding for ineffectual 'alternative development' programmes as a 'softer' approach. UNGASS is an opportunity to correct this strategic imbalance. It is an opportunity to move beyond short-termist approaches that target symptoms rather than causes. Going forward, drug policy should not be seen as a supply reduction, demand reduction or alternative development issue. It is, first and foremost, a sustainable development issue. ■

Development First: Multilateralism in the Post-'War on Drugs' Era

John Collins¹

SUMMARY

- UNGASS 2016 will mark the beginning of the post-war on drugs era.
- The international system has moved toward a new cooperative structure based on the tenets of 'policy pluralism,' which is the most fortuitous route toward developing the social scientific base.
- The rigidity and obligations of the drug treaties are often drastically overstated, and the obligation to pursue policies which we equate with the 'war on drugs' are virtually non-existent.
- From the very beginning, the UN drug conventions were read in terms of local socioeconomic and political realities.
- A 'development first' approach had frequently been the case before the declaration of the 'war on drugs' in the 1970s.
- 'Medical and scientific' use was a constantly shifting parameter based on reigning cultural norms. The UN was generally a reflection of this, not a determinant.
- Portrayals of the UN drug conventions as 'prohibitionist' are historically inaccurate, and the treaties' 'intent' and 'purpose' was for a relatively loose international trade regulatory framework.
- An extreme focus on specific prohibitionist policies produced the modern 'war on drugs.' However, this can be rolled back through local and national policy choices.
- Multilateral reforms, although occurring, will inevitably lag behind local and national reforms.

The failures of the 'war on drugs' have been well documented elsewhere.² Former and sitting presidents throughout Latin America to the sitting President of the United States, his former Attorney General, and now the Prime Minister of Canada all openly reject the 'war on drugs' in favour of new approaches grounded in public health and policy alternatives including legal regulation of cannabis. The Director of the US Office of National Drug Control Policy (ONDCP), Michael Botticelli, recently described the war on drugs as 'all wrong.'³

Regardless of the official outcomes of the UNGASS 2016, it represents the end point of the global 'war on drugs' era.⁴ The key questions remain; how to reform national and international approaches to drugs, where to direct scarce resources, how to translate evidence into policy, and what policies to replace the 'war on drugs' strategy with. While a wholesale change in national regulatory structures, let alone international ones, seems far off, incremental shifts have begun and look likely to pick up steam. In this new era, the post-'war on drugs' era, as this paper argues, national and local spheres increasingly hold greater relevance than international ones in determining policy choices and outcomes.

At the international level this is reflected in greater reliance on treaty 'flexibilities' to sustain international cooperation, even if that cooperation occurs on an entirely new implementation framework.⁵ Some reject flexibilities as a 'cop out' to avoid rewriting the treaties or claim flexibilities on drug treaties represent a threat to international law.⁶ This paper rejects both of these arguments, highlighting that the history of UN drug control is poorly understood, the domestic obligations of the treaties overstated, and the obligation to pursue policies which we equate with the 'war on drugs' largely non-existent. This chapter argues that selective enforcement, policy prioritisation, wide national regulatory variations, and

purposefully undefined criteria for 'medical and scientific' use⁷ all represent ingrained interpretive room within the conventions, reinforced with an absence of any tangible treaty enforcement mechanisms.

This chapter highlights that the treaties themselves do not constitute a 'prohibition regime' mandating a 'war on drugs.' It shows that the treaties represent a relatively loose international trade regulatory framework. Like all regulatory frameworks they suggest permitted and non-permitted (or prohibited) practices. An extreme focus on tackling certain types of prohibited behaviours from the 1970s onwards produced the modern 'war on drugs' – but it is far from a direct by-product of the UN drug conventions.⁸

Moreover, the chapter demonstrates that throughout the twentieth century, drug control imperatives were repeatedly subsumed to security, development, political stability and population welfare imperatives or what we might now refer to under the umbrella of 'development issues.' It was only during the 'war on drugs' era, 1971-2016, that drug policies became increasingly untethered from other policy realities. By highlighting that drug policies can once again be subsumed to development policies, i.e. the current Sustainable Development Goals (SDGs) framework, it suggests a return to a 'development first' approach to drugs and drug policy.

The treaties represent a relatively loose international trade regulatory framework. Like all regulatory frameworks they suggest permitted and non-permitted (or prohibited) practices. An extreme focus on tackling certain types of prohibited behaviours from the 1970s onwards produced the modern ‘war on drugs’ – but it is far from a direct by-product of the UN drug conventions.

Finally, this paper highlights new interpretive frameworks for the post-war on drugs era that build on convention ‘flexibilities’ to enable a new round of social scientific policy experimentation. It argues that the forthcoming role for multilateralism is to provide a functional cooperative framework to help member states (the executors of the treaties) to manage this issue, mitigate cross-border spill-overs, forward evidence-based drug policies, and openly challenge practices unjustified by evidence and banned by human rights law.

EXPLAINING THE END OF THE ‘WAR ON DRUGS’ ERA

The changed international paradigm has been precipitated by four main factors:

1. Recognition of broad failures of supply reduction policies;⁹
2. A massive normative shift away from repressive demand reduction policies toward public health oriented policies based on voluntary treatment provision and harm reduction;¹⁰
3. Interpretive widening around UN drug control treaties, and a recognition that these treaties sit within a wider plethora of development and human rights needs and obligations (see below);
4. A small number of ground-breaking shifts in national regulatory regimes, particularly cannabis legalisation.

Many international forums, once bastions of the prohibitionist mentality of market eradication and zero tolerance to drug use, now openly discuss compassion and public health approaches. The interventions (if not the language) of ‘harm reduction’ are increasingly recognised for their efficacy. The clear failures of ‘demand reduction’ and ‘supply reduction’ policies militate against cheerleading for a continuation of a police-led and militarised strategy.¹¹ Few still seriously speak of a ‘drug free world.’ Meanwhile, emerging regulatory experimentation with recreational drug markets is widely viewed as either inevitable¹² or a positive empirical social scientific experiment.¹³

UNDERSTANDING THE ‘PURPOSE’ AND IMPLEMENTATION OF THE CONVENTIONS¹⁴

The conventions are frequently described in terms of mandates toward prohibition. It is, as is often repeated, a ‘prohibition regime’ advocating a clear set of prohibitionist principles.¹⁵ The treaties are, as some have put it: ‘fundamentally about prohibition.’¹⁶ These principles, it is inferred, mandate unconstrained and symmetrical enforcement around preventing the non-medical and non-scientific use of certain substances.¹⁷ This interpretation usually begins with the current policy framework as the logical outcome of the treaties and thereby reads the history backwards from the current approach. The treaties preceded the war on drugs and therefore must have mandated it. Further, in the absence of textual clarity within the documents their ‘prohibitionist’ intent is often used to infer an obligation to repressive policies in legal analyses.¹⁸

Those which deviate from this ‘prohibitionist’ approach, the Swiss, the Dutch, Uruguay, the US, Bolivia (and others which avoid the flashlight of international attention¹⁹) are regarded as aberrations or ‘defections’ from the clear intent of the conventions.²⁰ This establishes a dichotomy between strict treaty adherents and those defecting from or ‘breaching’ the treaties. This dichotomy is then used to argue for the necessity of treaty rewriting.

The following examples, far from exhaustive, intend to highlight that instead of a clear dichotomy between adherence and ‘breach’, implementation has always ranged on a broad spectrum. This implementation was determined by resource constraints, local economic development, security policy, political stability and geopolitics. As one UK diplomatic brief in 1951 highlighted, parts of the drug conventions had frequently ‘been more honoured in the breach than in the observance’²¹

Nevertheless, the conventions have traditionally been viewed as a useful coalescing mechanism for international cooperation and therefore deserving public declamations of respect and adherence. Legal accommodations (what we today might call ‘flexibilities’) have been a common part of the international discourse, and generally accepted provided they sustained a sense of coherent international management of the issue.²²

REGULATIONS OVER PROHIBITIONS:

Far from a system focused on ‘prohibition’, prior to the ‘war on drugs’ era, prohibitions represented one (relatively minor) aspect of a broader international regulatory and trading arrangement. The vast majority of diplomatic fuel from 1924-1971, when the modern treaty system evolved, was burned on developing international production regulations – *i.e.* establishing how many states could grow opium and other substances and in what quantities. The US favoured a strict oligopoly of producers based on quotas, while other powerful drug manufacturing states preferred a relatively free market to keep opium prices low.

Prohibitionist aspects of international treaties, for example against state sanctioned opium smoking or problematic cultivation, were of secondary interest. Many, the UK for example, thought the latter unsolvable and held much ‘sympathy for the raw [opium] producing countries’.²³ They merely sought to enshrine market protections for their pharmaceutical firms in treaty law. Further, when the conventions were formulated, European countries had extremely low levels of domestic consumption. They viewed a well-regulated international trade as the best mechanism to keep consumption low and undermine the illicit market. Under this trajectory of supply management, international provisions around managing consumption were generally sidestepped²⁴ or kept as relatively unobtrusive as possible. Again, as one UK diplomat wrote, British public opinion ‘little excited by a drugs menace, would not favour extravagant local penalties to meet a world problem’.²⁵

PRIORITISING POLICIES: DEVELOPMENT, SECURITY AND WELFARE FIRST:

When international obligations pushed against the continuation of preferred regulatory policies, the latter were generally continued regardless of the treaties by referring to mitigating factors. The 1912 and 1925 conventions suggested prohibitions on opium smoking and accompanying production in Asia. However, the imperial powers in pre- and post-World War II Asia largely refused to implement them because state structures were too weak to do so, medical systems - let alone treatment services - were non-existent, and because it would simply fuel an already large regional illicit market.

Instead, their focus was to regulate existing consumption via monopolies and maintenance. They could then aim toward a time when prohibitions would be feasible and not produce more harm than good.²⁶ For example, many of the monopolies enacted registration and rationing systems and in many areas the core focus of opium policy was merely to make government opium more competitive than illicit opium. The goal was, first and foremost, do no policy harm and second to lessen the harms of the regional illicit markets.²⁷ Blind adherence to international policy agendas forwarded by, what one British medical official called ‘statistics-bound opioidophobes’ and ‘anti-opium propagandists’, ‘would be foolish as well as wrong’ if it didn’t take account of local realities.²⁸

The Dutch and British, in particular, focused their diplomatic efforts on creating a fully regulated global licit market (see below) to undermine the illicit one. If this could be shown to demonstrably suppress the illicit market and make prohibitions more sensible they would be countenanced. Even then, however, they insisted on ‘a reasonable transitional period’ to shift away from certain types

of consumption.²⁹ Prohibitions on certain types of use could be viewed as end goals but only if a whole array of development and governance outcomes were secured first.³⁰

Quiet bilateral pressure from the US eventually pushed the UK to officially end government supplies of smoking opium to registered users in most colonies at the end of World War II.³¹ However, in many cases, local policies remained unchanged or the form of government ‘maintenance’ changed. For example, the Colonial Office merely switched to providing opium in pill form, as this was seen as more in line with conceptions of ‘medical and scientific’ use of the day.³² Yet, as political unrest continued in Malaya through the late-1940s, they consciously avoided enforcing pointless prohibitions on smoking opium and deflected attention by once again highlighting illicit trafficking in the region as a mitigating factor.³³ The UK also steadfastly refused to implement immediate prohibitions in Burma after World War II, despite intense US pressure.³⁴

The US itself was extremely selective on enforcement. It was happy to pressure states to implement prohibitions, but would ignore them the moment broader geopolitical interests intervened. For example, although the US was ostensibly pushing Iran to limit opium production after World War II, embassy officials in Tehran, bucking against congressional pressure, cited ‘patent instability’ and refused to lobby for measures against opium production until stability returned.³⁵ In the 1940s and 1950s the US ignored high levels of opium smuggling from Kuomintang insurgents in Burma, continued opium smoking in French Indochina³⁶ and Mexican domestic opium production.³⁷

What these and numerous other examples show is that drug issues were almost never read in isolation of broader health, welfare, development and security targets, and rarely as absolute obligations to institute un-sequenced and self-defeating policies.

Therefore, the history of the international system highlights that:

1. The term ‘Medical and scientific’ use was the treaty delineator between licit and illicit practices. However, it was a consistently shifting parameter determined by reigning cultural norms. The international control system was a reflection of these norms, not a determinant. In the Single Convention the definition of ‘medical and scientific’ use was consciously left to member states³⁸ to decide alongside broad scopes to implement national regulations.
2. Bilateral political pressure was often the key driver of shifts toward prohibitive models of regulation, not any overweening fidelity to a prohibitionist reading of the drug conventions. Recourse to bilateral pressure was, in-turn, generally determined by, and subservient to, broader geopolitical interests.
3. The conventions, from the very beginning, were read and implemented with close regard to local socioeconomic and political realities. This has since been extended to include UN human rights regimes which mitigate against repressive policies.

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THE UN AS A NORMATIVE ACTOR:

The UN is frequently referred to as the 'policemen' of global prohibition. This is something not mandated by any treaty. Moreover, the UN CND is effectively a democratic forum populated by member states. The International Narcotics Control Board (INCB) is not a UN body - it has a role in assisting member states in treaty implementation and highlighting concerns to CND, but has little room for autonomous action, let alone enforcement. The drug secretariat (currently UNODC) exists to facilitate CND and member state policies. The Secretariat has played a role in advocating repressive policies and setting national policy trajectories toward the 'war on drugs'. However, this arose through agenda setting, policy dissemination and nudging toward repressive policies by suggesting they were based in best-practice evidence.

For example, the UN drug secretariat was instrumental in shaping the international narrative around managing consumption. This normative framework was established by a questionnaire circulated to member states in March 1947. Independent of any treaty obligations, questions were designed to suggest repressive and strict measures as the natural response, such as asking whether provision had been made to isolate drug 'addicts' from the rest of the population.³⁹ States began vying to outdo each other at CND in highlighting the severity of control and punishment. Soon the arrest of 'addicts', overprescribing doctors, illicit traffickers and other narcotics laws violators were viewed as metrics of success in international control.⁴⁰

The implication is that these were policy trajectories and choices, to which treaty debates have little relevance. Member states can, just as they rolled toward these policies, roll back from them. UNODC, just as its predecessors painted repression as the policy du-jour, can now highlight more effective policies in its place.

THE SINGLE CONVENTION:

The obligations, architecture and authorship of the Single Convention are widely misunderstood. It was a consolidation of existing treaties with some minor advances, such as defining the parameters of supply regulation and suggesting further prohibitions on types of non-medical and non-scientific use (while leaving these terms purposely undefined).

Far from being the author of the document, the US rejected the Single Convention because it was seen as too permissive. The US failed to secure key goals and, due to an inept delegation,⁴¹ the diplomatic heavy lifting was taken over by the UK who drove the compromise Single Convention through. For example, the US strongly advocated wording suggesting states consider a 'closed institutional' method of dealing with addiction (a euphemism for confined compulsory treatment or incarceration) if resources permitted. Even this watered down version could not make it into the draft.⁴²

Most importantly, the Single Convention allowed for the regulation of international supplies of drugs, but provided no mechanism for shrinking them, other than mild dissuasion – for example, self-reporting exports to the INCB. The US instead pushed for the stalled and wildly unpopular 1953 Opium Protocol which would have limited the production and export of opiates to a global oligopoly of countries. The US delegation pointed out that the Single Convention was based on 'an entirely different concept' of production limitation than the 1953 Protocol. The Single Convention, they wrote, contained: 'a compromise provision resulting from the insistence of the Soviet Bloc, countries in the British Commonwealth, and some African countries that the new countries be permitted to produce and export opium if they so desire.'⁴³ As a result, one major US press source described the Single Convention as a 'Soviet plot' to flood the world with opium.⁴⁴

It was not until 1967 that the State Department shifted policy and drove its ratification through the Senate.⁴⁵ Eventually the White House unilaterally declared the 'war on drugs' in 1971. It thereafter focused on aggressive bilateral diplomacy, funding efforts and ensuring regulatory capture of international bodies such as INCB, the UN drug secretariats, and exerting significant political capital at CND.

'Later conventions were additions to the regulatory framework but provided little that was new. The 1971 Convention was

an even looser regulatory framework than the Single Convention and was written with a burgeoning drug industry in mind, while the 1988 Convention was written in terms of the 1961 Convention's regulatory framework.⁴⁶ These conventions and relevant international bodies provided a useful enabling mechanism to coalesce member states around, while growing drug consumption in traditionally recalcitrant regions like Europe facilitated the US global 'war on drugs' pincer movement. A global regulatory framework matured alongside and was co-opted by the 'war on drugs,' but it was not a determining factor.

SUMMARY

From 1909-1967 a global regulatory system was created at the international level to manage the flows of 'dangerous drugs.' It was a system of trade regulation – not a system of global prohibition. Like all regulatory systems it created a distinction between 'licit' activities and 'illicit' activities. The former centred on undefined 'medical and scientific' use of 'scheduled' substances, while the latter centred on undefined forms of non-medical and non-scientific use and diversion. The overall goal was to create a 'planned' international market,⁴⁷ with demand being predicted by industry and governments, and supply being determined by a central bureaucratic group of number crunchers – what became INCB – while transactions would be left to the market.

The assumption of its architects was that a functioning regulatory system would absorb most licit production, lessen the illicit market and thereby help lessen non-medical and non-scientific consumption. What would remain would be a minimal role for enforcement activities.⁴⁸ These assumptions proved misplaced as drug consumption grew rapidly in the 1960s onwards and with it the global illicit market. Further, an overly westernised conception of 'medical and scientific' consumption consigned large swathes of traditional medical use to the illicit market and with it the regions where it was present. Simultaneously, those advocating a police oriented and repressive and militarised approach gained prominence and eventually instigated the 'war on drugs' of the 1970s – 2000s. However, by 2008 it was clear that this approach was not working and member states began to openly question the consensus. It is toward this period we now turn.

THE RECENT HISTORY OF UNGASS, 2008-2016:⁴⁹

In 2008, amidst carnage in Mexico and a recognition of the mass incarceration crisis in the US, a shift in global drug policies became apparent. For the first time in decades, new approaches outside the ‘war on drugs’ strategy were countenanced. Tentative discussions gave way to open debate. By October 2012 President Juan Manuel Santos of Colombia called for a systematic rethink of global drug policies arguing that:

The time has come to think outside the box. Our invitation is to dutifully study new formulas and approaches screened through an academic, scientific and non-politicised lens, because this war has proven to be extremely challenging and oftentimes, highly frustrating.⁵⁰

By June 2013, a coherent reform bloc had emerged in the Americas under the leadership of Mexico, Colombia and Guatemala. At the height of global reform rhetoric, even the UN Secretary General called for ‘a wide-ranging and open debate that considers all options’⁵¹

Reform-minded civil society was encouraged and hoped for a full ranging debate which would break open the holy grain of global drug policy: rewriting the UN drug conventions.

Some member states appeared willing to push a hard-line reform agenda and the idea of written treaty reforms was quietly countenanced. However, member states soon faced a choice: shift policies by (1) circumventing the conventions or (2) engaging in a monumental diplomatic process that risked rupturing the global control system and other issues, linked via byzantine international institutional structures and politics.

The tendency toward option (1) was only reinforced when one or more of the following factors seemed present:

1. If the system could be reformed by de facto rather than de jure means;
2. If the system could serve as a mechanism to readjust regional institutional alignments for a variety of issues by exploiting drugs as a geopolitical wedge issue;
3. If wavering adherence to the control system could add new pressure for additional resources from interested states such as the US to tackle issues seen as important to producer and transit countries.

Meanwhile, governmental views on drug treaty issues were summed up by one senior Latin American political leader in 2014: ‘we examined the treaties closely and concluded there is nothing in them which requires a ‘war on drugs’⁵² While many observers continued to argue normative, legal and moral imperatives for treaty rewriting, pragmatism seemed increasingly absent. Latin American governments, while leading the debate, appear to have done so for a variety of reasons including: geopolitics, national self-interest, diplomatic manoeuvring, pragmatism, a desire to pursue effective and evidence-based policies and other idiosyncrasies. When some of these factors began to shift or results were unclear, their willingness to bear the resource and time burdens of endless diplomatic processes waned.

The US, on the other hand, simply shifted their interpretation of the international treaties after several states moved toward cannabis legalisation. Further, in moments of bluntness, State Department officials have openly asserted national sovereignty tempered by a need to defuse international criticisms.⁵³ Conservative actors within the control system, most notably the diplomatically inept President of INC (a treaty body with an abysmal human rights record),⁵⁴ Raymond Yans, sparked ire by publicly castigating Uruguay for legalising cannabis while seeming to avoid direct confrontation with the US.⁵⁵

Simultaneously, a number of other ‘flexibility frameworks’ emerged to deflate the conventions as an obstacle to reform. Europe, while expressing discomfort with overtly highlighting international legal instruments as ‘flexible’, preferred to speak of interpretive ‘scope’ downplay the debate and keep it off their already packed policy agenda. Asia, meanwhile, sought a path of ‘steady as she goes’ on the ‘war on drugs’, with ASEAN nations continuing the ‘drug free world’ pursuit.⁵⁶ Russia, pursuing the maxim of ‘offence is the best defence’, grappled with building repressive coalitions around anti-public health policies – for example an anti-methadone coalition⁵⁷ – and pushing a hard-line on opium production in Afghanistan. The likelihood of creating a new ‘consensus’ across these diverse blocs on this divisive issue hardly needs elaborating.

The UN stepped in to take clearer control of the negotiating reins. Soon the UNGASS process became bogged down in consensus building and the reform impetus appeared to stall. By mid-late 2015, expectations for the UNGASS meeting reached rock bottom. Some looked to 2019 as the ‘next big step’

where true UN reforms could be enacted. Others looked outside the system. As one senior Latin American official stated in a private roundtable: ‘the current system does not work for us and we cannot wait for it to change’⁵⁸

In the years 2008-16 the UN served as a useful forum for driving a change in the normative underpinnings of global drug policies. By exposing the contradictions between the UN’s approach to drug policy and broader approaches to human rights, development and public health (most notably in the field of HIV), significant rhetorical and policy shifts occurred. These changes have been internalised by CND, UNODC and its corresponding bodies. This percolated down to member states, many of whom more openly laud human rights and public health policies. However, while governments have absorbed the language of reform, they have generally avoided major shifts in budgets and policies. To tackle this latter issue now requires a shift beyond international forums and a greater focus on changing national and regional funding and policy goals.

POLICY EXPERIMENTATION IN A CHANGED INTERNATIONAL ENVIRONMENT

As US Assistant Secretary of State for the Bureau of International Narcotics and Law Enforcement Affairs, Ambassador William Brownfield stated: ‘Things have changed since 1961. We must have enough flexibility to allow us to incorporate those changes into our policies ... to tolerate different national drug policies, to accept the fact that some countries will have very strict drug approaches; other countries will legalise entire categories of drugs’⁵⁹

There is no single mechanism to define the boundaries of the treaties. Member states must instead decide whether the national regulatory systems they enact remain ‘in good faith in accordance with the ordinary meaning’ of the treaties, as mandated by the Vienna Convention on the Law of Treaties.⁶⁰

Meanwhile, as Mark Kleiman and Jeremy Ziskind note: ‘The places that legalise cannabis first will provide – at some risk to their own populations – an external benefit to the rest of the world in the form of knowledge, however the experiments turn out...[t]he guardians of the international treaty regimes would be well advised to keep their hands off as long as the pioneering jurisdictions take adequate measures to prevent exports’⁶¹

FRAMEWORKS FOR FLEXIBILITY ON REGULATED MARKETS:⁶²

1. RESOURCE/CAPACITY LIMITATIONS: SELECTIVE ENFORCEMENT MODEL:

This framework derives from legal complications around enforcing the treaties in a federal political system. The US remains the test case. The federal government is the signatory to the UN drug control treaties and is their executor. Individual US states are not. The federal government has no constitutional authority to force states to implement the treaties. The federal government only has the authority to directly enforce the treaties in states via federal resources.

The US State Department has argued this would place an excessive burden on federal resources and is therefore not consonant with a realistic interpretation of the drug control treaties. Further, the drug control treaties make repeated and specific mention of 'constitutional limitations' as a mitigating factor around implementing a number of their clauses. For example, Article 35 of the 1961 Single Convention includes the preface: 'Having due regard to their constitutional, legal and administrative systems the Parties shall...'⁶³

The US State Department has gone further and suggested a four-point framework for continuing international cooperation around drug policy, whilst allowing increasing variation in national policies.⁶⁴

- 1) Defend the integrity of the core⁶⁵ of the conventions.
- 2) Allow flexible interpretation of treaties.
- 3) Allow different national/regional strategies.
- 4) Tackle organised crime.

Other federalist jurisdictions have faced similar issues. In the case of Spain, a 2013 report by RAND highlights that:⁶⁶

'Following several Supreme Court rulings, the possession and consumption of cannabis is no longer considered a criminal offence, and the jurisprudence in the field has tended to interpret the existing legislation in a way that permits 'shared consumption' and cultivation for personal use when grown in a private place. While there is no additional legislation or regulation defining the scale or particulars under which cultivation could be permitted, the Cannabis Social Club (CSC) movement has sought to explore this legal space, reasoning that if one is allowed to cultivate cannabis for personal use and if 'shared consumption' is allowed, then one should also be able to do this in a collective manner. In this context, hundreds of CSCs have been established over the past 15 years, but legal uncertainty around the issue of production continues.'

2. SUPREMACY OF HUMAN RIGHTS TREATIES OVER DRUG CONTROL TREATIES:

Human rights obligations are a part of the UN Charter. Obligations derived from the drug control treaties are subordinate to human rights obligations. As the UN Charter explicitly states, 'in the event of a conflict between the obligations of the Members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail'.⁶⁷

Uruguay has provided a systematic elaboration of this argument. The Uruguayan Ministry of Foreign Affairs wrote to the INCB in February 2014:⁶⁸

'The Uruguayan State is an absolute defender of international law. In that sense, it has a comprehensive view of the law and obligations assumed by the country not only in the sphere of the Drug Conventions of 1961, 1971 and 1988, but also in the field of the protection of human rights...'

It is important for Uruguay to remark the following:

- i. *The object and purpose of the Convention on Narcotic Drugs, especially the 1988 Convention, should be combating illicit trafficking and, in particular, combating the harmful effects of drug trafficking...*
- ii. *All the measures adopted to put this combat into practice must neither contradict the Uruguayan Constitution nor ignore or leave fundamental rights unprotected.*
- iii. *The obligations that our State, as well as other State parties, have assumed under other Conventions, must be taken into account, in particular those related to the protection of human rights, since they constitute *jus cogens* ["compelling law"] and cannot be ignored.*
- iv. *...given two possible interpretations of the provisions of the Convention, the choice should be for the one that best protects the human right in question, as stated in Article 29 of the American Convention on Human Rights...In this context and on the basis of the above interpretation, we believe that production and sale in the manner prescribed in the new law may be the best way, on the one hand, to combat drug trafficking, and on the other, to defend the constitutionally protected right to freedom of our fellow citizens.'*

'Alternative development' represents a particularly problematic framework as it segregates entire communities from regular development processes and implements retrograde and discredited development policies with the same endpoints as eradication strategies: ineffective, crop displacing and innately short-termist, while favouring the landed over the landless.

3. EXPANDED DEFINITION OF 'MEDICAL AND SCIENTIFIC' VIA SOCIAL SCIENTIFIC POLICY EXPERIMENTATION:

As the commentary on the 1961 Single Convention states, 'The object of the international narcotics system is to limit exclusively to medical and scientific purposes the trade in and use of controlled drugs'.⁶⁹

The Commentary on the Single Convention states that 'the term 'medical purposes' does not necessarily have exactly the same meaning at all times and under all circumstances'.⁷⁰ Prior to 1961, an array of states counted state regulated opium eating and smoking as 'quasi-medical' use.⁷¹ Although this has ceased, it highlights the continued evolutionary process of convention interpretation. By redefining national understandings of 'medical and scientific' with greater regard to national needs, indigenous rights and human rights, states can expand the scope of licit consumption practices under the conventions. This provides significant and innate flexibility of interpretation around implementation of the conventions.⁷² In particular when understood in terms of the clear 'regulatory' 'intent' and 'purpose' of the conventions.

A LONG TERM DRUGS/DRUG POLICY MITIGATION STRATEGY – SUSTAINABLE DEVELOPMENT

As member states increasingly reject the war on drugs strategy, this chapter suggests a mechanism for replacement: the Sustainable Development Goals (SDGs). This is not to suggest that the SDGs address drug policies in any great depth. They do not. However, the SDGs provide the most comprehensive international framework to substitute prohibitionist policies and instead prioritise sustainable development for member states and the broader international community.

For example, in the case of peace building in Colombia, the government faces the continued existence of illicit crop economies, which sustain poor, marginalised and conflict ravaged communities with virtually no viable alternative. In this context, issues of supply reduction must take a back seat to the SDGs. Further, it should not be considered an 'alternative development' issue: it is a sustainable development issue. 'Alternative development' represents a particularly problematic framework as it segregates entire communities from regular development

processes and implements retrograde and discredited development policies with the same end-points as eradication strategies: ineffective, crop displacing and innately short-termist, while favouring the landed over the landless.⁷³

By tackling the causes of poverty, insecurity and inequality, governments can lessen the causes of illicit drug economies and thereby eventually work to reduce supply. However, the policy process must be properly sequenced and supply reduction viewed as the long-term outcome of successful development policies.

Key Policy Points:

- Support development and political integration first.
- Accept a need to accommodate local realities and prioritise policy goals: development over eradication.
- View problem-crop reduction as a positive externality (outcome) of successful sustainable development policies, rather than a prerequisite for government assistance.
- Recognise that 'properly sequenced forced eradication' is incongruent with economic and political integration as the looming threat of military intervention undermines trust and establishes the government as an external and threatening force.⁷⁴

In this context, the government's role is to treat illicit production as an issue, but a relatively low priority one that requires overarching development issues to be addressed before it can be tackled.

In tackling these issues in coca or opium growing regions, governments must grapple with the traditional issues of development: fostering economic integration, sustainable and diverse livelihoods, security, rule of law, etc. None of these can progress if the government sets an end commodity as its key target: *i.e.* whether farmers are growing the only crop that sustains them in the immediate term. Meanwhile, the impacts on consumer countries are minimal and thereby render the policy choices additionally unjustifiable. Most of the price inflation that is credited with dissuading consumption in consumer countries⁷⁵ comes from the parts of the commodity chain which require the greatest financial and political capital to maintain – transshipping and crossing borders. Farm gate

 Increasing segments of the commodity chain, beginning with marginalised coca and opium producer communities, should be decriminalised. Particularly when that decriminalisation works with the implementation of the SDGs and has no demonstrable impact on consumer country prices. 

prices of coca and opium represent an almost negligible proportion of end market prices. Marginal shifts in production, unless a massive and sustained macro shift,⁷⁶ have no impact. Therefore, policies geared toward impacting on production induce major hardship on vulnerable populations with no discernible outcomes.

Meanwhile, there is broad academic recognition that decriminalisation is a policy imperative for demand-side policies.⁷⁷ This is now extending to the supply side. Beyond UNGASS, increasing segments of the commodity chain, beginning with marginalised coca and opium producer communities, should be decriminalised. Particularly when that decriminalisation works with the implementation of the SDGs and has no demonstrable impact on consumer country prices.

CONCLUSION

A myriad of political, diplomatic, economic, realpolitik, irrational, moral and legion other forces have brought international drug policy to where it is today. An inflection point occurred over the last decade, which drove global drug policies more quickly toward a new normative international framework. The complex political and economic forces which buttress the system have begun to shift. However, UNGASS demonstrates that change will be evolutionary, not transformative; ad hoc, messy and legally ambiguous, not clear, coherent and legalistic. This is as one would expect with any issue within the realm of international relations.

Overall, the SDGs offer a clear pathway to a 'development first' approach to drugs. They allow for positive action on the key issues that mitigate or worsen issues of drug policy: violence, poverty, corruption and so on. Further, history highlights that the current global strategy rests on an extremely

selective prioritisation of specific aspects that could potentially be implied by the treaties. It further rests on its prioritisation above all other development, welfare and health-based policies or any real reference to human rights. Under such a reading, the system is not a 'straightjacket': it is simply being implemented in a particularly bizarre, ineffective and unjustifiable manner.

That the treaties suggest member states work to suppress illicit (undefined) 'non-medical and non-scientific' use by (undefined) mechanisms, does not therefore equate to forced eradication, militarisation, widespread criminalisation or any of the other 'pigheaded'⁷⁸ implementations of international drug policy. The 'war on drugs' has always been about interpretation, implementation and resource allocation. The escape from the 'war on drugs' will similarly rest on interpretation (flexibilities), implementation (evidence or ideology) and resource allocation (public health and human security over incarceration and policing).

METRICS AND INDICATORS

To walk into a discussion on the direction of drug policy in any meeting is to walk in on a discussion of the need for new metrics, indicators or in some circles, for new data. The assertion is rarely followed by any tangible elaboration of actual metrics and indicators. Further, the role of metrics and indicators in a broader reform strategy, itself usually lacking, is never addressed. The assumption appears that: fundamentally irrational policies can be made more rational through more effective monitoring and implementation.

Undoubtedly there are marginal changes that can be made. But the idea that new metrics and indicators are the way to reform global drug policies in a less prohibitionist

direction seems to be untethered to any clear strategic reality. Instead, it seems it is a debate which fixates on symptoms of policy inadequacy rather than causes. Again, one could think of the SDGs: the goals and targets came first. The metrics and indicators second. It seems in drug reform the notion is to reverse engineer policy goals by tinkering with policy evaluation tools.

Others suggest new metrics and indicators will be a useful mechanism to engage the broader development community. This seems a reasonable goal, however, some caution is needed. Alternative development emerged in a similar manner - as a softer form of supply side policies. Its origins trace back to the 1930s and 40s, and since then it has always been seen as the 'new wave' of liberal drug policy that just requires commitment and funding.

Alternative development has in fact become one of the most ineffective and unjustified policy interventions in the field and is subject to the same displacement 'balloon effect' as eradication policies. Further, it becomes a mechanism to sustain prohibitionist policies by appearing to do 'something' about supply reduction regardless of whether it is ineffective or harmful. It thereby results in policy makers viewing it as a soft fall-back from repressive policies. Frequently, policy makers have oscillated between damaging and ineffective eradication policies and ineffectual and wasteful alternative development policies: meaning that genuinely development-oriented policies never achieve a foothold. Similar worries should be held about the emerging fixation on the metrics debate.

Other contributions to this report offer attempts to elaborate some clear metrics that policy makers should incorporate. This discussion is meant merely to highlight the dangers of metrics becoming a non-discussion about a non-solution to the problems of bad drug policies. ■

NOTES

- 1 Thanks to A. Zajaczkowska for providing feedback on the first draft on this paper.
- 2 J. Collins, ed., *Ending the Drug Wars: Report of the LSE Expert Group on the Economics of Drug Policy* (London School of Economics and Political Science, 2014), <http://www.lse.ac.uk/IDEAS/publications/reports/pdf/LSE-IDEAS-DRUGS-REPORT-FINAL-WEB01.pdf>.
- 3 S. Pelley, 'A New Direction on Drugs', *60 Minutes*, 13 December 2015, <http://www.cbsnews.com/news/60-minutes-a-new-direction-on-drugs/>.
- 4 This paper dates the 'war on drugs' era from the declaration of the war on drugs, 1971, to the UNGASS in 2016.
- 5 As this paper went to press, the term 'flexibility' seemed likely to appear in the official UNGASS 'outcome document.' Some commentators interpret 'treaty flexibilities' as public health oriented approaches grudgingly permitted within the treaties, but against their prohibitionist intent. This paper rejects this reading and construes flexibilities as implementations which were previously viewed as outside mainstream interpretations of the treaties during the 'war on drugs' era, but are now increasingly accepted – e.g. the US State Department's rationale for selective federal enforcement of cannabis prohibitions: see W. R. Brownfield, 'Trends in Global Drug Policy' (New York, 9 October 2014), <http://fpc.state.gov/232813.htm>.
- 6 J. Reinl, 'The Paradox of War on Drugs and Marijuana Legalisation', *Al Jazeera*, 10 January 2016, <http://www.aljazeera.com/indepth/features/2016/01/paradox-war-drugs-marijuana-legalisation-160109182606156.html>.
- 7 See Francisco Thoumi's contribution to this report.
- 8 J. Collins, 'Regulations and Prohibitions: Anglo-American Relations and International Drug Control, 1939–1964' (London School of Economics and Political Science (LSE), 2015), <http://etheses.lse.ac.uk/3107/>.
- 9 See Peter Reuter, Harold Pollack and Bryce Pardo's contribution to this report for a broader discussion, or Beau Kilmer's contribution for a potentially revisionist take.
- 10 J. Csete, 'Costs and Benefits of Drug-Related Health Services', in *Ending the Drug Wars: Report of the LSE Expert Group on the Economics of Drug Policy*, ed. J. Collins (London: LSE IDEAS, 2014).
- 11 See, e.g., Vanda Felbab-Brown's contribution to this report.
- 12 See Jonathan Caulkins' contribution to this report.
- 13 M. A. R. Kleiman and J. A. Ziskind, 'Lawful Access to Cannabis: Gains, Losses and Design Criteria', in *Ending the Drug Wars: Report of the LSE Expert Group on the Economics of Drug Policy*, ed. J. Collins (London School of Economics and Political Science, 2014).
- 14 For an overview of the international drug conventions see: J. Collins, 'The International Drug Control System', ed. J. Collins *Governing the Global Drug Wars*, LSE IDEAS Special Reports, 2012, <http://www.lse.ac.uk/IDEAS/publications/reports/SR014.aspx>.
- 15 M. Jelsma and D. R. Bewley-Taylor, 'The UN Drug Control Conventions: The Limits of Latitude', *Series on Legislative Reform of Drug Policies* (Transnational Institute and International Drug Policy Consortium, 2012), <http://www.tni.org/sites/www.tni.org/files/download/dlr18.pdf>.
- 16 Expressed by a number of policy actors in public and private discussions.
- 17 One could think of an analogy of prohibitions around intellectual property laws. International regulations (and prohibitions) on intellectual property theft would never be read as carte blanche for extreme policing and human rights degrading responses to those involved. Similar comparisons could be made for piracy, whereby a policy decision to enact an aggressive and grossly disproportionate military response in all cases is somehow construed as a requirement of international law. Such a logical fallacy is readily apparent in this case, but seems lost in drug policy discussions.
- 18 Private discussions.
- 19 For example, the recognition that some Latin American governments had simply never criminalised drug use appeared almost to come as a surprise to some of those debating whether decriminalisation was possible under the conventions.
- 20 A policy literature has emerged suggesting public health approaches represent a form of 'soft defection' from the 'regime', while overt breaks with the consensus represent 'hard defections': D. R. Bewley-Taylor, *International Drug Control: Consensus Fractured* (Cambridge University Press, 2012).
- 21 Draft Brief for UK Rep, 'ECOSOC XII', 6th February 1951, BNA, IOC (51)14, CAB 134/410.
- 22 Discussions of 'quasi-medical' opium use; contingency of policy change on suppression in surrounding territories; the need for development-first approaches and shifts in types of opium maintenance represent some of the clearest examples of this. See: Collins, 'Regulations and Prohibitions: Anglo-American Relations and International Drug Control, 1939–1964', pp.38–100.
- 23 CND: Third Session – Report of the UK Delegate, 2 June 1948, BNA-FO371/72915. Cited in: *Ibid.*, p.183.
- 24 W. B. McAllister, 'Reflections on a Century of International Drug Control', ed. J. Collins, *Governing the Global Drug Wars*, LSE IDEAS Special Reports, 2012.
- 25 Report by British Delegate, CND 4th Session, 20 June 1949, Cited in: Collins, 'Regulations and Prohibitions: Anglo-American Relations and International Drug Control, 1939–1964', p.200.
- 26 *Ibid.*, p. 51.
- 27 This is similar to recommendations for cannabis regulations made by Kleiman and Ziskind, 'Lawful Access to Cannabis: Gains, Losses and Design Criteria'.
- 28 L. Minute, 'Notes on Policy of Opium Prohibition in Burma, January 1944; Letter, Lindsay to McGuire, 27 November 1943', cited in: *Ibid.*, p.84.
- 29 Quoted in: *Ibid.*, p.51.
- 30 For extensive elaborations of this view, see: File: Control of Opium Smoking in Burma, Cited in: *Ibid.*, p.87.
- 31 J. Collins, 'Breaking the Monopoly System: American Influence on the British Decision to Prohibit Opium Smoking and End Its Asian Monopolies, 1939–1943' (Forthcoming).
- 32 Collins, 'Regulations and Prohibitions: Anglo-American Relations and International Drug Control, 1939–1964', p.148.
- 33 *Ibid.*, p.196.
- 34 *Ibid.*, p.98.
- 35 American Embassy Tehran to Secretary of State, 31 July 1945, cited in: *Ibid.*, p.154.
- 36 In 1947, the State Department pointed out that 'the political situation in that part of the world and in France' prevented the US raising the issue and suggested 'non-public corrective action.' *Ibid.* p.181.
- 37 In 1948, the State Department vetoed any criticism of perceived Mexican inaction of opium growing citing 'other negotiations...in several matters of considerable importance, one of which is of great

- importance to us from the viewpoint of hemisphere defence', *Ibid.* p.171.
- 38 See UN, 'Commentary on the Single Convention on Narcotic Drugs, 1961' (New York, 1973), https://www.unodc.org/documents/treaties/organized_crime/Drug%20Convention/Commentary_on_the_single_convention_1961.pdf.
- 39 Secretary General to US Secretary of State, 23 April 1947, Cited in Collins, 'Regulations and Prohibitions: Anglo-American Relations and International Drug Control, 1939-1964', p.172.
- 40 For example, Iran pointed out that police had been authorised to enter private houses and the Parliament was considering the death penalty for anyone found smoking opium. CND publicly noted Iran's measures with satisfaction. UN CND 2nd Session, 'Record of the Seventeenth Meeting', 5 August 1947, Cited in: *Ibid.*
- 41 US Chief drug diplomat Harry Anslinger rarely showed up to CND meetings in the late 1950s or the Plenipotentiary Conference in 1961 due to the ill health of his wife.
- 42 The final nail in the coffin was the Vatican's 'fears that this would be used against the Cardinals and Bishops in the Iron Curtain countries'. See: Anslinger to Hayes, 4 April 1961, Cited in: Collins, 'Regulations and Prohibitions: Anglo-American Relations and International Drug Control, 1939-1964', p.251.
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Re-examining the 'Medical and Scientific' Basis for Interpreting the Drug Treaties: Does the 'Regime' Have Any Clothes?

Francisco E. Thoumi¹

SUMMARY

- The 1961 Single Convention on Narcotic Drugs has been ratified by 185 countries, with the 1971 and 1988 Conventions having received similar support.
- This essay explores the logical consistency of the conventions since, despite strong support to limiting drug use to 'medical and scientific purposes,' these terms are not defined in the Conventions: excluding any contribution of the social sciences.
- By ignoring other sciences, the international control system has failed to account for the fact that policy success depends on the policy implementing mechanisms that are available in a society. Failure to cooperate with the social sciences is equivalent to the INCB telling countries that policy goals in global drug control should be complied with independent of any social costs or consequences.
- Interpretation of the term 'science' has left drug policy mainly in the hands of physicians, health and law enforcement experts, in an effort to de-politicise drug policies under the assumption that the drug policy makers' decisions can be made using only 'hard' sciences and medicine. This omits any consideration of the social factors of drug dependence, illegal drug production and trafficking. Anti-drug policies based on 'medicine and science' may attack contributing factors, but not their underlining social causes.
- It may be logically possible to accept that non-medicinal and research uses of marijuana, such as in Uruguay, comply with the conventions if those policies are based on scientific evidence from both medicine and the social sciences. The same may be argued about safe injection rooms.
- Whereas the slogan of the last UNGASS was 'A drug free world. We can do it!', the author hopes that the slogan of UNGASS 2016 will be 'a drug free world, no we can't, but let's accept the complexity of drug issues and work together to minimise the costs of addiction and all other related social harms.'

The 1961 Single Convention on Narcotic Drugs has been ratified by 185 countries and the 1971 and 1988 Conventions have received similar support. This essay explores the logical consistency of the conventions because, despite the strong support to the limitation of drug uses to 'medical and scientific purposes,' they are not defined in the conventions and exclude any contribution of the social sciences.

The International Drug Control System arose from the concern with the growth of opium addiction during the Nineteenth Century, mainly in China and particularly after the Opium Wars. At the Shanghai Opium Commission of 1909² the US delegation, supported by China, proposed to limit the use of opium and other psychoactive drugs to 'medical and scientific purposes.' Other countries opposed efforts to restrict their burgeoning pharmaceutical industries via international regulation. Meanwhile, colonial powers which produced and exported opium or allowed domestic consumption, argued that some traditional or 'quasi-medical' uses were legitimate and that use regulation was a better policy than complete prohibitions on non-medical and scientific uses.³ The Commission produced a series of non-binding recommendations and did not go along with the American and Chinese proposal.

The US pursued that use restriction in the conferences in which The Hague Convention of 1912 and the 1925, 1931 and 1936 drug conventions of the League of Nations were negotiated. However, the US did not achieve its desired result and it actually left the 1925 conference because of that issue. In the League of Nations, the US only signed the 1931 Convention that made some advances in the direction of limiting controlled drug use.

By the end of the Second World War, the politics of international drug control had changed drastically and the drug control system developed by the League of Nations shifted to the Economic and Social Council (ECOSOC) of the UN.

During the 1940s and 50s, disorder and illegality of the world opium market resulted in efforts led by the US to create a new 'single convention' to consolidate all existing treaties and international norms, as well as to establish a regulatory system for global production in order to forcibly limit supply to 'medical and scientific' needs.⁴ Interim efforts to restrict global supply, alongside stalled negotiations around the 'single convention,' resulted in the 1953 Opium Protocol wherein article 2 asserts that 'The Parties shall limit the use of opium exclusively to medical and scientific needs.' However, the Protocol was viewed as a product of diplomatic bullying and many member states rejected the explicit limiting of the number of 'recognised' producers of opium and other medicines internationally. As a result, it did not come into force in the 1950s, despite US efforts.

Meanwhile, under British leadership the 'single convention' became viewed as a compromise document which could roll back the excesses of the 1953 Protocol and it was agreed at a Plenipotentiary Conference in 1961. The US initially rejected the document as too weak, but it found overwhelming support among member states, coming into force in 1964

and eventually being ratified by the US in 1967. This convention was also based on the goal of limiting all controlled drug use to 'medical and scientific purposes.' Article 4, paragraph c reads:

'Article 4. General obligations'

The parties shall take such legislative and administrative measures as may be necessary:

[...] (c) Subject to the provisions of this Convention, **to limit exclusively to medical and scientific purposes** the production, manufacture, export, import, distribution of, trade in, use and possession of drugs' (highlights by the author).

Achieving this goal was the main purpose of the Convention as stated in the preamble:

'Desiring to conclude a generally acceptable international convention replacing existing treaties on narcotic drugs, limiting such drugs to medical and scientific use and providing for continuous international co-operation and control for the achievement of such aims and objectives.'⁵

The Commentary on the 1961 Single Convention concurs: 'The object of the international narcotics system is to limit exclusively to medical and scientific purposes the trade in and use of controlled drugs.' From the beginning this has been a basic principle of the multilateral narcotics system, although all the treaties providing for it authorise some exceptions. The 1912 and 1925 Conventions and the 1953 Protocol contained provisions incorporating this principle. The gradual scope of its application is a characteristic feature of progress in this

Despite the expressed goal of limiting drug uses to 'medical and scientific purposes,' they are not defined in the Conventions and current interpretations exclude any contribution of the social sciences.

branch of treaty law. It is one of the most important achievements of the Single Convention that it ended the exceptions permitted in earlier treaties, subject only to transitional provisions of limited local application and duration.⁶

This essay explores the logical consistency of the conventions because, despite the expressed goal of limiting drug uses to 'medical and scientific purposes,' they are not defined in the conventions and current interpretations exclude any contribution of the social sciences. Further, the motivations expressed in the preamble are confusing because they differ in the various official languages of the United Nations. These issues are analysed in sections II and III.

Section IV explores the commonly used concepts of science. These include medicine, 'basic' or 'hard,' and social sciences. Section V and VI look at the etiology and epidemiology of illegal drug production trafficking and consumption and the impossibility to formulate and implement successful drug policies solely based on medicine and 'hard' sciences. The last two sections present a few conclusions and challenges facing the International Drug Control System (IDCS).

ARE THERE LOGICAL FLAWS IN THE CONVENTIONS AND IN THEIR INTERPRETATION?

The drug conventions implicitly assert that limiting the use of controlled substances to 'medical and scientific purposes' is the right way to achieve and protect the 'health and welfare of mankind.'⁷ This formula was first proposed in 1909 and based on the prevailing belief that scientific advances in medicine and other sciences would enable societies to manage and reduce the social harms from drug use.

There is no question that conventions should be complied with, but there is also no question that the conventions should be clear and logically consistent because otherwise they would lead to contradictions and confusion. To avoid these problems, conventions generally define their most important terms carefully and in this respect the drug conventions are flawed because they fail to define their two most important concepts: 'medical and scientific purposes.' In legal parlance, they have a 'legal void' or 'legal gap.'

The first article of the three drug conventions defines the important terms and concepts used.⁸ Other definitions concern the UN drug agencies and their staff positions. This list confirms that when negotiating the conventions, it was important to clarify what each term meant to avoid ambiguities and confusion. Unfortunately, the interpretation of the conventions depends in a fundamental way on the definitions of medicine and science used, as they are not defined in the conventions. Meanwhile, the fact that article 4 Paragraph c 'treats medicine and science as separate raises doubts whether medicine is considered a science, because if medicine is a science there would not have been a need to mention it separately.

However, the Commentary on the Single Convention sheds some light:

'The term 'medical purposes' has not been uniformly interpreted by Governments when applying the provisions of the narcotics treaties containing it. Some have prohibited the consumption of narcotic drugs by all addicts excepting only when necessary to alleviate suffering during withdrawal treatment; a number of other countries have permitted consumption by persons whose addictions prove to be incurable to the minimum quantities required to life. There have also been a few cases in which all consumption of narcotic drugs by addicts was prohibited, even in the course of withdrawal treatment.'

The term 'medical purposes' does not necessarily have the same meaning at all times and under all circumstances. Its interpretation must depend on the stage of medical science in the particular time in question; and not only modern medicine, sometimes referred to as 'western medicine,' but also systems of indigenous medicine such as those which exist in China, India and Pakistan, may be taken into account in this connection.

The term 'medical purposes' includes veterinary and dental purposes.'⁹

These commentaries note that countries have interpreted the term 'medical purposes' in various ways, using criteria from modern medicine but also accepting some other traditional medical practices and ways to treat addicts including some addiction maintenance, that 'may be taken into account in this connection,'¹⁰ a statement that is vague enough to require further interpretation.

In any case, neither the conventions nor the commentaries make any effort to define medicine and science. One may speculate about the reasons why:

- Perhaps it was assumed that everybody clearly knows what medicine and science are and there is no need to define them.
- Perhaps because those are very complex concepts that could have not been discussed or defined adequately in a political document of a multicultural and diverse organisation.
- Perhaps because the adequate interpretation of the conventions did not require such definitions.
- Perhaps because drug policies should be decided only by consensuses emanating from medicine, but accepting the use of psychoactive substances in 'hard sciences' research programmes.

I am sure that there could be other hypotheses, but in my experience with those who have participated in the interpretation and implementation of the conventions I have found the last hypothesis is likely to have prevailed as many of them implicitly assume social and other 'soft' sciences are not sciences and should not be taken seriously because they are simple speculations.¹¹ Thus, drug policies should be formulated by 'hard' scientists and physicians. The logic of this position is simple: medicine knows how psychoactive drugs negatively affect the brain and the central nervous system and this knowledge gives toxicologists and other doctors, supported by other 'hard' sciences, the power to formulate drug policies for the whole of humankind. It is as if physicians, who are used to decide which drugs their patients should and should not take, should also decide for all of society.

Whatever the reasons may be, the real issue is that the agencies of the UN have not defined 'medical and scientific purposes' and have interpreted the drug conventions from a perspective that rejects the legitimacy of

the social sciences and give a monopoly to the medical establishment to decide what are the only legitimate uses of psychoactive drugs. This however presents a logical dilemma since the terms 'medicine' and 'science,' that are the key determinants of the allowed drug uses, are not defined. Thus, it is logically impossible to know if any specific policy complies with the conventions and it is not possible to rule out any policy as 'unscientific.' For example, if social sciences are sciences, syringe and needle exchange and drug injecting rooms, that are based on empirical evidence (that social sciences can provide) about their social costs and benefits, might well comply with the conventions. But if the social sciences are not scientific, such policies could be rejected.

Conventions generally define their most important terms carefully and in this respect the drug conventions are flawed because they fail to define their two most important concepts: 'medical and scientific purposes.'

IS THE PREAMBLE CLEAR ENOUGH ABOUT THE MOTIVATIONS FOR THE CONVENTIONS?

The preamble of any convention informs about the reasons and motivations that promoted its creation. Then, when conventions formulate policies, they are expected to be consistent with their motivations, but the 1961 Single Convention is confusing in this regard. The preamble starts: 'The Parties, concerned with the health and welfare of mankind.' However, the Spanish and French versions are different: '*Las Partes, preocupadas por la salud física y moral de la humanidad*' and '*Les parties, soucieuses de la santé physique et morale de l'humanité*' which translates as 'The parties concerned with the physical and moral health of mankind.' Revising the Russian, Chinese and Arabic versions, it is found that the prefaces refer to wellbeing and caring for human health and welfare. Article 40, paragraph 1 of the Convention asserts that 'This Convention, of which the Chinese, English, French, Russian and Spanish texts are equally authentic.'¹³ The 1971 Convention on Psychotropic Substances in English, French and Spanish have replicated those assertions about their motivations.

The preambles of both conventions present an apparent contradiction between the motivations expressed on the one hand in Arabic, English, Russian and Chinese, and on the other in French and Spanish: the main motivation expressed in the former group was the welfare of mankind and in the latter two languages was the moral health of mankind. It may have been that in 1961 the term 'welfare' in English had a moralistic connotation, in which case there would not have been a contradiction. However, after reviewing several dictionaries and encyclopaedias, in their definitions of welfare there were no references to morals.¹⁴ The fact is that 'welfare' and 'moral' are not synonymous and their meanings vary drastically across societies. That is why to clarify the conventions the same term should be used in English, the language in which the conventions were negotiated and in other UN official languages. Furthermore, that term should also be defined. Besides, if a definition of morals is used, the Convention is arguing that there is a concept of morality that can be applied globally, which is impossible to agree on. If the common definition of welfare is used, drug policies would be a lot more flexible than if the purpose was moral

as it would allow the use of rigorous social and economic cost-benefit analyses wherein results cannot be predicted *a priori*, to determine whether a drug policy improves or harms welfare.

WHAT IS SCIENCE? ARE THERE ANY SOCIAL SCIENCES?

Since the conventions do not define science, Table 1 presents the definitions in the dictionaries of Cambridge University and the Royal Academy of the Spanish Language.¹⁵

These definitions show that the attempts to define science, besides trying to answer the question of what science is, have also developed systems to classify sciences and scientific knowledge. The contrast between the definitions of the two dictionaries is striking. The Cambridge University Dictionary limits science to what could be considered as modern sciences emanating from the Enlightenment, while the definition of the Royal Academy of the Spanish Language covers also pre-modern fields such as infuse and occult sciences, which fall into the category of 'epistemological obstacles' to the development of modern sciences and scientific knowledge.¹⁶

The attempts to classify sciences are innumerable and result in a great variety of groupings. The following is presented to illustrate this point:

- Natural sciences: physics, chemistry, ecology, oceanography, geology, meteorology, human biology and botany.
- Social sciences: anthropology, archaeology, business administration, communication, criminology, education, government (political science), linguistics, international relations, psychology, sociology, economics, law, history and geography.
- Formal sciences: decision theory, logic, mathematics, statistics, systems and computer theories.
- Applied sciences: all engineering fields, applied mathematics, applied physics, medicine and applied computing.

TABLE 1. DEFINITION OF SCIENCE

Dictionary of the Royal Academy of the Spanish Language (23rd. edition, author's translation)	Cambridge University Dictionary (online)
<p>1. Body of knowledge obtained by systematic and structured observations and reasoning from which it is possible to deduce general principles and laws.</p> <p>2. Erudition.</p> <p>3. Skills, mastery, knowledge about something.</p> <p>4. Body of knowledge relative to exact, physics, chemistry and natural sciences.</p> <p>Science-fiction: Literary or cinematographic genre with a content based on hypothetical future technical and scientific achievements.</p> <p>Infused science: 1. Knowledge received directly from God. 2. Knowledge that is not acquired through study.</p> <p>Pure sciences: The study of natural phenomena and other aspects of knowledge studied without regard of their applications.</p> <p>Exact sciences: mathematics.</p> <p>Human sciences: sciences like history, philosophy and philology that study diverse aspects of human thought and activity.</p> <p>Natural sciences: those whose object is the study of nature such as geology, botany, zoology, etc. Sometimes physics and chemistry are included.</p> <p>Occult sciences: Mysterious knowledges and practices such as magic, alchemy, astrology, etc., that since antiquity have pretended to scrutinise and dominate the secrets of nature.</p> <p>Social sciences: those like economics, sociology and anthropology that deal with social human activity.</p> <p>The art of Poetry ('ciencia Gaya' in Spanish)</p>	<p>1. The systematic study of the structure and behaviour of the natural and physical world or knowledge obtained about the world by watching it carefully and experimenting.</p> <p>2. Sciences are also particular areas of science, such as biology, chemistry, and physics.</p> <p>3. Science also refers to subjects which are studied like political science, computer science.</p>

The definitions and classifications of science show that there are many possible definitions of science and also that the term 'science' does not apply only to the fourth definition of the Royal Academy of the Spanish Language: 'Body of knowledge relative to exact, physics, chemistry and natural sciences,' which is perhaps close to what some scientists would refer to as 'basic' sciences. This is why without clearly defining the terms 'medical' and 'scientific' in the conventions, it is logically impossible to claim that there is a unique way to interpret them. Furthermore, to be logically consistent, any interpretation of the conventions should spell out which definition of science is used.

I propose that in order to decide if an academic discipline is a science and whether it should be considered in the conventions on the same footing as modern medicine, two questions should be answered positively: first, is the knowledge in that discipline obtained through modern scientific methods? That is through methodical and structured observation, reasoning and empirical testing techniques. And second, is that knowledge relevant for drug policies?

Drug policy issues involve many academic disciplines: medicine, public health, law, criminology, law enforcement, chemistry, economics, finance, sociology, political science (government), international relations, statistics, agronomy, anthropology, environmental sciences, history, among others. The issue is whether these disciplines were developed following modern scientific methods.

In 1909 many of these disciplines were weak and undeveloped compared to physics and chemistry, which were also grossly undeveloped compared to their current state. Since then the development and complexity of universities and research centres across the world has grown exponentially and the fields of knowledge became increasingly specialised. Concurrently scientific research methods advanced in virtually all fields. Social sciences have made great strides. They have applied analytical research methods and developed new models and empirical testing techniques. In some cases, like experimental economics and psychology, the use of research methods previously used only in the so called 'hard' or 'basic' sciences, has become the norm. In medicine itself, neuroscience virtually did not exist in 1961 and its findings are not reflected in the Convention.

Not surprisingly, both supporters and critics of the IDCS insist that their positions are based on science and that they want drug policies based on 'science and evidence.'

Current policy supporters implicitly assume:

1. That current policies have been formulated based on science.
2. That science provides the models and instruments to fully understand drug phenomena.
3. That there is a consensus about the interpretation of the evidence.
4. That science also provides the knowledge necessary to go from the scientific models to socially adequate policies.

Without clearly defining the terms 'medical' and 'scientific' in the conventions, it is logically impossible to claim that there is a unique way to interpret them.

Critics concur with the last three assumptions and differ only on the first one: from their point of view, current policies have disregarded many scientific advances and significant evidence. They also point out:

1. The weakness of some of the medical studies used to support some of the measures taken in the Single Convention. For example, the report of the Commission of Inquiry on the Coca Leaf¹⁷ would not meet today's scientific criteria and was a highly politically motivated document.¹⁸ Besides, a summary of the Commission's report asserts that 'It does not at present appear that the chewing of the coca leaf can be regarded as a drug addiction in the medical sense.' But despite finding that coca chewing has deep social reasons rooted in Peru and Bolivia's social structures and history, still recommended that coca chewing should be banned: 'since chewing coca is not an isolated fact, but the consequence of a number of unfavorable social and economic factors, the solution of the problem involves two fundamental and parallel aspects: firstly, the need for improving the living conditions of the population amongst which chewing is a general habit and secondly, the need for initiating simultaneously a governmental policy to limit the production of coca leaf, to control its distribution and eradicate the practice of chewing it.'¹⁹
2. That the efforts to repress drug consumption and eliminate its supply do not consider the evidence on their social, economic and environmental consequences, which frequently are dismissed as unintended and attributed to the drug production, trafficking and consumption that the anti-drug policies are combating.

I propose that in order to decide if an academic discipline is a science and whether it should be considered in the Conventions on the same footing as modern medicine, two questions should be answered positively: first, is the knowledge in that discipline obtained through modern scientific methods? That is through methodical and structured observation, reasoning and empirical testing techniques. And second, is that knowledge relevant for drug policies?

Interestingly, both policy supporters and policy critics are convinced that they are objective and can formulate drug policies rationally without interference from their emotions and intuitions, that is, from their political beliefs and inclinations.

THE ETIOLOGY AND EPIDEMIOLOGY OF ILLEGAL DRUG PRODUCTION, TRAFFICKING AND CONSUMPTION

In most instances, cause and effects relationships are clearly established in the 'hard' sciences like chemistry and physics, but when psychoactive drug production, trafficking and consumption are tested empirically no such relationships are encountered. Medical epidemiology studies show that drug addiction vary substantially among societies.²⁰ In some cases, genetics plays an important role, like in alcohol addiction among some native communities in North America, but in all cases the importance of social factors is very substantial. In the cases of drug production and trafficking of illegal substances it is not possible to argue that genetics has played a role in the development of the illegal drug industries. In all these cases there are no direct cause and effect relationships.

All epidemiological studies have identified contributing and protective factors, but no direct causal factors. There are many social factors that contribute to drug consumption: broken homes and single female parents, school failure, poverty, social exclusion, pressures to succeed in business and professions, having received extensive medical treatment with addictive drugs, etc. Many others are protective like good loving families, strong religious participation and factors that are the inverse of the contributing ones. These factors are used to develop risk profiles of vulnerable people, but most people that fit those profiles do not become addicts or drug users. Risk factors simply increase the probability that a particular phenomenon occurs like the probability that a person will become a drug user or an addict. However, they are not functional causes in the sense of mathematics and basic science such that drugs (D) are a function of X, Y and Z such that it could be argued that D=f(X, Y, Z).

Epidemiological social studies reach similar results; they identify contributing and protective social factors for and against engaging with illegal drugs and other criminal activities. The great difference in the prevalence of drug production, trafficking and consumption across countries shows that there are some societies that have a higher risk of developing criminal activities and drug consumption than others. That is, as with individuals, every society has a degree of vulnerability determined by its social structures and formal and informal norms (institutions).²¹

THE IMPOSSIBILITY TO FORMULATE AND IMPLEMENT SUCCESSFUL DRUG POLICIES SOLELY BASED ON MEDICINE AND SCIENCE

The drug conventions assume that successful international drug policies can be formulated and implemented solely based on medicine and science. This assumption implies that medical doctors, supported by scientists, mainly chemists, biologists and other professionals from the 'hard' sciences, should have monopoly power to decide what uses the controlled drugs may have across humankind. That is, that humans may not ingest controlled psychoactive drugs under any circumstances, except for purposes approved by doctors. Thus, recreational, experimental, religious, social and similar uses are absolutely prohibited and UN documents refer to them as abuses. This implies that the international control system has had the goal of a world without drugs, except when they are used to cure illnesses and do research. Because of this, those in the professions of medicine, the police services and the justice system have ended up acting as public policy experts formulating and implementing policies with a very narrow view that disregards the social etiology of drug production, trafficking and consumption.

By ignoring the social and other sciences, the international control system has failed to take into account a fundamental public policy fact: policy success depends on the policy implementing mechanisms that are available in a society. Medicine can determine the effects of drug use on the human body but it cannot prevent addiction and prohibiting social uses of addictive drugs is not medicine, it is an act that falls in the realm of social sciences. The failure to cooperate with the social sciences in the formulation of drug policies is equivalent to have the INCB tell countries: 'this is the policy goal that you accepted when you signed the conventions, it is your problem to comply with it, independent of any costs, benefits or social consequences and it is our job to induce you to comply'.²²

Drug production, marketing and consumption present multidimensional complex problems that may not be solved with solutions coming from one discipline. Any solution to the social problems of addiction cannot be formulated by a group solely consisting of, physicians or economists or sociologists or policemen, etc., no matter how scientifically rigorous their methods. Yet, despite a consensus about the complexity of psychoactive drug-related phenomena, the great majority of policy makers and analysts involved do so from a partial perspective influenced by their narrow academic and professional training.

Every academic discipline has a subject of study, tackles some specific problems and develops a paradigm used to solve them.²³ In the physical ('hard') sciences, consensus is relatively easy to obtain and there is little controversy: most scholars agree how things should be done. In the 'soft' social sciences it is more difficult to build consensus, but it is possible. However, when consensus is achieved, its acceptance is limited within the paradigm of each discipline and it does not necessarily extend to other fields of knowledge.²⁴

Within all academic fields there might be an agreement on the need to use modern scientific methods, but they disagree about the relative importance of each one of them, e.g. inductive vs. deductive, quantitative vs. qualitative methods. They also have great differences among their goals, that may conflict with those of other fields because they tend to reflect the particular world view (*Weltanschauung*) of each discipline. Physicians may support the limit of drug use to 'medical and scientific purposes' but economists or sociologists may argue that the implementation of that policy, through strong law enforcement actions, would destabilise the economy and social structures of a country and lead to violence. Each group would argue that they are arriving at their conclusion applying scientific methods and analysing the same evidence as the others. These divergences result from differences among academic fields in what is considered evidence and the way to analyse it, indicating that a purely 'scientific' evaluation of any policy is always questionable by those outside the paradigm from which it was formulated.

A deeper problem arises from the fact that most humans find it difficult to make decisions based solely on scientific evidence and reason, even though they all claim to be rational. For example, late nineteen and twenty century Marxist and Neoclassical economics were developed under the assumption of the '*homo economicus*', who has the capacity to always make rational decisions. Over time it became clear that they failed to explain many real life economic behaviours. Today's behavioural sciences have made great evidence based strides that show the influence of sentiments and the individuals' life experiences on personal decisions, factors that the '*homo economicus*' of the traditional economic models would consider irrational.

Medicine provides another good example: 'although understanding the causes of a phenomenon, which successful basic research does, is helpful in formulating policy, often a large amount of other information that is structured in a different manner best serves policy makers. Policy makers draw on a large amount of information

that has no particular analytical base or theoretical background (of the kind that basic research provides). In this sense medical science that deals with changing bodies and minds, is a prototypical policy science. It is estimated that about half the information physicians employ has no basis in biology, chemistry or any other science, but rather it is based on an accumulation of experience. This knowledge is passed on from one medical cohort to another, as 'this is the way things are done' and 'they work'.²⁵

Furthermore, in many cases a purely rational approach to decision-making is not practical. Everybody has to make innumerable decisions every day. Just going to the supermarket requires people to decide among many items to buy and a rational choice among 30 cereals would require to gather information about daily or weekly consumption, the size of the weight and volume of the cereal in each box, the type of each cereal, its fat and sugar content, its price per ounce, etc. Then you'd also need a mathematical model, feed all the information to a computer and arrive at a 'rational decision.' This is clearly impractical and that is why everybody learns to simplify those decision-making processes. Modern psychology shows empirically, that people learn to use heuristic short cuts, that use sentiments, like brand and store loyalties, to bypass reason. These work reasonably well most of the time.²⁶

The pretension to formulate policies based only on 'medicine and science' is an attempt to de-politicise policy making which is an oxymoron.²⁷ Policy making is fundamentally a political process in which policy proponents present a list of reasons to justify a particular policy.²⁸

Another interesting issue is whether a consensus 'based on medicine and science' is sufficient to produce successful drug policies. There is no question that medicine should inform policymakers, but consensuses among professionals are just educated opinions and are akin to elections and elections never prove that the best candidate was chosen, they only prove that a particular candidate received the most votes, e.g. a consensus within WHO and PAHO may prove that most physicians in those agencies think that non-medical drug uses should be prohibited and a consensus among free-market economists proves that most of these economists believe that the marijuana market should be quite free. But a consensus does not demonstrate that the consented policy may be implemented successfully without rigorously considering the financial, political, cultural, religious and other like constraints that every society may have.

The international control system has had the goal of a world without drugs, except when they are used to cure illnesses and do research. Because of this, those in the professions of medicine, the police services and the justice system have ended up acting as public policy experts formulating and implementing policies with a very narrow view that disregards the social etiology of drug production, trafficking and consumption... the international control system has failed to take into account a fundamental public policy fact: policy success depends on the policy implementing mechanisms that are available in a society.

It may be logically possible to accept that the policies of Uruguay, and the States of Colorado and Washington that have allowed non-medicinal and research uses of marijuana comply with the conventions if those policies are based on scientific evidence from both medicine and the social sciences. The same may be argued about injection rooms in some European countries.

Once the limit of drug uses to 'medical and scientific purposes' was enshrined in the 1961 Single Convention, it was interpreted as a prohibition for all non-medicinal and research uses which was based on the belief that medical doctors had the power to decide drug uses for all of humankind. This measure implicitly seeks an ideal world without drugs, which could be a worthy goal according to some moral codes. The prohibition of all non-medical and research uses has been a fascinating experiment in social engineering that pretended to de-politicise drug policies but that to succeed required every Party to the Conventions to commit very large amounts of resources to prevent people from using drugs and if they already use them to prevent them from becoming addicts, and if they are addicts to treat, rehabilitate and resocialise them.²⁹ It would also commit Parties to devote large amounts of money to control their territories, to fund development programmes to prevent the development of illicit drug producing and trafficking organisations, to assign more resources to the justice system and to building jails, etc. The government programmes required to comply with a commitment to eliminate all drug uses different from those with 'medical and scientific purposes' would crowd out government expenditures in many other important health, food and nutrition, education, infrastructure, housing, other police and health programmes, etc.

In reality, the goal of a 'world without drugs' is impossible to achieve given the resource constraints faced by all governments which frequently result in a 'beggar thy neighbour' reaction to demand from other foreign countries what they cannot achieve domestically. For instance, Colombians complain that the United States does not control domestic illegal drug markets and Americans that Colombia does not control its territory, crops and drug cartels. The institutional and financial constraints required to achieve a world in which psychoactive drugs are used only for 'medical and scientific purposes' are so great that such a goal should be only 'aspirational' to be achieved in an ideal society, but not for a real one. Confronting this reality in official international meetings has been very difficult because once an international treaty is ratified, there are many obstacles to make substantial changes in the policies that it has ingrained in a society. It is then not surprising that the political declarations of the drug control agencies periodically reassert their ideal goals and promise that 'ten years from now we will have reduced significantly drug production, trafficking and consumption'.³⁰ This is just kicking the can to the future and dodges the need to confront the complexity of the drug phenomena.

SOME CONCLUSIONS

The international drug control system is based on the premise that addictive psychoactive drugs must be used only for 'medical and scientific purposes.' This premise was formulated first at the 1909 Shanghai Opium Commission. The Conventions of 1912, 1925, 1931 and 1936 accepted this use restriction with different exceptions, and by that time the 1961 Single Convention generalised its application to all controlled drugs. The consensus was almost universal and the terms 'medical' and 'scientific' were not defined in the Convention, despite it having a long list of defined terms. This presents a problem when trying to interpret the Convention because its two most important concepts are left as if their meaning is so clear that they do not have to be defined.

The preambles and commentaries to the drug conventions could contribute to clarify those meanings, but they do not. Besides, the statement of purposes in the preambles in English, Russian, Chinese and Arabic on one hand, and in French and Spanish on the other, are different. In the former group the purpose is to improve the 'health and welfare of humankind,' but in the other two languages it is the 'physical and moral health of humankind.' As argued above the decision about which policies would meet the 'medical and scientific' requirement vary depending of which purpose is applied. The commentaries mention that some countries have interpreted 'medicine' as including traditional medical practices and not only modern ('Western') medicine.

The definitions of science provided by the most recognised dictionaries are extremely diverse. However, the way conventions have interpreted the term 'science' has left world drug policy mainly in the hands of physicians, health and law enforcement experts. This has been an effort to de-politicise drug policies under the assumption that the drug policy makers' decisions can be made using only 'hard' sciences and medicine, without taking into consideration the social etiology of drug addiction and illegal drug production and trafficking. Policy makers are human, not just unfeeling scientists in love with the beauty found in truth and their policy recommendations are always influenced by their own sentiments, life experiences and cultures. The failure to define and clarify the term 'science' implies that there is no unique way to interpret the conventions. For instance, it may be logically possible to accept that the policies of Uruguay and the States of Colorado and Washington that have allowed non-medicinal and research uses of marijuana comply with the conventions if those policies are based on

scientific evidence from both medicine and the social sciences. The same may be argued about injection rooms in some European countries.

Epidemiological studies show that there are some factors that contribute to or protect against drug addiction and illegal drug production and trafficking. These factors only change the probability that those activities would develop. Anti-drug policies based on 'medicine and science' may attack contributing factors, but not their underlining social causes. This is why they might achieve some improvements, mainly in the short term, but they will not solve the drug addiction, production and trafficking problems.

Critics of current policies highlight the illegality of drug markets as the cause of many terrible social harms. But illegal drug markets are just a contributing factor of those harms, not causes in the scientific sense. For example, if 'drugs generate' violence, why does the homicide rates in drug producing and trafficking countries vary so much in time and space? In these cases, the epidemiology of crime shows clearly that there are some societies that are more vulnerable than others and that legalising drug markets does not take care of the underlining social reasons that contribute to make a society vulnerable to the development of illegal drug production, trafficking and markets or of many other criminal activities.

Contemporarily, the IDCS confronts many challenges:

1. The need to acknowledge fundamental contributions of sciences other than medicine to the understanding of psychoactive drug issues. The IDCS is a child of modernity that implicitly assumes that every government is sovereign and has the monopoly of territorial control, power, violence and justice in its country. This implicitly requires that in each country there is social cohesion and core of shared values which identify a nation. This is why the society of all these countries is called the United Nations rather than the United Countries. In today's postmodern world there are many organisations such as large corporations (especially in the pharmaceutical and chemical sectors), NGOs, financial institutions, religions, citizen's groups, criminal organisations, subversive groups, that are stakeholders in drug-related policy issues.³¹
2. Illicit drug production and trafficking are just some among many profitable illegal activities for criminal organisations. These organisations' goals are to obtain profits and power and they simply use drugs as an instrument in achieving these objectives. They, like any modern business, are always seeking to grow and diversify. For instance, the Organization of American States³² identified 23 broad criminal categories in which criminal organisations are actively making money. Many of those activities may be as profitable as drugs and many are less risky.³³
3. The world today confronts many social and economic 'bads' and harms: extreme poverty, social inequality and exclusion, greed and lack of social cohesion, corruption, trafficking in arms and humans, homicides, fraud, economic crisis, wars, etc. The conventional wisdom is that drugs are a cause of many of those social harms. For example, 'drugs are the cause of the high number of homicides in Colombia.' But the evidence points in a different direction: the relationship among many of those harms is circular and not causal. Every harm encourages other harms as it increases the probability that a society will develop them. This is why drug addiction, trafficking and production are symptomatic of the structural vulnerabilities of each society and why traditional law enforcement policies based on the police and justice systems cannot eliminate drugs except in extremely authoritarian regimes. But since uncontrolled power corrupts, even in those countries, their

Some would argue that such a policy would lead to a 'slippery slope' that will lead to the liberalisation of other drug markets, like cocaine and amphetamine. But the evidence shows that societies and their leaders on the whole are not stupid. When the evidence clearly shows that the balance between the benefits and the costs of any policy turns significantly negative, modern societies react on their own, without the need of a paternalistic international body telling them what is good for them

The slogan of the last UNGASS, which fortunately was not part of the political declaration, was 'A drug free world. We can do it!' It is my hope that the slogan of the next UNGASS will be 'a drug free world, no we can't, but let's accept the complexity of drug issues and work together to minimise the costs of addiction and all other related social harms.'

governments tend to become corrupt in the medium term and their drug policies are likely to subsequently fail.

4. The IDCS was inspired by two policy issues: how to take care of drug addiction and how to deal with the international drug trade (legal and illegal). The conventions focused more on addiction than drug trafficking, but today some countries and other stakeholders question that approach because of the high social and economic costs associated with some law enforcement efforts, particularly against marijuana consumption, crop eradication and trafficking organisations. It would be useful to have a debate about the conditions under which a sovereign country might decide to allow non-medical marijuana use. The circular relationship among social and economic 'bads' show that there may be cases in which efforts to eliminate one 'bad' may induce the growth of many other 'bads' that would result in worse social conditions.
5. The debate should also confront the fact that modern Public Policy has empirically found that when there are circular relationships, the policies should be holistic, consider all 'bads' and attempt to maximise the difference between overall social and economic benefits minus costs, not to eliminate one 'bad.' From the international perspective, there is no question that illegal drug trafficking should not be allowed. But the argument to impose a prohibition on marijuana (or any other drug) use through an international treaty, even when a government considers that it will do more harm than good, is highly questionable and goes against the results obtained from the application of scientific methods in the social sciences. Of course this is valid only with a caveat about the need to insure that no social costs are transferred to other countries.
6. Some would argue that such a policy would lead to a 'slippery slope' that will lead to the liberalisation of other drug markets, like cocaine and amphetamine. But the evidence shows that societies and their leaders on the whole are not stupid. When the evidence clearly shows that the balance between the benefits and the costs of any policy turns significantly negative, modern societies react on their own, without the need of a

paternalistic international body telling them what is good for them. This is why alcohol prohibition failed in the United States but has succeeded in some Islamic countries. The evidence shows that throughout history psychoactive drug use has been controlled mainly by religion, family, clans and other civil society organisations. The State as we know it is a relatively new social development and it cannot succeed as the main drug controlling agent without the support from the civil social organisations.

And to conclude, modern international drug policy should be part of the broad anti-crime policies of any country and should also take into account other concerns such as human rights and the environment. However, drug policies cannot succeed if they are independent of policies dealing with those issues because of the fact that these are all interrelated. When the restriction of drug uses to 'medical and scientific purposes' was first formulated, the world was a lot simpler than today and the simple solution adopted was a very powerful idea that was well received by almost everyone. At that time drugs were perhaps the main international criminal economic activity. Today there are many more, and both the world and criminal organisations are a lot more complex. The IDCS needs to reflect that complexity because otherwise it will become completely useless. After all, it is just 'soft law' and there is not much that can be done to keep a country from trying alternative strategies to confront its addiction and illegal market problems. The slogan of the last UNGASS, which fortunately was not part of the political declaration, was 'A drug free world. We can do it!' It is my hope that the slogan of the next UNGASS will be 'a drug free world, no we can't, but let's accept the complexity of drug issues and work together to minimise the costs of addiction and all other related social harms.' Let's acknowledge the need to coordinated drug policies against corruption, organised crime, greed and other social 'bads' and work together with all the stakeholders, to ultimately develop better policies to cope with drug and other harms and build a more complex and strong IDCS.

NOTES

- 1 The author thanks the comments of Marcela Anzola and John Collins on earlier drafts. This essay was prepared or accomplished by Francisco E. Thoumi in his personal capacity, with his own funds. The opinions expressed in this essay are the author's own and do not reflect the view of the INCB or the Colombian Academy of Economic Sciences.
- 2 For a historical overview of the evolution of the international drug control system see: J. Collins, 'The International Drug Control System', in *Governing the World Drug Wars*, LSE IDEAS Special Reports (London: London School of Economics and Political Science, 2012), 8–9, <http://www.lse.ac.uk/IDEAS/publications/reports/pdf/SR014/SR-014-FULL-Lo-Res.pdf>.
- 3 J. Collins, 'Regulations and Prohibitions: Anglo-American Relations and International Drug Control, 1939–1964' (London School of Economics and Political Science, 2015), <http://etheses.lse.ac.uk/3107/>.
- 4 For a historical overview of this time period see: W. B. McAllister, *Drug Diplomacy in the Twentieth Century: An International History* (New York: Routledge, 2000).
- 5 See the Preamble in United Nations, 'Single Convention on Narcotic Drugs, 1961', 1961, https://www.unodc.org/pdf/convention_1961_en.pdf.
- 6 United Nations, 'Commentary on the Single Convention on Narcotic Drugs, 1961' (New York: United Nations, 1973), p.110.
- 7 See the Preamble in United Nations, 'Single Convention on Narcotic Drugs, 1961'.
- 8 The following is a partial list: cannabis, cannabis resin, coca bush, coca leaf, opium, medicinal opium, poppy plant, poppy straw, narcotic drugs, illicit traffic, exports, imports, preparation, production, product, special stocks, stocks, territory, region, premises, psychotropic substances, controlled delivery, confiscation, seizure, proceeds, transit state.
- 9 United Nations, 'Commentary on the Single Convention on Narcotic Drugs, 1961', p.111.
- 10 The Spanish translation of the commentary has a stronger assertion as it reads "deben tenerse en cuenta a este respecto" (United Nations, 'Comentarios a La Convención Única de 1961 Sobre Estupefacientes' (New York: United Nations, 1989), p.121) that means that they should be taken into account and adds another possible interpretation issue to the Convention.
- 11 In May 2012 after the second day of the first session I attended as a Member of the International Narcotics Control Board (INCB) an unquestionable brilliant and dynamic Board Member that had been the leader of the Board for two decades, told me that social sciences were not real sciences but simple speculations. It was obvious that I had wasted my life studying social sciences during 50 years!
- 12 K. Humphreys and P. Piot, 'Scientific Evidence Alone Is Not Sufficient Basis for Health Policy', *BMJ* 344 (27 February 2012), these authors have very strong academic roots but are not Ivory Tower types. They have held high ranking positions in the Office of National Drug Control Policy (ONDCP) of the White House, the Veterans Health Administration and WHO-UNAIDS.
- 13 Arabic is today also an official United Nations language. The Single Convention's Arabic version was made available at a later date.
- 14 The following are some of the definitions encountered:
‘the good fortune, health, happiness, prosperity, etc., of a person/group, or organisation’
‘the state of doing well especially in respect to good fortune, happiness, well-being, or prosperity’ ‘the health and happiness of people,’physical and mental health and happiness,’
‘The health, happiness, and fortunes of a person or group’
- 15 Searching other sources, the interested reader will find no unique definition and similar differences among the sources.
- 16 G. Bachelard, *La Formación Del Espíritu Científico. Contribución a Un Psicoanálisis Del Conocimiento Objetivo* (Buenos Aires: Editorial Argos, 1948).
- 17 United Nations Economic and Social Council (ECOSOC), 'Commission of Inquiry on the Coca Leaf' (Lake Success, N.Y.: United Nations, May 1950).
- 18 P. Gootenberg, *Andean Cocaine: The Making of a Global Drug* (Chapel Hill: The University of North Carolina Press, 2008, pp.236–239 ; A. Henman and P. Metaal, 'Coca Myths', Drugs and Democracy Programme, Debate Papers No.17 (Amsterdam: Transnational Institute, June 2008), pp.4–5.
- 19 UNODC, 'Commission of Inquiry on the Coca Leaf', 1950, https://www.unodc.org/unodc/en/data-and-analysis/bulletin/bulletin_1950-01-01_4_page005.html.
- 20 To confirm this, it suffices to consult any UNODC Annual World Drug Report.
- 21 F. E. Thoumi, *Debates Y Paradigmas de Las Políticas de Drogas En El Mundo Y Los Desafíos Para Colombia* (Bogotá: Academia Colombiana de Ciencias Económicas, 2015).
- 22 Thoumi, *Debates Y Paradigmas de Las Políticas de Drogas En El Mundo Y Los Desafíos Para Colombia*, pp.249–251.
- 23 A paradigm is a set of scientific achievements accepted by a community of professionals which agree on the use of rules and norms of scientific practices. This consensus is a prerequisite to have a 'normal science' among the community members. This 'normal science' provides answers to a significant number of problems
T. Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 1962).
- 24 T. Kuhn, *The Structure of Scientific Revolutions*
- 25 A. Etzioni, 'The Unique Methodology of Policy Research', in *The Oxford Handbook of Public Policy* (Oxford, United Kingdom: Oxford University Press, 2006), 833–43, pp.833–834.
- 26 D. Kahneman, *Thinking Fast and Slow* (New York: Daniel Kahneman, 2011).
- 27 The symbiosis between policy and politics is so strong that in all the Roman languages the word for politics and policies is the same.
- 28 See Chapter 14 of Thoumi, *Debates Y Paradigmas de Las Políticas de Drogas En El Mundo Y Los Desafíos Para Colombia*, which deconstructs these and other arguments.
- 29 The prohibition of all non-medical and research drug uses is analogous to a policy that in order to eliminate malnutrition in the world would require countries to insure that a nutritious healthy daily diet would not cost more than \$0.50 per person worldwide, or a policy that in order to make sure that all children would grow in two parent families would criminalise all extramarital sex and prohibit divorces worldwide.
- 30 This was done in the 1998 Special General Assembly on the World Drug Problem and in the Political Declaration of the 2009 CND.
- 31 A. Clunan and H. Trinkunas, *Ungoverned Spaces. Alternatives to State Authority in an Era of Softened Sovereignty* (Stanford, CA: Stanford University Press, 2010), analyse these issues in several regions of the world. Moreover, G. Duncan, *Más Que Plata O Plomo. El Poder Político Del Narcotráfico En Colombia Y México* (Bogotá: Penguin Random House, 2014), is an excellent analysis of the power of drug traffickers in Colombia and Mexico.
- 32 Organization of American States (OAS), *Drugs and Security, Studies on the Drug Problem in the Americas* (Washington, D.C., 2013), pp.24–25.
- 33 For example, in recent years it is estimated that illegal mining has produced revenues comparable to those of drug trafficking in Colombia.

Regulation of Possession and the Criminalisation of Drug Users in Latin America¹

Catalina Pérez Correa, Rodrigo Uprimny and Sergio Chaparro

SUMMARY

- Despite the reformist discourse, Latin American governments maintain a predominantly punitive and repressive approach to illegal drugs and their consumption.
- This paper seeks to explain why, despite the growing consensus that governments should not seek to criminalise consumption, drug users remain criminalised.
- The principle of proportionality establishes that criminal law should only be used as a last resort. The principle states that a policy must:
 - First prove a conduct is harmful to others, to such degree that it must be determined as a crime.
 - Second, it establishes that before using criminal law, all other available options (whether formal or informal) must be evaluated.
 - Third, if something can only be prevented through punishment, then the least intrusive punishment available should be used.
 - If we take this principle seriously, as we should to guarantee just and reasonable laws, then any deviation from this standard will qualify as an unlawful use of criminal law.
- Possession, in different ways and through different mechanisms, remains a crime, because the use of illicit substances remains regulated through criminal law even though it is not considered a crime.

Latin America has, over the last few years, emerged at the vanguard of international efforts to reform drug policy. In 2009, the former presidents of Brazil, Mexico and Colombia co-chaired the Latin American Commission on Drugs and Democracy. The report issued by the Commission urged countries to treat drug use as a health issue and not a criminal one.² In 2012, the presidents of Colombia, Guatemala and Mexico called for the UN to host an international conference on drug policy reforms, which led to convene the special session of the General Assembly on the world drug problem (UNGASS) in early 2016.³ That same year, the Organization of American States (OAS), led by Chilean José Miguel Insulza, published the Scenarios for the Drug Problem in the Americas (2013-2015), in an effort to 'open up the path to a new hemispheric dialogue on how to act'.⁴

Yet despite the reformist discourse, Latin American governments maintain a predominantly punitive and repressive approach to illegal drugs and their use. The criminal justice system is still preferred over the health system as a tool for government intervention in drug policy. It is primarily through the police, and sometimes the military, prosecutors and criminal courts, that states interact with users of controlled substances in these countries.

For example, according to the information obtained by the Research Consortium on Drugs and the Law (CEDD), in Argentina, 9,414 investigations were recorded for drug possession for personal consumption in 2012 by federal prosecutors around the country.⁵ In addition, in 2008, the province of Buenos Aires recorded 7,484 criminal investigations for possession for personal use pursued by local prosecutors.⁶ This means that both national and provincial authorities are engaged in the persecution of drug use through the criminal system. In the case of Mexico, between 2009 and May 2014, 140,860 individuals were arrested and 52,074 investigations were

opened for drug use (which is not formally a crime) by the federal government. In addition, during this time 87,746 criminal investigations were initiated for possession of drugs at the federal level.⁷ Moreover, in Ecuador, between 2007 and 2014 the Public Defender's Office aided 15,532 people detained for possession.⁸

This paper seeks to explain how, despite growing consensus against it, drug users remain criminalised. The paper analyses the legal mechanisms in place across the region that facilitate the criminalisation of users. Using the national studies on drug users and state responses published by CEDD,⁹ this text explores the existing legal norms and penal reasoning that explain the constant criminalisation of drug users across the region, in countries where the use of drugs is actually not considered a crime. It also analyses some of the moral and theoretical problems implied in the current legislation of possession of illicit drugs. The paper ends with some notes regarding the current metrics and indicators used to evaluate drug policy.

REGULATION OF POSSESSION AND OF USE

Although drug use is not a crime in the countries that were studied, possession is always – although in different ways – considered a crime.¹⁰ This results in the criminalisation of consumers, for consumption always involves, at some point, the possession of the illegal substance. The only exception to this constant is found in Costa Rica, where there is a clear and explicit policy not to arrest consumers for possession, as will be explained further on.

In several of the countries studied, as is shown below, possession is tolerated under certain circumstances. Such is the case of possession for personal use where the finality – for personal use – can be either objectively or discretionally determined by prosecutors and/or judges. However, even in these cases it is the criminal, not health, authorities who determine if possession is for personal use or not. In other cases, for example Argentina and Colombia, possession is not tolerated under any circumstances. In these instances, the Supreme¹¹ and Constitutional Courts,¹² respectively, declared that punishing possession for personal use is unconstitutional, provided it does not imply a concrete danger or harm to the rights or property of a third party.

In most countries, possession is normatively distinguished between: i) possession with intent to distribute (which can be with or without a commercial purpose)¹³ and, ii) possession without intent to distribute. This last type can also be distinguished between possession tolerated for personal use and possession that, without having any intention of distribution, is not tolerated by the law. We will henceforth refer to the latter as possession without intent, (in Spanish: posesión simple, or tenencia simple (as opposed to possession with intent).

Possession of illicit substances in any of these instances can have three possible regulations:

- the conduct is considered a crime and is punished
- the conduct is considered a crime but is not punished.
- the conduct is neither considered a crime nor is it punished.

In the countries studied by CEDD, the use of illicit drugs is usually neither a crime nor punished while the different types of possession usually fall within the first two regulatory regimes mentioned above. In addition, imprisonment is often the preferred form of punishment.

Table 1 shows the legal regulation of use and possession in the countries studied. Although the table does not account for all the complexities of each legal framework, it shows that use and possession are always handled within the criminal sphere even if they are not punished.

As the table shows, while no state considers the use of illegal substances to be a criminal offence, possession is prohibited in all countries to some extent or in certain circumstances. In some cases, like Mexico, Peru or Ecuador, possession for use is a crime but not criminally sanctioned under certain circumstances (such as when the amount does not surpass the allowed threshold). In Brazil, possession for use is a crime and criminally sanctioned, although not through imprisonment. In Argentina, all possession is a crime, although the Supreme Court declared the punishment of possession for use to be unconstitutional, as long as it does not 'result in a specific hazard or harm to the rights or goods of third parties'. In Ecuador (see Table 4 and 5) recent reforms (in September 2015) set thresholds to distinguish levels of involvement in trafficking at such low levels that any quantity of certain substances can be processed as a trafficking offence. In that country, small scale trafficking of heroin, base cocaine, cocaine and marijuana is verified above zero grams. Uruguay, on the other hand, sets several objective criteria to determine possession for use in the case of cannabis, but maintains an open (discretionary) system for other substances.

Since every consumer must possess the substance in order to use it, she must therefore commit the crime of possession in order to use. Thus, even in the cases where possession for use is not criminally sanctioned (but remains a crime), it is through the police, prosecutors and criminal judges that the state deals with consumers. Additionally, authorities from the criminal justice system are the ones to decide if the person will be charged as a user or a dealer. This implies that consumers are at constant risk of being detained, become the victims of extortion or even imprisonment.

In some countries possession without intent, above certain thresholds, is a punishable crime. This is extremely problematic because it punishes possession with no further requirement of proof of intent, beyond the actual act of possession. This, we argue, implies a violation of the presumption of innocence, the principle of ultima ratio (last resort) and the principle of proportionality. Under the legal definition of the crime of possession, consumers are often processed as small-scale dealers and punished accordingly. In some cases, such as in Ecuador, the user has to prove that it was not his or her intention to distribute (*i.e.* proving a negative), but to consume. In other countries, for example Mexico, mere possession of drugs in an amount above the established threshold is enough to warrant criminal prosecution, regardless of the circumstances or intent. Other countries only punish possession with intent to sell or distribute (even if distribution is without payment), but even in those cases, people who possess illicit substances for personal use must be arrested before the possession is declared lawful or without punishment.

In some countries, possession without intent, above certain thresholds is a punishable crime. This is extremely problematic because it punishes possession with no further requirement of proof of intent, beyond the actual act of possession. This, we argue, implies a violation of the presumption of innocence, the principle of ultima ratio (last resort) and the principle of proportionality.

Table 1. Is consumption and/or possession of illicit substances a crime?¹⁴

COUNTRY	CONSUMPTION	POSSESSION	REGULATION (SYNTHESIS)
Argentina	No	Yes	Drug possession for personal use is considered a crime (Article 14 of law 23.737). However, in 2009, the Supreme Court declared that the part of the article that criminalised possession for use is unconstitutional.
Bolivia	No	Yes	Possession for use is a crime, punishable with forced treatment, according to article 49 of law 1008. However, in practice this law is not applied. If a medical examination determines that a person carries more than is needed for his or her personal use, he or she is prosecuted for trafficking (Article 49 of Act 1008).
Brazil	No	Yes	Possession for personal use and possession without intent are considered crimes. Article 28 of law 11.343/06, states that the judge must determine if the substance is for personal use through taking into account, among other things, the nature of the substance, the amount carried and the criminal record of the person. Possession for personal use is criminally punished, although not with prison time.
Colombia	No	Yes	Consumption is constitutionally prohibited, but the Constitutional Court declared that the article from the criminal code that penalised possession for personal use is unconstitutional. The Supreme Court has ruled that possession for personal consumption should not be criminalised even if it surpasses the established dose for personal use. ¹⁵ Possession without intent is considered a crime. ¹⁶
Costa Rica	No	No	Possession for personal consumption is not a crime. Possession is only a crime if it is determined that the person's intent is to 'distribute, trade, supply, manufacture, develop, refine, transform, extract, prepare, cultivate, produce, transport, store or sell drugs, substances or products referred to in this Act or to cultivate the plants from which such substances or products are obtained.' (Article 58 of Act 8204) Possession of seeds with the capacity to germinate or of other natural products that produced the referred drugs is a crime and is criminally sanctioned (Article 58 of Law 8204). However, in practice and as a result of the General Attorney's guidelines, this law is not applied and consumers are rarely detained by police.
Ecuador	No	Yes	Possession without intent is illegal, but when it is for consumption it is not punished (Article 220 of the Organic Comprehensive Criminal Code). Possession without intent is established by threshold amounts. ¹⁷
Mexico	No	Yes	Possession for personal consumption is illegal, but it is not criminally prosecuted if it is for consumption, provided it does not exceed the maximum thresholds established by the General Health Act, and as long as it is not done in places such as schools or prisons and is one of the substances covered by the General Health Law. Possession without intent above the established thresholds is a criminal offense.
Peru	No	Yes	Possession for use is not criminally sanctioned as long as it is below the established thresholds allowed and the person is not in possession of two or more substances.
Uruguay	No	Yes	Possession is a crime but it is exempt from punishment if the amount is 'intended for personal consumption.' In the case of cannabis, the possession of up to 40 grams or 6 psychoactive cannabis plants is legal for personal consumption (Article 7, Law 19.172). Moreover, possession is a crime if the person does not have the corresponding legal authorisation (Article 5, Law 19.172).

THRESHOLDS AND CRIME OF POSSESSION WITHOUT INTENT

Although some legislation considers possession to be a crime, certain amounts are permitted or tolerated under established thresholds deemed to represent personal use. However, some of these legal systems will sanction possession in excess of these thresholds without requiring proof of intent to sell or distribute, such as in Mexico, Peru (when more than one substance is involved) or Ecuador (under the new thresholds established in 2015). This crime is referred to as possession without intent.

Under this legal definition, any person caught carrying more than the allowed amount of a particular substance is regarded as a small-scale dealer and prosecuted for that crime. It is not necessary for prosecutors or judges to assess the circumstances or concrete evidence of the case. In some instances, even when there is evidence to suggest that possession was for personal use, judges must sentence for micro-trafficking, regardless of the circumstances. A case in Mexico illustrates this point:

In 2014, a Judge in the State of Guanajuato declared the sanction of possession without intent (*posesión simple*) to be unconstitutional due to considering it being a disproportionate response. In this case, a state prison inmate was found with two pills of Clonazepam, a substance commonly used for panic disorders and anxiety attacks. The inmate had gone through a divorce while being imprisoned and also lost his father, both within a short timespan. After suffering severe panic attacks, he had begun to self-medicate Clonazepam to control them. Expert testimonies included in the file declared that the inmate had a nervous condition and that the substance lessened the attacks he suffered. Although the substance can be sold and bought in drug stores with medical prescription, the law establishes severe penalties for possession of certain medicines without a valid prescription. In addition, since the crime had been committed in a prison this allowed no space for exemption from the rule. In this case, the judge had no room to consider the specific conditions of the case in the ruling: which proved that there was no intention to sell or distribute.¹⁸ Although the judge affirmed that a crime had been committed, she did not apply the corresponding sanctions due to these being disproportionate.

The result of this use of thresholds, found in Mexico, Ecuador and Peru is the criminalisation of an unknown number of consumers who are processed as sellers or micro-traffickers, and who appear in official statistics as such.

In other countries, like Brazil, Colombia or Bolivia, legislation or high court judgements have required the evaluation of additional elements to prosecute and sentence a person for possession. However, even in this scenario, consumers remain under the sphere of criminal justice institutions, as laws require detention of users until quantities and/or intent are determined.

Unfortunately, thresholds in the region are usually very low, and the amounts often do not correspond to the use and buying practices of consumers. Table 2 shows the maximum carrying thresholds established in countries covered by CEDD.

In the case of Mexico and Peru, the thresholds for cannabis are 5 and 8 grams respectively. Taking the daily dosage of any average cannabis consumer into consideration, carrying 5 or 8 grams can be regarded as reasonable. However, if the consumer is buying enough for a longer period of time, the amount purchased will most likely exceed the tolerated threshold and, if apprehended, he or she will likely be processed as a dealer. In the case of cocaine, cocaine paste and cocaine hydrochloride, all countries have low thresholds, even for daily consumption. In the case of Peru, if the person is in possession of two or more substances, possession is criminally sanctioned.

In Ecuador, there are two coexistent thresholds.¹⁹ The first threshold, shown in table 2, seeks to protect consumers from the criminal law intervention. The second

Table 2. Thresholds established for main substances²⁰

SUBSTANCE	COLOMBIA	ECUADOR	MEXICO	PERU	URUGUAY
Heroin	-	0.1 g	50 mg	-	-
Cannabis	20 g	10 g	5 g	8 g	40 g
	Hashish: 5 g				
Cocaine, base cocaine or cocaine hydrochloride	1 g	2g cocaine 1g hydrochloride	500 mg	5g cocaine 2 g hydrochloride	-
MDA	-	0.15 g	40 mg	-	-
MDMA	-	0.015 g	40 mg	-	-

In terms of criminal law theory, possession without intent attributes objective culpability to the act of possession. This means that punishment of any person who possesses illegal substances above the tolerated thresholds is justified regardless of the intent to harm. Furthermore, it punishes a conduct without the existence of actual harm.

threshold, on the other hand (see Table 3), seeks to distinguish levels of involvement within trafficking networks (divided in minimum, medium and high). However, the reform created an overlap of the two thresholds thus exposing rather than protecting users. The new threshold criminalises the possession of certain substances at the same level that the previous one tolerated (see Tables 3 and 4). Thus, for example, possession of 0 to 20 grams of marijuana today is considered minimum trafficking and is punishable from 1 to 3 years in prison. Moreover, possessing 0.1 to 0.2 grams of heroin is considered medium trafficking and is punishable from 3 to 5 years. Large scale trafficking is punished with 10 to 13 years in prison. This new system will probably lead to the criminalisation of users.

In terms of criminal law theory, possession without intent attributes objective culpability to the act of possession.²⁶ This means that punishment of any person who possesses illegal substances above the tolerated thresholds is justified regardless of the intent to harm.²⁷ Furthermore, it punishes a conduct without the existence of actual harm. According to Luigi Ferrajoli, the principle of responsibility (blame) implies that every crime can be attributable to a person because of their understanding of the facts and intent to commit a crime.²⁸ Thus, the fact that a conduct is considered morally wrong is not enough to warrant punishment. As stated by Nils Jareborg,

‘The measure of blameworthiness of any kind of conduct depends partly on what values and interests have been infringed or threatened, and partly on whether the conduct involves actual infringement (harm) or creates a danger of such infringement or is related to such infringement in some more distant way (for instance, a breach of a safety rule). But it also depends on the guilt or culpability exhibited by the actor in her conduct.’²⁹

In other words, harm and culpability are necessary aspects to determine and justify criminalisation and punishment and pose limits to state intervention through criminal law.³⁰ According to Ashworth, ‘the harmfulness of a conduct must be judged in terms of its effect on valued interests, which may be individual interest or some form of collective interest’.³¹ In other words, the criteria for determining harm are set by the actual consequences of an action. A necessary question then, when analysing the criminalisation of possession of certain substances over a certain quantity is: what is the harm caused by this particular conduct? Is criminal punishment justifiable when no clear harm exists?

The other element of criminal law highlighted by Ferrajoli is culpability or intent. Intent is a central part of criminal law and in justifying punishment. As stated by Andrew Ashworth:

‘The centrality of the culpability requirement is surely part of the essence of the criminal law: if a person is to be censured publicly by being labeled a criminal and made liable to the sentence, then the court should be satisfied not merely that that person caused consequence but also that he or she did so culpably. Anyone can cause injury, death or damage by misfortune or coincidence, but that should not be enough for criminal liability, however great the harm. The criminal law should require proof of fault as a condition of imposing censure, let alone punishment that involves restriction or deprivation of liberty.’³²

Table 3. New thresholds for Ecuador, narcotic drugs²³

NARCOTIC DRUGS (SEPTEMBER 2015)								
SCALE	HEROIN		BASE COCAINE		COCAINE HYDROCHLORIDE		MARIJUANA	
	Net weight (grams)							
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Minimum	0	0.1	0	2	0	50	0	20
Medium	0.1	0.2	2	50	1	50	20	300
High	0.2	20	50	2,000	50	5.000	300	10.000
Higher scale	20 onwards		2.000 onwards		5.000 onwards		10.000 onwards	

Blame, however, is a subjective condition that involves the capacity to foresee consequences. Thus, most countries criminalise certain harms caused unintentionally but that could be prevented, such as involuntary manslaughter.³³ Also, most countries criminally punish actions where there is an intent to cause harm but no actual harm.³⁴ In these latter cases, criminalisation and punishment is justified since if the conduct had been carried out, a concrete harm would have been caused. However, the crime of 'possession without intent' criminalises and punishes a conduct with neither intent nor harm.³⁵

The difference between subjective and objective culpability can show the difficulty for justifying the criminalisation of possession without intent. Consider a case of first-degree murder. Premeditation and the act of taking a life are justifications for punishment. Punishment is justified because a person had an intent to harm, so even if the conduct had not been carried out the intent is condemnable. This is a case of subjective criminality. Now consider a case where a patient dies during an operation. The medic could be responsible under criminal and civil law, independently of intention. If negligence is proven, punishment is justified because the medic had a duty of care toward the patient that was not fulfilled. In this case, there would be objective criminality, which means the conduct is reprehensible independently of the intent.

The crime of possession without intent implies objective criminality, thus blame becomes irrelevant in the justification of these cases. The conduct is reprehensible independently of the intention to cause harm. Even more, the crime presupposes the existence of harm, and thus

requires no need to prove harm. Sodomy laws represented a similar situation where certain sexual acts were deemed as immoral and therefore punishable. In the case of possession without intent neither blame nor harm are relevant to justify criminalisation. Possession proves the crime and specific circumstances are irrelevant, even when they show that possession was for personal use and no harm can be determined. The result can be viewed as a violation of the right to be presumed innocent until proven guilty.

A worrisome consequence, especially for problematic and inefficient judicial systems, is criminalisation and imprisonment of an uncertain number of individuals that derive from possession crimes. In 2014, the Argentinean Attorney's Office (PROCUNAR) reported 9,414 cases of drug possession for personal use by federal prosecutors around the country in addition to the cases investigated at the local level.³⁶ In Mexico, between 2006 and 2014, 175,993 investigations were initiated for possession (possession without and with intent).³⁷ In Ecuador, between 2007 and 2014, the public defenders office aided 15,532 people detained for possession.³⁸

Even in countries like Uruguay or Bolivia, where legislation includes the assessment of circumstances (not just thresholds), consumers are criminalised and sometimes punished. In those countries, the intent to distribute or sell is evaluated by judges that are often insensitive to consumers' practices. In the case of Uruguay, although possession of up to 40 grams of cannabis is tolerated for personal use, other substances are subject to the judge's criteria to determine whether possession is for personal use or not.³⁹

A necessary question then, when analysing the criminalisation of possession of certain substances over a certain quantity is: what is the harm caused by this particular conduct? Is criminal punishment justifiable when no clear harm exists?

Table 4. New thresholds for psychoactive drugs in Ecuador²⁵

PSYCHOTROPIC SUBSTANCES (SEPTEMBER 2015)						
SCALE	AMPHETAMINES		METHYLENE DIOXYPHENETHYLAMINE (MDA)		ECSTASY (MDMA)	
	Net weight (grams)	Minimum	Maximum	Minimum	Maximum	Minimum
Minimum	0	0.090	0	0.090	0	0.090
Medium	0.090	2.5	0.090	2.5	0	2.5
High	2.5	12.5	2.5	12.5	2.5	12.5
Higher scale	12.5 onwards		12.5 onwards		12.5 onwards	

Thresholds can be said to have a dual effect. On the one hand, they serve to limit arbitrary decision-making by prosecutors or judges. This can be positive for judicial systems undermined by corruption. However, when the maximum thresholds are low they drive perverse practices that lead to the criminalisation of users. It becomes easier for police and prosecutors to charge a user with possession than to investigate (and prove) micro-trafficking.

With vague parameters like 'reasonable quantity' it is up to each judge to decide.⁴⁰ In Bolivia, maximum possession thresholds are not legally established but are instead established in practice and depending on the medical reports prosecutors request from experts or health authorities. If the medical report states that the consumer was carrying a few grams more than the amount that he or she should carry for personal use, the consumer is prosecuted for the crime of drug trafficking, since micro-trafficking is not codified in law in Bolivia.

In Colombia, the Supreme Court has developed the doctrine of the provisioning dose to protect consumers (in Spanish, dosis de aprovisionamiento). According to this doctrine, if someone is caught with an amount slightly higher than the threshold and it is only for personal use, he/she should not be punished. However, continued criminalisation motivated the Supreme Court to intervene, encouraging the Prosecutor General's Office and the police to focus their action against traffickers who threaten legally protected goods.⁴¹

In all, thresholds can be said to have a dual effect. One the one hand, they serve to limit arbitrary decision-making by prosecutors or judges.⁴² This can be positive for judicial systems undermined by corruption. However, when the maximum thresholds are low they drive perverse practices that lead to the criminalisation of users. It becomes easier for police and prosecutors to charge a user with possession than to investigate (and prove) micro-trafficking. In terms of prosecution indicators, possession cases will usually result in easily obtained guilty verdicts, which implies an incentive to prosecute these cases over more complex (and important) ones.

Perhaps the exception to the analysis presented here is Costa Rica, where there are no thresholds for personal use, but rather a discretionary model based on evidence and mitigating factors found in the commission of a crime. Further, the Attorney General's Office has disseminated guidelines pushing for arrests made for consumption to be dismissed.⁴³ This has prevented the arrest of users by the police meaning that neither use nor possession is criminalised.⁴⁴

According to Von Hirsh, several considerations are necessary when evaluating the decision to use criminal law as a response to a conduct, such as whether or not; 'the system has explicitly rated the seriousness of the crimes? In grading offenses, has the rulemaking agency made its own conscientious judgment on the merits as to their seriousness? Lastly, has the rule maker given explicit reasons for this seriousness rating?'⁴⁵ The problem with the crime of possession without intent is the impossibility to adequately respond to these questions as the evaluation of harm is not possible. From a theoretical and moral point of view, criminalisation of possession without intent becomes unjustifiable.

In Latin-American societies, the use of criminal law is practically tantamount to punishment through imprisonment; a highly intrusive, violent and costly state measure. Because of this, criminalisation should only be used as a last resort (principle of ultima ratio), when other – less harmful – means have failed, and for conduct that truly merits the intervention. In this sense, regulation of possession must be revised in order to protect users of illicit substances from the application of unfair, unwarranted and inappropriate laws, and the proportionality of the response should also be evaluated.

CONCLUSIONS

Despite the regional 'decriminalisation' discourse consumers continue to be detained, prosecuted and even incarcerated in Latin America. This occurs because possession, in different ways, remains a crime, and because the use of illicit substances remains regulated through criminal law even though it is not considered a crime. So while Latin America's discourse is one of decriminalisation of drug use, legal practices and norms rely on the use of penal institutions for addressing the consumption of illicit substances.

Understanding the regulation of possession of illicit substances is fundamental for understanding the constant criminalisation of consumers across Latin America. In this text, we analysed different regulations of possession that help understand why users are caught within the penal sphere of the law. Particularly, we analyse the case of 'possession without intent' as an example of a legal mechanism that criminalises users without any moral or theoretical justification.

In Latin America, where police and other penal institutions are known for often pervasive abusive practices, placing the regulation of use and possession within the purview of criminal law exposes drug consumers to violations of their basic rights, corruption, extortion, physical abuse and arbitrary detentions. According to Burgh, 'Punishment involves our doing to people what we ordinarily think is wrong to do. It seems that, insofar as this intuition is disconnected from justice, we have a compelling reason to cease acting on it.'⁴⁶ As seen in this text, there are few (or no reasons) to prohibit the possession of illicit drugs or worse, to do so via criminal law. This is especially true in the case of possession without the intent to sell or distribute. Today, the regulation of these conducts violates the principles of proportionality and produces an unjust approach to a widespread social reality. With little in its defence, regulation of possession must be revised in order to match discourse with reality and as a way to protect users from the application of unjust and disproportionate laws and practices.

ON METRICS AND INDICATORS

Metrics and indicators are a structural problem of contemporary drug policies, which often promote the criminalisation of drug users and hinder progress toward a better response to drug use. We find five main problems with these indicators:

1. The first lies in the objectives set by current drug policies: reduction of supply or demand. These objectives inform a set of metrics that solely focus on analysing supply and demand reduction, without addressing the root causes that contribute to such supply and demand, such as poverty, underdevelopment, health, education and insecurity.
2. The data used to assess the success or failure of drug policies is extremely narrow. Indicators based merely on procedural aspects of drug control (budget invested, the number of people arrested, convicted and incarcerated) to reduce supply and demand reveal very little about the impact of drug policies on peoples' lives.
3. Traditional metrics of supply and demand reduction can signal success without revealing the damaging impact of drug policy on human rights, health or social inclusion.
4. The indicators currently used have created perverse incentives, such as the tendency to inflate results with illegal or harmful strategies.
5. Finally, the current metrics do not give room for differential approaches for different populations. As we show, the existing indicators create incentives to process consumers over micro traffickers as they are often registered as successful captures to reduce supply. As a consequence, the policy hides realities that should be taken into account, such as class, gender and race biases in criminal prosecution of drug offenses.

Better indicators to assess drug policies could lead to better drug policies. These could be, for example;

- The decrease in the number of deaths caused by overdose,
- The evolution of the infection rates from HIV, hepatitis B and C and other communicable diseases among people who use drugs,
- And, the coverage of treatment and harm reduction programmes for people who need them (within prisons or for the general population).

On the supply side, rather than evaluating the number of people arrested and incarcerated for drug law violations, indicators such as; the reduction in the number of victims from drug-related violence, the decrease in the number of families whose incomes depend on the participation in drug markets, and the reduction of recidivism, could lead to a more just approach. This is an approach that protects human rights rather than pose an obstacle to them. ■

With little in its defence, regulation of possession must be revised in order to match discourse with reality and as a way to protect users from the application of unjust and disproportionate laws and practices.

NOTES

- 1 An earlier version of this text was published by the Research Consortium on Drugs and the Law (CEDD), see C. Pérez Correa, A. Corda, and L. Boiteux, 'Drug Consumption and Consumers in Latin America' (Research Consortium on Drugs and the Law (CEDD), 2015), http://www.drogasyderecho.org/publicaciones/pub-priv/catalina_i.pdf.

The authors would like to thank Alejandro Madrazo for his useful comments, Ariana Angeles for her assistance and Jorge Paladines for the information on Ecuador.
- 2 Latin American Commission on Drugs and Democracy, 'Drugs and Democracy: Toward a Paradigm Shift', 2009, http://www.drogasedemocracia.org/arquivos/livro_ingles_02.pdf.
- 3 Resolution adopted by the general assembly on 20 December 2012, United Nations General Assembly, 'International Cooperation against the World Drug Problem', A/RES/67/193, 67th Session, 23 April 2013, https://www.unodc.org/documents/commissions/CND/Drug_Resolutions/2010-2019/2012/GA_Res-67-193.pdf.
- 4 Organization of American States and Scenarios Team, Scenarios for the Drug Problem in the Americas 2013 – 2025 (Washington, D.C.: Organization of American States, 2012).
- 5 General Attorney's Office, 'Statistical Report on Narcocriminality. Regarding the Distribution of Criminal Investigations Initiated for Drugs, Population and Employees in the Fiscal Public Prosecutor's Office, Year 2012' (Buenos Aires: Narcocriminal Attorney's Office, 2014), http://www.mpf.gob.ar/procunar/files/2014/04/informe-procunar_5-5.pdf, see also General Attorney's Office, 'Law of Partial Defederalization of Criminal Jurisdiction Regarding Narcotics (Law N° 26.052)' (Buenos Aires: Narcocriminal Attorney's Office, 2014).
- 6 *Ibid.*
- 7 C. Pérez Correa and K. Silva, 'The state before use and users of illicit drugs in Mexico', Drug Policy Program Papers (CIDE, 2014) available at http://www.mpf.gob.ar/procunar/files/2014/04/informe-procunar_5-5.pdf (in Spanish).
- 8 Public Defenders Office of Ecuador, 'Aids in Drug-related Crimes from 2007-2014' (Quito: Office of Applied Research - SDGP, 2014).
- 9 Research Consortium on Drugs and the Law (CEDD), 'In Search of Rights: Drug Users and State Responses in Latin America' (Mexico, 2014), http://www.drogasyderecho.org/publicaciones/prop_del/reporte-completo.pdf.
- 10 For the complete report and country studies, see: www.drogasyderecho.org.
- 11 The Supreme Court of Argentina declared the unconstitutionality of Article 14, second paragraph of Act 23.737, which punishes possession for personal consumption, provided that it 'does not result in a specific hazard or harm to the rights or goods of third parties'. See Supreme Court of Justice of the Nation Argentina, Arriola Ruling, A. 891, XLIV, 2009.
- 12 See Constitutional Court of Colombia, Sentence C221/94, 1994, where the Court declared inapplicable the articles of Law 30 of 1986 that penalised use and possession for personal use. Later, in sentence C-491 from 2012, the Constitutional Court of Colombia ratified that consumption is an activity protected by fundamental rights and, therefore, possession for personal use cannot be criminalised.
- 13 In Mexico, for example, free distribution of illicit drugs is considered a crime.
- 14 The table below is based on CEDD, 'In Search of Rights'.
- 15 See Criminal Appeals Chamber, Supreme Court of Colombia, Sentence No. 29183, M.P. José Leonidas Bustos Martínez, 2008.
- 16 However, according to the Supreme Court, when the possession is above the established thresholds for personal use, additional criteria can be used to demonstrate that possession is for personal use and should not be criminalised. See Criminal Appeals Chamber, Supreme Court of Colombia, Sentence N° 42617, M.P. Gustavo Enrique Malo Fernández, 2014.
- 17 Resolution 001 CONSEP-CD-2013 established the admissible thresholds. 'Registro Oficial No 19 - Jueves 20 de Junio de 2013 Segundo Suplemento', Revista Judicial, 28 June 2013, <http://www.derechoecuador.com/productos/producto/catalogo/registros-oficiales/2013/junio/code/20953/registro-oficial-no-19--jueves-20-de-junio-de-2013-segundo-suplemento>.
- 18 See Amicus Curiae presented by the Center for Economic Teaching and Research (CIDE) to the 9th district Judge in the State of Guanajuato, 'Amparo Trial 1139/2013-III', 2013, <http://ppd.cide.edu/documents/302668/0/20140602%20Amicus%20Curiae%20Rev-VP.pdf> (in Spanish).
- 19 J. Paladines, 'Nuevas Penas Para Delitos de Drogas En Ecuador: "Duros Contra Los Débiles Y Débiles Contra Los Duros"', Transnational Institute, 8 October 2015, <https://www.tni.org/es/art%C3%ADculo/nuevas-penas-para-delitos-de-drogas-en-ecuador-duros-contra-los-debiles-y-debiles-contra>.
- 20 Prepared with information from studies by country.
- 21 Paladines, 'Nuevas Penas Para Delitos de Drogas En Ecuador'.
- 22 *Ibid*
- 23 For the distinction between subjective and objective culpability see N. Finkel and J. Groscup, 'Objective versus Subjective Culpability, and a Commonsense Balance', *Law and Human Behavior* 21, no. 2 (1997): 209–30.
- 24 See Amicus Curie presented by the Center for Economic Teaching and Research (CIDE), 'Amparo Trial'.
- 25 See L. Ferrajoli, *Derecho Y Razón. Teoría Del Garantismo Penal* (Madrid: Ed. Trotta, 1989), 489–90.
- 26 N. Jareborg, 'Criminalization as a Last Resort (Ultima Ratio)', *Ohio State Journal of Criminal Law* 2 (2004): 521–27.
- 27 Von Hirsch uses these same factors to determine seriousness of a crime. 'Seriousness depends upon two major factors: (1) the degree of the conduct's harm or risk of harm, and (2) the extent of the actor's culpability in committing that conduct. The model thus does not call for mechanical equality among all offenders convicted of a given species of crime. Differentiations would have to be made, depending on the particular circumstances, to account for variations in the extent of injury involved, and in the degree of the actor's culpability in inflicting that injury', in A. Von Hirsh, 'Criminology: Commensurability and Crime Prevention: Evaluating Formal Sentencing Structures and Their Rationale', *Journal of Criminal Law and Criminology* 74, no. 1 (1983): 209.
- 28 A. Ashworth, 'Is Criminal Law a Lost Cause?', *Law Quarterly Review* 116 (2000): 225–56, p.239.
- 29 *Ibid.* p.239.
- 30 Article 159 of the Mexico City Criminal code establishes that a person who (even not knowing that he or she has a disease) infects another will be punished with up to two and a half years' imprisonment.
- 31 Such is the case of Criminal Enterprise laws (asociación delictuosa) in Mexico sanctioning whoever forms part of a group of people with the intention to commit crime, with four to eight years' imprisonment. In this case, no harm is necessary, but the mere intent is sufficient to merit punishment (Article 253 of the Mexico City Penal Code).
- 32 One could argue that harm could be done to the possessor (self inflicted harm), yet this would mean that use would also need to be criminalised.

- 33 General Attorney's Office, 'Statistical Report on Narcocriminality'.
- 34 Mexico, General Attorney's Office, petition for information no. 0001700072215
- 35 Public Defenders Office of Ecuador, 'Aids in Drug-related Crimes from 2007-2014.'
- 36 See G. Bardazano, 'Respuestas Estatales a Los Usuarios de Sustancias Psicoactivas En Uruguay: Entre La Alternativa Y La Profundización de La Guerra Contra Las Drogas' (Research Consortium on Drugs and the Law (CEDD), 2014), http://www.drogasyderecho.org/publicaciones/prop_del/uruguay-usuarios.pdf.
- 37 Bardazano, 'Respuestas Estatales a Los Usuarios de Sustancias Psicoactivas En Uruguay', p.15.
- 38 See Criminal Appeals Chamber, Supreme Court of Colombia, Sentence N° 42617.
- 39 See CEDD, 'In Search of Rights'.
- 40 See Fiscalía General de la República and Ministerio Público de Costa Rica, Poder Judicial, 'Instructivo General 02/2010'; February 2010 ; and Fiscalía General de la República and Ministerio Público de Costa Rica, Poder Judicial, 'Instructivo General 01/2011'; January 2011. See also E. Cortés Amador and D. Amighetti López, *Políticas de Drogas Y Derechos Humanos: Reformas En Costa Rica* (Costa Rica: Perspectivas, FES, 2014).
- 41 Some legal references for this have been established in several appeals issued by the Third Chamber of the Supreme Court, where custodial sentences for people who had in their possession up to 200 grams of marijuana or cocaine were revoked for lack of evidence to prove the intent of distribution or sale of the seized drugs. See E. Cortés Amador, 'Control social del consumo de drogas en Costa Rica: Para orientar las políticas nacionales de drogas hacia el enfoque de derechos humanos' (Universidad para la Cooperación Internacional, 2013), <http://www.uci.ac.cr/Biblioteca/Tesis/PFGMCSH45.pdf>.
- 42 A. Von Hirsh, 'Criminology: Commensurability and Crime Prevention: Evaluating Formal Sentencing Structures and Their Rationale', *Journal of Criminal Law and Criminology* 74, no. 1 (1983): 209.
- 43 R. W. Burgh, 'Do the Guilty Deserve Punishment?', *The Journal of Philosophy* 79, no. 4 (1982): 193–210, p.210.

Legalising Drugs Prudently: The Importance of Incentives and Values

Jonathan P. Caulkins

SUMMARY

- For the first time in the modern era, jurisdictions are legalising not just cannabis use but also its production, distribution and sale.
- Legalisation could make cannabis use relatively safer – if it increases occasional users who experience no problems. However, it could just as easily go the other way, with lower prices, higher potency, and greater advertising, facilitating escalation of problematic cannabis use.
- The notions developed herein have a potential relevance for a number of other illicit drugs.
- Regulatory architectures should be based on acknowledging that:
 - (1) Heavy users are prone to abuse dependence-inducing intoxicants.
 - (2) Industry prioritises profit over protecting customers, recognising that most sales and profits flow from the minority of people who consume very heavily (e.g., the 'whales' in the gambling industry).
 - (3) Regulatory bodies are prone to industry capture, and their political overlords are more responsive to large numbers of affluent voters than to small numbers of poor ones.
- As such, the regulatory architecture should be stacked in favor of protecting public health, most notably the welfare of the heavy users who lose control over their consumption.
- At least two basic strategies (not mutually exclusive) are available:
 - (1) To place regulatory control in the hands of a public-health minded agency.
 - (2) To keep for-profit industry out of the picture altogether.

This is yet another paper about legalising drugs. But it's different. The usual slant is debating the pros and cons of legalisation, with academics who chose to write on the topic almost always coming out in favor; defending the status quo may not be innovative enough to satisfy academics' contrarian urges or tenure committees' expectations.

A newer genre takes legalisation – of cannabis at least – as a fait accompli, but recognises that legalisation is not a simple yes/no choice.¹ There are a myriad ways of implementing legalisation, and those choices matter. A bad legalisation could underperform a good prohibition just as a bad prohibition could underperform an idealised legalisation. Publications in this vein evaluate the pros and cons of including this or that regulation or setting taxes at this rate vs. another rate.²

This paper has a similar goal – informing how to best implement legalisation – but takes one step back. Instead of asking, in effect, what regulatory regime should a benevolent dictator impose by fiat? It asks what supply and regulatory architectures are appropriate, given the realities of political processes and economic incentives in a modern democracy.

The moment of legalisation presents two special opportunities and one special challenge relative to the ensuing decades of grubby regulatory rule-making. First, it is only at the moment of legalisation that voters and lawmakers can act free of the constraints created by an extant legal industry with all of its parochial interests. There is a one-time opportunity to work with a relatively clean slate.

Second, legalisation is a high-stakes act that can focus the attention of busy lawmakers and voters, increasing the diversity of viewpoints and stakeholder interests that are represented. Once the watershed moment passes, the day in and day out drudgery of deciding whether production licenses should be denominated in plants, square feet or kilograms, and whether wattage rules should be adjusted for growers using LED rather than incandescent lights, will concern

only industry insiders and (hopefully) a handful of unusually attentive do-gooders. The big choices, such as what kinds of organisations get to participate in the market, will be made all at once in a rush and then rapidly become ossified.

The catch is that this one-time-only opportunity for getting the regulatory architecture right comes before we actually have much experience with or evidence concerning legalisation in a modern industrial society. At the moment of legalisation, society will be debating passionately but largely in ignorance.

This suggests that the most important decisions to be made on legalisation day or very soon thereafter are: (1) What kinds of organisations get to supply cannabis legally? And (2) What are the powers and motives of the regulatory agencies who oversee those suppliers? Rather than debating whether the ideal excise tax is \$1.00 or \$1.50 per gram when no one has the empirical evidence necessary to support objective analysis, we might instead think about who gets to decide how those tax rates will be adjusted over time.³ And rather than deciding whether billboards advertising cannabis sales must be 200 meters or 400 meters away from the nearest school, maybe we should be thinking more about what types of organisations are allowed to make those sales.

The goal of this paper is to spur thinking along these lines. I begin by laying out three foundational observations, and then identify key recommendations that flow from those observations. I couch the discussion in terms of cannabis legalisation, since only cannabis legalisation is a live policy topic today, but close with some thoughts about how the analysis might or might not carry over to

other substances. The data concerning use patterns are drawn mostly from the US household survey, because that survey is well-run, large, and makes its data available to the public via a convenient online tool that permits easy replication of the calculations underpinning the figures given below.⁴ I suspect that the general patterns – including the concentration of use among the minority of heavy users – may have parallels in some other countries.

FOUNDATIONAL PREMISE #1: HEAVY USERS ARE PRONE TO ABUSE CANNABIS

Most people who try cannabis do not become dependent, but a distressing proportion of those who use on an ongoing basis do become dependent.

A commonly cited source for estimates of the lifetime risk of developing cannabis dependence is Anthony et al.'s study⁶ that used 1990 – 1992 data from the National Comorbidity Study. They found that 4.2% of respondents reported having had enough problems with their cannabis use to meet the criteria for dependence at some point and 46.3% reported ever trying cannabis even once. Dividing 4.2% by 46.3% suggests that 9.1% of those who ever tried cannabis had developed dependence.⁶ The corresponding proportion among younger users was 15.3% - presumably higher because back in 1990–1992 many older users never had a chance to try cannabis until they had aged past their most vulnerable years.

Similar rates are found in other Western countries. E.g., Fergusson and Horwood⁷ report that 69% of 1,265 children in the Christchurch cohort study had tried cannabis by age 21 and 9% had already developed cannabis dependence, for a 9 / 69 = 13% risk of dependence by age 21. By age 25, that proportion had grown to 16% -- with 12.5% dependent out of 76.7% who had tried.⁸ In an Australian sample (mean age 21), 12% were dependent at the time of data collection; lifetime rates of dependence would be higher to the extent that some who had been dependent no longer were so and others may not yet have progressed to dependence.⁹

For various reasons the proportions may be different now, notably the sharp increase in cannabis potency,¹⁰ and the future could be

different even from today. Anyhow, let us suppose for the moment that it will also be true in the future that 9 – 15% of those who try cannabis will become dependent on it.

That still would not mean using marijuana creates little risk of dependency because most people who try marijuana only ever use it occasionally. As such, all of that dependence risk loads up on the smaller number of people who use it more often.

according to the 2013 US household survey). Hence, the lifetime risk that heavy marijuana use will lead to abuse or dependence is quite high, perhaps considerably greater than 27 – 45%.

Logic and the limited empirical evidence available suggests that liberalising cannabis policies will increase the prevalence of use and, to an even greater extent, increase the intensity of use. For example, the number of daily and near-daily cannabis users in the US has increased sevenfold from its nadir in 1992.¹² Not all of that increase can be pinned on policy changes. And precisely estimating the effects of any given policy change is difficult for many reasons. For one, changes in cannabis laws tend to follow – not trigger – changes in law enforcement practice, rendering before and after comparisons treacherous. Cannabis flows freely across state lines, so states meant to serve as ‘controls’ in statistical evaluations often get ‘treated.’ In addition, much of the empirical work has erroneously lumped together disparate policy changes by modeling all types of decriminalisation with a single binary indicator variable or using as an independent variable the existence of a medical marijuana law not its constituent parts or the number of dispensaries or number of patients as the predictor variables.¹³

Nevertheless, the most sensible prediction is that legalisation will increase cannabis abuse and dependence to at least some extent, and the question is really how large the increase will be, not whether there will be one.¹⁴

The most important decisions to be made on legalisation day or very soon thereafter are: (1) What kinds of organisations get to supply cannabis legally? And (2) What are the powers and motives of the regulatory agencies who oversee those suppliers?

The tobacco literature often counts people as ever having smoked only if they have done so on at least 100 occasions. Those who never cross that threshold are seen as not being relevant for understanding health harms (or industry revenue). The same principle can be applied to marijuana. Few whose lifetime consumption totals less than 100 occasions are ever seriously harmed by that use. Conversely, most frequent users do cross that threshold, since it amounts to less than six months of daily or near-daily use or a year of using on weekend days.

US household surveys no longer ask about the number of occasions used cumulatively, from initiation to date, but older surveys did. They show that only about one-third of those who admit trying cannabis report having used it as many as 100 times in their lives. Since almost no one who uses less often develops dependence, we should triple the 9 – 15% figures to 27 – 45% to find the lifetime risk of developing dependence for someone who uses marijuana 100 or more times in their life.¹¹

Furthermore, ‘dependence’ was the more severe of two levels of substance use disorder (SUD) distinguished before the newer Diagnostic and Statistical Manual of Mental Disorders (DSM) merged them into the broader category of SUD. The other form was labeled ‘abuse.’ About 1.5 times as many people meet the criteria for ‘abuse or dependence’ as meet the stricter criteria for dependence (4.1 million vs. 2.8 million

SUPPORTING PREMISE: CANNABIS ABUSE AND DEPENDENCE IS UNHEALTHY

Systematic reviews identify a variety of health-harms associated with heavy and prolonged cannabis use,¹⁵ so for many people it is obvious that cannabis abuse and dependence are public health concerns. Readers in that camp can skip this section, which merely presents statistics showing that a significant proportion of marijuana users self-report suffering problems stemming from their use.

Rather, this section is written for those who question whether society should care whether legalisation increases cannabis abuse and dependence. Some skepticism is not unreasonable. After all, caffeine induces tolerance, withdrawal and other hallmarks

of substance abuse, and the DSM labels caffeine-use disorder as a condition meriting further study.¹⁶ Yet few view the tribulations of those who over-indulge their caffeine habit as rising to the level of a societal problem. Even though the Drug Abuse Warning Network recorded about 21,000 emergency department episodes involving energy drinks and there are occasional reports of associated deaths,¹⁷ some argue that caffeine and energy drinks do not pose a significant public health problem, aside from adverse effects on sleep.¹⁸ Perhaps cannabis abuse and dependence is likewise a reality but not a concern. Indeed, Room et al.¹⁹ argue that cannabis not only has a lower risk of addiction than other common drugs, including tobacco, alcohol, cocaine, stimulants, and heroin, but also that the degree of dependence is less.

Still, less harmful does not mean not harmful, as a comparison with the familiar case of alcohol makes clear. Alcohol is obviously much more harmful than cannabis in several very important respects, including the risk of death from acute intoxication and the tendency to induce violence. On those dimensions, marijuana looks exceedingly safe.

However, self-reports to the US household survey suggest that marijuana produces challenges to life functioning and self-control.²⁰ In 2013, twenty million Americans self-reported past-month marijuana use and 4.1 million self-reported enough problems with that use to meet DSM-IV clinical definitions for marijuana abuse or dependence. Based on parallel questions in the same survey, the corresponding figures for alcohol were 136 million past-month users and 18.9 million suffering alcohol abuse or dependence.

All of those figures are presumably underestimates because they are based on survey self-report and denial is a hallmark of addiction. But the ratio of ratios is instructive. The ratio of marijuana abuse and dependence to current use ($4.1 / 20 = 0.21$) is about 60% higher than is the corresponding ratio for alcohol ($18.9 / 136 = 0.13$). So under current patterns of use in the United States, marijuana appears to generate more abuse and dependence per user than does alcohol. If one focuses on the more serious diagnosis of dependence, then marijuana produces 140% as many victims per user, since the ratios are 0.14 for marijuana vs. 0.06 for alcohol.

SAMHSA imputes abuse and dependence from answers to about a dozen questions concerning specific problems that

respondents might indicate they believe are being caused by their substance use. There is a discernible pattern to the responses. Cannabis looks the worst, relative to alcohol, on questions about life functioning.²¹ Cannabis also generates greater rates of people saying they tried to limit or cut down their use, but failed. The only commonly answered question for which alcohol's ratio was larger than marijuana's was 'Did you regularly drink alcohol and then do something where being drunk might have put you in physical danger?' (0.08 for alcohol vs. only 0.07 for cannabis.)

So not only is cannabis abuse and dependence fairly common now among those who use cannabis regularly for a half-year or more, that abuse and dependence interferes with life functioning at rates per past-month user that are greater than those for alcohol (albeit still nowhere near alcohol's effects on death or violence). Conceivably, legalisation could make cannabis use look relatively safer – if it leads to a flood of occasional users who experience no problems, but it could just as easily go the other way, with lower prices, higher potency, and greater advertising, facilitating escalation.

Most people who try cannabis do not become dependent, but a distressing proportion of those who use on an ongoing basis do become dependent.

Altogether respondents to the 2013 survey report 287 million days of cannabis use in the past month.²⁴ Of that total, 229 million (80%) come from respondents who are 21 or older (the usual definition of adult for purposes of using legal cannabis or alcohol in the United States). 137 million (60%) of those days come from people who do not self-report enough problems to merit a diagnosis of substance abuse or dependence. Less than half of use-days (80% * 60% = 48%) are by adults who are not identified as having abuse or dependence problems.²⁵

The survey does not ask on which days of the week respondents used. As a proxy for 'only on weekends,' consider those who report using on fewer than 10 days in the past month (if someone used both weekend days on all four weekends, they would have used on 8 days). Adults who suffer from no abuse or dependence problems and who consume on fewer than 10 days per month report 13 million past-month days of use or 4.7% of the 287 million total. Since frequent users also tend to use a greater amount per day of use, this market segment's share of consumption is probably more like 3% of marijuana consumption.

Some might think the definition of non-problem use above was drawn too narrowly. Figure 1 shows how this proportion varies with the cut-off frequency above which use is defined to be problematic. Unless one expands the definition of non-problematic to encompass daily or near-daily use, unproblematic use by adults is less than 10% of the market in terms of days of use, and even less in terms of amount consumed.

Two things reconcile this with the fact that most cannabis users suffer no adverse consequences. First, even daily use does not always harm every user of cannabis or, for that matter, even more deadly drugs. The proportion of pack-a-day smokers who get lung cancer is 'only' 5 – 20%, depending on how old they were when they started smoking. But obviously lung cancer associated with daily smoking is nonetheless a health concern at the population level.

FOUNDATIONAL PREMISE #2: THE MARIJUANA INDUSTRY IS PRONE TO ABUSE HEAVY USERS

Problem marijuana use may be a public health concern, but it is a profit opportunity for those selling marijuana. Indeed, it is not just a profit opportunity, it is the only important profit opportunity. Simple arithmetic reveals that controlled, occasional use by adults does not generate enough sales to fulfill Jamen Shively's forecast that the cannabis industry will mint more millionaires than Microsoft.

For the moment, let us define non-problem use as weekend consumption by adults who do not suffer from substance abuse or dependence (of any intoxicant, not just marijuana, so marijuana use by alcoholics is counted as problem use).²²

The US household survey does not ask respondents how much cannabis they used; people have a hard time answering questions in terms of grams of cannabis, let alone milligrams of THC. The best measure for these purposes is the number of days of use.²³

Marijuana producers' profit interests are at odds with the welfare of their customer base, and of society more generally.

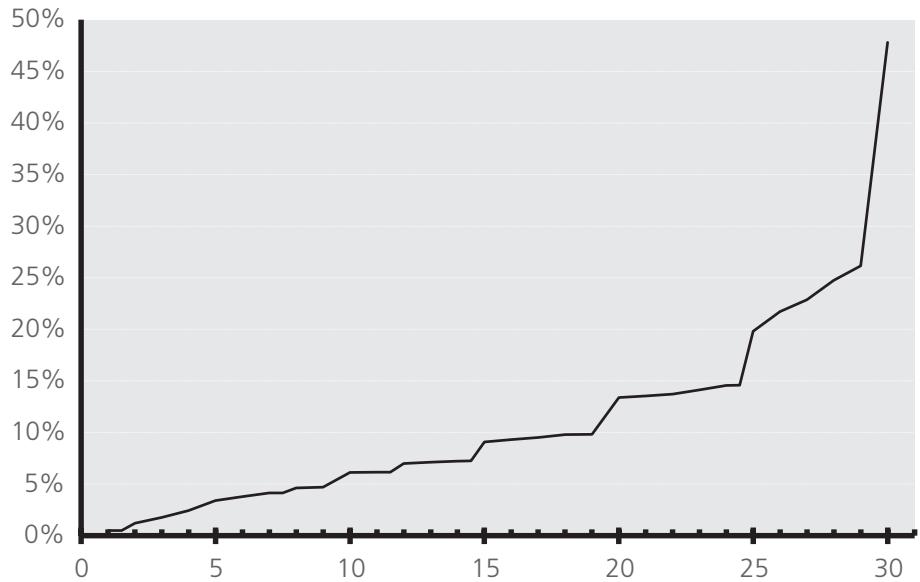


Figure 1. Proportion of Cannabis Use Reported in Household Surveys that is by Adults with No Identified Substance Use Disorder and Who Use No More Often than the Number of Days per Month Specified on the Horizontal Axis

Second, one heavy user consumes more – a lot more – than does one occasional user.²⁶ So the person involved in the typical episode of use is very different from the typical user. Again, a little arithmetic makes the point. (this time we include the 13 million people who report use in the past-year but not the past-month).

In the 2013 survey, 53.4% of past-year users reported using on 52 or fewer occasions in the past year. So if we created a sorted table with a row for each frequency of use, wrote in the number of respondents belonging in each row, and marched down that ordered table until we got to the median user – meaning the user such that half of all users consume less often and half consume more often – then that typical user would report having used 52 times in the past year. It is fair to say that the typical cannabis user consumes about once a week, on average.

We can do the same exercise with days of use. The row for the 2 million people who report using twice in the last 12 months now contains the number 4 million, since those 2 million people produced 4 million days of use. Likewise, the row for the 700,000 who report using 10 times in the last 12 months contains the number 7 million, and so on. The survey respondents collectively report 3.9 billion days of use in the last year, so we can march down the ordered table until we reach the $3.9 / 2 = 1.95$ billionth day of use. That might be viewed as the typical day of use. We can then ask how frequently the

person contributing that typical day used over the last 12 months. The answer is 312 days – or 26 days per month, not just once a week. That striking difference arises because the minority of daily and near daily users account for a disproportionate share of the days of use. The 50% of past-year users who consume weekly or less often account for just 7% of the days-of-use.

Finally, we can do a similar exercise with grams consumed. Although the US household survey does not ask about grams used, RAND conducted web-surveys in seven European countries and again in the state of Washington that showed users pictures of piles of cannabis alongside everyday objects like coins, paper clips, and credit cards.²⁷ These prompts helped respondents answer what otherwise would be difficult questions about the weight of marijuana consumed. The key finding from Washington is that people who report using daily or near-daily average about 1.6 grams per day of use, and that is about two to three times as much per use-day as for the occasional users. Light et al.²⁸ obtained similar results from parallel data collection in Colorado.

Folding that information in with the survey data on number of days used produces the following estimate. The 13% of past-year users who report using on each and every day in the last month account for 45% of the days-of-use reported in the last month and more than 50% of the grams consumed. Hence, the typical gram of marijuana is used

by someone who reports using literally every single day in the past month. Indeed, since their average consumption of 1.6 grams per day is enough for roughly 3-4 joints, and each joint produces intoxication that lasts several hours, the following striking statement is probably literally true: The majority of cannabis in the US is consumed by people who spend the majority of their waking hours intoxicated.²⁹

In sum, we have three contrasting descriptions of typical use, all simultaneously true.

- The typical marijuana user consumes weekly or less often.
- The typical day of marijuana use involves someone who uses nearly daily (26 times per month)
- The typical gram of marijuana is used by someone who spends the majority of their waking hours intoxicated.

So marijuana companies cannot expand sales significantly by selling to occasional users. They must push additional people into a state of more or less perpetual intoxication or intensify the intoxication of those who are already in that state. Neither is healthy. In short, marijuana producers' profit interests are at odds with the welfare of their customer base, and of society more generally.

The next question is whose side regulators will take.

It is only at the moment of legalisation that voters and lawmakers can act free of the constraints created by an extant legal industry with all of its parochial interests.

FOUNDATIONAL PREMISE #3: REGULATORS ARE PRONE TO NEGLECT THE PUBLIC HEALTH INTEREST

After legalisation, the regulatory agency responsible for overseeing the new industry could focus on any of three interests:

- The regulated companies
- Typical consumers
- The public health interest

The first two have political clout; the third does not. In an ideal world public agencies would be defenders of the weak; in the real world, clout often wins out.

The idea that regulated industries generally have clout and exercise it to bend rules to their benefit needs no explanation,³⁰ and there is no reason to expect the cannabis industry to be any different. In Mark Kleiman's words, the marijuana advocacy movement is already morphing into the cannabis lobby,³¹ with the National Cannabis Industry Association front and centre. This is natural and not a problem per se – unless one is naïve enough to be surprised by it.

Still, the brazenness of the cannabis industry's ambitions are breathtaking. Oregon's Cannabis Tax Act proposition of 2012 (which almost passed) would have charged a newly constituted Oregon Cannabis Commission with responsibility for overseeing the industry. The proposition stipulated that five of the seven commissioners 'shall be elected at large by the [licensed] growers and processors.' In other words, regulatory-capture was built in.

That plan did not pass, but reality under the 2014 proposition which did pass is also troubling. One-third of the Oregon Liquor Control Commission's cannabis rules advisory committee hail from industry (four entrepreneurs on the production side and the founder of a cannabis testing company, as well as the chief petitioner for the proposition). Needless to say, the FDA does not allow pharmaceutical representatives to play a similar role.

The most dramatic example to date, though, is Sensible Ohio, which pushed for an amendment to the State Constitution that would have created a legally-protected oligopoly, with production limited to sites owned by ten people who each contributed \$2 million to the campaign to get this proposition passed.³²

Likewise, it would be surprising if a regulatory bureaucracy did not pay attention to the interests of typical consumers in a democracy. Median voters hold the power in elections, and we would expect median users to be on the minds of cannabis regulators. As noted above, the median user consumes only weekly. Most such people are fully in command of their consumption and so can reasonably be treated the way government agencies

treat any other consumer – as competent adults who can look after their own interests. They are not suffering appreciable harms and whatever harms they suffer are likely more than offset by the benefits they derive from their consumption.

The interests of such controlled users lie in having many conveniently-located stores offering a wide variety of products, clear and accurate labeling, and low prices – which implies both low taxes and a minimum of burdensome regulations that drive up production costs. That list of desiderata overlaps considerably with the industry's wish-list.

Indeed, the cannabis industry can, like the alcohol and gun industries but unlike the tobacco industry, call on a cadre of happy customers whenever its interests are threatened by the prospect of unfavorable laws or regulations.

By contrast, the public health interest lies in dependent and abusive patterns of consumption, but there are relatively few such people. The 4.1 million people who report enough problems on surveys to meet DSM criteria for marijuana abuse or dependence are outnumbered three to one by the 11.7 million adults who use 50 or fewer times per year and do not suffer from abuse or dependence.

They are also less educated and poorer, which matters inasmuch as political and bureaucratic institutions respond to money, not just headcounts. Only 10% of those who abuse or are dependent on marijuana have college degrees. The corresponding figure is 40% among controlled, adult users. So the number of college graduates who use marijuana in ways that align their interests with industry outnumbers eleven-to-one the number of college graduates suffering from marijuana abuse or dependence.

It is perhaps obvious that the interests of industry and these problem users differ. Industry wants them to consume more; their doctors generally want them to consume less. But what is less widely appreciated is that the heavy users' accountants also ought to weigh in on the side of moderation. At present this group spends about 4.5% of its household income on marijuana, a vastly greater proportion than the 0.25% share among controlled, adult users.³³

In sum, natural political processes will nudge regulators to serve the industry (which lobbies and makes campaign donations) and the modal users (who are numerous and relatively more affluent, so more likely to vote), not the circumstances surrounding the typical gram of use – which involves daily users who spend the majority of their waking hours under the influence of a performance-degrading drug.

Hence, if the public, and the law makers they elect, generally want legalisation to be conducted in a way that protects the public interest, the overall architecture within which producers and regulators operate will have to be slanted toward achieving that end.

CONCLUSION: LEGALISATION OUGHT TO STACK THE DECK TOWARD PROTECTING HEAVY USERS

From these three premises, it is possible to assert that:

1. Heavy users are prone to abuse marijuana (and they themselves say it harms them)
2. Industry is prone to abuse heavy users
3. Regulators are prone to neglect public health interests

It follows that at the moment of legalisation – when the topic has captured the attention of diverse people and industry interests have not yet become entrenched – the deck should be stacked in favor of protecting public health, most notably the welfare of the heavy users who lose control over their consumption. At least two basic strategies are available for achieving this.

The first is to place regulatory control in the hands of a public-health minded agency that views its job as protecting those who abuse cannabis from being abused by industry.³⁴ There are agencies that are willing to be tough on the industries they regulate, notably the FDA vis-à-vis the tobacco industry and the EPA vs. the coal industry. However, that is not the norm. Even leaving aside extreme instances of regulatory capture (the Interstate Commerce Commission being the textbook example), many agencies construe their role as being neutral toward the industry, insisting that companies follow the rules but not worrying whether the rules are protecting the public health. Alcohol beverage control agencies are thought to operate in this fashion, and some inherit regulatory oversight of marijuana (e.g., Washington State's Liquor and Cannabis Board). Other agencies are explicitly dual mission, such as the Federal Aviation Administration being responsible for both airline safety and promoting air travel. Colorado placed regulatory control in its Department of Revenue, which presumably has a culture of viewing tax collection as a central function; taxes depend on revenue, which for cannabis in turn depends on sales to people who abuse the drug.

For those who believe good government is stronger than industry lobbying and the political pressures of the median user, simply choosing an appropriate regulatory body may be sufficient. But others might want additional, structural protections.

One powerful way to accomplish that is keeping for-profit industry out of the picture altogether. Rolles and Murkin³⁵ warn against the two extremes

of prohibition and free market supply. They argue that both are prone to dangerous excesses and that some middle ground, such as a government monopoly over production and distribution, is much safer for substances, like marijuana, that are prone to harmful use. That is the path Uruguay has adopted, along with co-ops and home growing.³⁶

The US has not heeded such warnings. All four states that have legalised large-scale production as of this writing have embraced the private-enterprise commercial model.³⁷ The problem, of course, is that companies have no interest in protecting users' health beyond keeping them alive so they can keep on buying the companies' products.

Moreover, a government monopoly also might not fit well with a free-market American culture, particularly at this time when hostility toward government is so high, and as a practical matter government monopoly at the state level may be problematic while marijuana remains prohibited by the federal Controlled Substances Act. But as Caulkins et al.³⁸ note, there are many ways to provide for legal supply besides government monopoly and commercial legalisation.

One alternative would maintain all of the industry structure and regulations that states like Colorado and Washington impose on licensed producers and retailers, but in addition limit licenses to non-profits or public benefit-corporations.³⁹ Public benefit corporations are for-profit, but they have pledged to manage their organisation in order to advance a triple bottom line of people, planet, and profits, rather than sacrificing all to maximise profits. One could go further and require these organisations to have governing boards whose members come from – or are selected by – the public health and child welfare communities. Just as the charters of some universities set aside a certain number of board seats for alumni, and the charters of some religiously affiliated colleges set aside board seats for church representatives, the state could refuse to issue a license to any organisation that does not build in a voice on its governing board for those most likely to be harmed if the organisation embarked on a single-minded pursuit of profits.

Eliminating or softening the mission-driven incentive for promoting sales to heavy users may be particularly valuable vis-à-vis control of advertising in the US, where First Amendment speech protections extend to commercial free speech, greatly limiting regulators' options for constraining advertising. If the suppliers do not want to promote sales to consumers who harm themselves via that consumption, then it does not matter whether regulators can block such promotion.

At least in theory an industry might make more money selling high-priced products to rich users, even if they use moderate quantities, than it does selling low-priced products to poor users who consume more in total. If companies catering to the rich dominate the industry associations, they might lobby for regulations that favor lower-volume, higher-quality and higher-cost production patterns.

DISCUSSION: DOES THE PRINCIPLE EXTEND TO OTHER DRUGS?

This essay was motivated by the trend toward cannabis legalisation. That is the drug whose legalisation is a present possibility, and it is the one for which direct empirical evidence is beginning to develop. However, even for cannabis that evidence is thin, because no modern jurisdiction had legalised large-scale production and sale for non-medical use until Colorado and Washington State did in 2012, and even there, cannabis stores did not open until 2014.

Nevertheless, it is natural to wonder what portion of the logic would carry over to other substances. Since the evidence base with respect to legalising other drugs is all but non-existent, this section moves into more or less pure speculation. With that caveat firmly stated, here is one guess concerning generalisability to other substances.

In broad terms, the foundational premises hold for many other currently illegal drugs, so one might expect essential elements of the conclusion to pertain. That is, if we restate the three premises in more general form, they seem uncontroversial:

1. Heavy users are prone to abuse dependence-inducing intoxicants.
2. Industry prioritises profit over protecting customers, and recognises that most sales and profits flow from the minority of people who consume very heavily (e.g., the 'whales' in the gambling industry).
3. Regulatory bodies are prone to industry capture, and their political overlords are more responsive to large numbers of affluent voters than to small numbers of poor ones.

Hence, there is a risk that the minority of consumers who use heavily will be (1) harmed by their abuse, (2) exploited by industry, and (3) neglected by regulators. So if one wishes to minimise that risk, it is prudent to slant the design or 'architecture' of legalisation in ways that resist these tendencies.

If we want to probe for instances in which the risk is smaller, and so special precautions are less necessary, we might try thinking of substances for which the premises do not hold. Some examples follow.

- Some banned substances do not induce dependence and so are less likely to lead to compulsive or otherwise uncontrolled consumption. Examples include steroids and some hallucinogens.
- Most consumer goods – not just drugs – obey some form of 'Pareto Rule' in which consumption is concentrated among a minority of heavy users, but not all do. To the extent that MDMA rapidly produces short-term tolerance to its desired effects, the average consumption rate among heavy MDMA users may be a smaller multiple of the average rate for typical consumers than is the case for alcohol, marijuana or cocaine.
- At least in theory, an industry might make more money selling high-priced products to rich users, even if they use moderate quantities, than it does selling low-priced products to poor users who consume more in total. If companies catering to the rich dominate the industry associations, they might lobby for regulations that favour lower-volume, higher-quality and higher-cost production patterns.
- If most of the drug-related harms fall on third parties, rather than on the user, then the political marginalisation of the heavy users matters less. Politicians might care as much about helping those third-party victims as they do about catering to industry needs. Banning indoor smoking to protect the public against second-hand tobacco smoke might be an example. But the case of alcohol is troubling in this regard. Alcohol generates a fairly high ratio of harm to third parties (drunk driving, violence, etc.) relative to harm to users (cirrhosis, heart disease), and yet only a handful of countries truly adopted a public health approach to alcohol regulation (the so-called 'Nordic model')⁴⁰; many take action against the externalities themselves (e.g., with tough penalties for drunk driving), but otherwise are fairly industry-friendly.

More such examples could be cited. But these suffice to suggest that the thesis developed above for cannabis probably has relevance for a number of other drugs, but as a general rule subject to exceptions, not as an iron-clad law of nature.

Indeed, at some level this entire essay boils down to stating the obvious. For goods and services over which consumers maintain full control of their consumption decisions, and make those decisions wisely, there is little need for a benevolent government to regulate in ways that favour consumers' interests over producers' interests. The consumers can look after themselves very well, thank you.

However, for goods and services that have a systematic tendency to defeat the heuristic decision-making capabilities of the average human, a paternalistic government may want to structure laws and regulatory processes to ensure that consumers are protected – not just from the drug but also from exploitation by the drug industry. Cannabis is such a good. Many, though not necessarily all, other dependence-inducing intoxicants are, too. ■

ON METRICS

With regards to recent discussions surrounding metrics and indicators, it seems as if some of the debates have been concerned with attacking a straw man: no thoughtful person has ever pretended that enforcement statistics are an adequate or a complete set of measures to be employed in the international drug control system.

The frequent use of enforcement statistics when assessing 'success' in drug control is in part due to the fact that they are available at near zero cost as by-products of administrative record systems. For example, the amount of drugs seized will typically be measured whether or not it is considered to be an indicator of drug control success. Keeping track of amounts seized is a basic administrative function that ensures that the right evidence gets associated with the right court case and reduces the risk that some of the seized drugs will be diverted for re-sale in later stages of the enforcement process (in particular in settings where corruption is rampant). Thus, from an economic perspective, when the cost of something is near zero, one should 'consume', i.e. use, such statistics even if they are not highly useful in measuring drug control success.

It is also worthwhile touching upon the obsession with hectares of coca eradicated as a measure of either effort or success. Importantly, there can be a world of difference between a hectare of coca eradicated by aerial spraying and a hectare eradicated by manual removal. The former may have little effect – if the peasants get to the field within a few hours, they can often still harvest the leaves that have been sprayed and the roots will not generally get infected with the herbicide. Thus, it has little effect except forcing the farmer to harvest at a suboptimal time. However, when eradicated by hand, the farmer would have to start over by planting anew. As such, a fundamental error that has been committed for almost 20 years is the narrative that hectares eradicated by air + eradicated manually = total hectares eradicated. Although eradication in and of itself is a method with very limited success, if continuing the pursuit of this strategy drug enforcement officials at least need to provide a clear delineation between aerial and manual eradication

For other indicators, it is true that these are poor: prevalence of use does not directly matter that much since total prevalence is usually dominated by users who use infrequently, and so have few or no problems.⁴¹ With cannabis use in the US, RAND has switched to mostly talking about and measuring the number of daily and near-daily users, in addition to past-month days of use: which is a much better proxy for both the quantity used and the amount of use-related harm than is total prevalence. These statistics are further broken down in various ways, such as days-of-use by people who have a substance use disorder versus those who do not.

Moreover, whereas public health officials tend to measure drug-related deaths, this is a poor measure of addiction since deaths per year of dependence tends to be much higher for opioids than stimulants or other substances: and some interventions are highly efficient at reducing overdose-related fatality (notably Naloxone for opioid overdoses), but not very good at reducing dependence. Although some of the strong supporters of the public health approach may claim that drug-related deaths matter so much more than all other metrics that it is a sufficient statistic in itself, this author argues that it is incomplete. Drug dependence in and of itself wrecks a significant amount of lives: of the dependents and their families. This is not reflected in drug-related death statistics. Nor are amounts spent on black market transactions and crime and violence fuelled by that spending. An intervention that cut black market spending by 50% while leaving the number of overdoses unchanged would be a substantial gain from a public health as well as social welfare perspective, and an exclusive focus on deaths of drug users would not give it due credit.

Moreover, there is only limited sub-literature on drug-related Emergency Room (ER) mentions. Such data does get used, which it should. However, the key challenge is to work out the extent to which the drug was the primary cause of the ER mention or if it was just detected inside the ER and played some ancillary role in the health event precipitating the need for emergency care. By and large, the kind of data that ERs routinely collect does not answer that question very well, and we cannot ask ER doctors to take a break from saving their patients, in favour of filling out longer data instruments.

An important contribution on the metrics side would be to develop methods to support the monitoring of (purity-adjusted) price, and also have purity itself as an indicator.

This author has been arguing that an important contribution on the metrics side would be to develop methods to support the monitoring of (purity-adjusted) price, and also have purity itself as an indicator. If this is done correctly, it is possible to get high-frequency measures of price and purity, whereas many traditional demand side measures are only available on an annual or quarterly basis.

These are mostly not new ideas; the literature on these issues is long-standing. That said, there have been some important innovations, including developing methods of wastewater testing for drugs, and perhaps Siddharth Chandra's use of price gradients to infer trafficking flows.⁴² Eric Sevigny's recent work on drug harm measures may be consulted for something which this author thinks reflects the state of the art, at least in the US⁴³

One area which needs further work is thinking about how these metrics and measures would be different post-legalisation. The obvious point here is that we might get much better supply side data on quantities sold from tax records, just as today estimates of total amount of alcohol consumed comes from tax records – and not so much from self-report surveys. The limitation here is the inability to distinguish between people who are problem drinkers from those who are not. Generally speaking, we do know that most alcohol is consumed by people who have a drinking problem or at least drink rather alarming amounts.⁴⁴ This is the Pareto Law in action. Figuring such things out tends to be a research project, and not something that is easily derived from administrative data. In contrast, for

illicit drugs, the supply side estimates are almost all highly dubious and/or not very useful. For example, the UN makes a good faith effort at estimating Afghan opium production, but since Afghanistan supplies 90% of the world's illegal opioids, this is not terribly useful for any individual country since no one country consumes a dominant share of Afghan production. Contrast that with the situation with cocaine in the 1980s. At that time, the US dominated cocaine consumption – and thus estimating global production shed some light on the likely magnitude of US cocaine consumption.

Similarly, post-legalisation proponents will have to ask many finer-grained questions about outlet density and concentration of outlets in disadvantaged neighbourhoods, among other things – just like what is done for alcohol. Likewise, there should be monitoring of marketing efforts, both in traditional media and internet and social network based marketing. Hopefully, in an era of legalisation we will have more useful data. Indeed, to some extent that may be inevitable if one impact of legalisation is simply to increase drug use enough that surveys will be more precise. Whereas the consumption of alcohol, tobacco and cannabis are so common that a random sample of 1,000 people produces a reasonable number of users, the same is not true for heroin or cocaine. For substances whose frequent use seriously disrupts lives, *i.e.* cocaine, crack, and meth (as opposed to cannabis and tobacco) we will still face the problem that the most frequent users may not be living in circumstances that render them easy to survey. ■

NOTES

- 1 E.g., Caulkins, J. P., B. Kilmer, M. A. R. Kleiman, R. J. MacCoun, G. Midgette, P. Oglesby, R. L. Pacula, and P. H. Reuter. 'Considering Marijuana Legalization: Insights for Vermont and Other Jurisdictions.' Santa Monica, California: RAND Corporation, 2015.
- 2 B. Kilmer, J. P. Caulkins, G. Midgette, L. Dahlkemper, R. J. MacCoun, and R. L. Pacula. 'Before the Grand Opening: Measuring Washington State's Marijuana Market in the Last Year Before Legalized Commercial Sales.' Santa Monica, California: RAND Corporation, 2013 ; R. J. MacCoun, 'The Paths Not (yet) Taken: Lower Risk Alternatives to Full Market Legalization of Cannabis.' In *Something's in the Air: Race and the Legalization of Marijuana*, edited by K Tate, J. L. Taylor, and M. Q. Sawyer, 40–53. Routledge, 2013 ; Rolles, S., and G. Murkin. *How to Regulate Cannabis: A Practical Guide*. Bristol: Transform Drug Policy Foundation, 2013 ; Kilmer, B. 'Policy Designs for Cannabis Legalization: Starting with the Eight Ps.' *The American Journal of Drug and Alcohol Abuse* 40, no. 4 (2014): 259–61 ; R. L. Pacula, B. Kilmer, A. C. Wagenaar, F. J. Chaloupka, and J. P. Caulkins. 'Developing Public Health Regulations for Marijuana: Lessons from Alcohol and Tobacco.' *American Journal of Public Health* 104, no. 6 (2014): 1021–28 ; Fijnaut, C., and De Ruyver, B. *The Third Way: A Plea for a Balanced Cannabis Policy*. Leiden: Brill Nijhoff, 2015.
- 3 And perhaps tax bases as well (cf., Caulkins et al. 'Considering Marijuana Legalization,' 2015 ; Oglesby, P. 'States May Be Stuck with Second-Best Marijuana Taxes.' *State Tax Notes* 72, no. 9 (June 2, 2014). <http://ssrn.com/abstract=2455961>). Initially an ad valorem (percentage of value) tax has appeal, because it is so simple, but it has drawbacks and over time – as the industry stabilises and testing technology improves – switching to a different tax base, such as taxing THC content, may be prudent.
- 4 Most analysis herein can be replicated using the SDA tool available at <http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/35509>.
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- 8 J. M. Boden, D. M. Fergusson, and L. J. Horwood. 'Illicit Drug Use and Dependence in a New Zealand Birth Cohort.' *Australia and New Zealand Journal of Psychiatry* 40, no. 2 (2006): 156–63.
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- 11 The prevalence among all who try is the weighted average of the prevalence for those who do use more than 100 times, and those who do not. So if those who use fewer than 100 times essentially never become dependent, then overall prevalence = prevalence among those who use often * 1/3 + 0 * 2/3, so prevalence among those who use often = 3 * prevalence among all who try the drug.
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- 20 Caulkins, J. P. 'Is Marijuana Safer than Alcohol? Insights from Users' Self-Reports.' Carnegie Mellon University Heinz College Working Paper, 2014. <http://repository.cmu.edu/cgi/viewcontent.cgi?article=1401&context=heinzworks> ; J. P. Caulkins, 'The Real Dangers of Marijuana', *National Affairs*, 2016.
- 21 For example, the ratio for marijuana was 2.8 times higher than the ratio for alcohol concerning the question '*Sometimes people who drink alcohol [use marijuana or hashish] have serious problems at home, work or school - such as: Neglecting their children, Missing work or school, Doing a poor job at work or school, Losing a job or dropping out of school. During the past 12 months, did drinking alcohol [using marijuana or hashish] cause you to have serious problems like this either at home, work, or school?*'
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- 36 Walsh, J., and G. Ramsey. *Uruguay's Drug Policy: Major Innovations, Major Challenges*. Washington, DC. (Washington, D.C.: Brookings Institution, 2015.)
- 37 Washington DC took the more modest step of legalisation with only home growing, but that may be a temporary bow to political reality as the national capital.
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- 39 Caulkins, J. P. 'Nonprofit Motive: How to Avoid a Likely and Dangerous Corporate Takeover of the Legal Marijuana Market.', *Washington Monthly*, 2014, March/April/May edition. Note: Even though non-profits do not pay corporate income taxes, entrusting legal supply to non-profits would still generate considerable tax revenue from sales and excise taxes and income taxes on employees. Non-profit does not mean no tax revenue.
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- 41 See for example the UNODC's World Drug Report(s), wherein there is clear delineation between problem users (often dependent users) and other users.
- 42 See, e.g., C., Siddharth and J. Joba, 'Transnational cocaine and heroin flow networks in western Europe: A comparison', *International Journal of Drug Policy* 26, no. 8(2015): 772-780 ; C., Siddharth, S. Peters, and N. Zimmer, 'How Powdered Cocaine Flows Across the United States Evidence From Open-Source Price Data', *Journal of Drug Issues* 44, no. 4 (2014): 344-361 ; C., Siddharth and M. Barkell, 'What the price data tell us about heroin flows across Europe', *International Journal of Comparative and Applied Criminal Justice* 37, no. 1 (2013): 1-13 ; C., Siddharth, M. Barkell, and K. Steffen, 'Inferring cocaine flows across Europe: Evidence from price data', *Journal of Drug Policy Analysis* 4, no. 1 (2011).
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If Tougher Enforcement Cannot Reliably Raise Drug Prices, What Are Appropriate Goals and Metrics?

Peter Reuter, Harold A. Pollack and Bryce Pardo

SUMMARY

- There is minimal evidence supporting the core proposition that drug enforcement raises the price on illicit drugs: which has been a classic and critical assumption of the global war on drugs.
- Through a careful analysis of four levels of the cocaine industry; production, smuggling, high-level domestic distribution and low-level domestic distribution – this article highlights how illegal drug markets differ in important ways from the simplified models taught in Economics 101.
- Rather than simply increasing price and limiting the supply, drug enforcement strategies prioritising market disruption have caused disorder and violence: as can be seen in Mexico where organisational decapitation has contributed to cartel fragmentation as increasing number of groups fight over fewer trafficking routes.
- Whereas arrests and quantities seized have long been the two metrics used to evaluate operational success, the authors propose that an alternative set of metrics should be used. A coherent framework for assessing the goals of drug enforcement can be applied from the analysis of demand side policy, namely harm reduction; *i.e.* reducing the harms that drug users inflict on themselves, others, and also the harms caused by illicit markets in the production, trafficking and distribution of drugs.
- Overall, the supposed efficacy of supply-side enforcement remains challenged as there is little evidence that marginal increases in enforcement raise equilibrium prices. This realisation should allow law enforcement to focus on those social harms most amenable to police interventions.

A classic and critical assumption of the war on drugs was that more stringent enforcement would raise price. Whether higher price was a desirable outcome was hotly debated. Higher prices, under most reasonable assumptions about demand, meant higher revenues for dealers, more property crime and perhaps more violence. On the other hand, it meant fewer users and less drug consumption, and so perhaps less drug-related harm over the long-run.

Though the drug war may have ended, drug enforcement is likely to still dominate budgets in most countries for the foreseeable future. Change occurs slowly and enforcement is generally much more expensive than prevention, treatment or harm reduction. In a previous review of the empirical evidence on the effects of tougher supply side enforcement on prices,¹ two of us found little support for the proposition that higher toughness produced higher prices. However, the research to date is sparse, heterogeneous in terms of methodology and of enforcement programmes assessed, marred by limited data sets and thus fragile methodologies. The problems are inherent in the topic. There is little likelihood of a major breakthrough in understanding the effects of the many forms of drug enforcement (from eradication of crops to longer sentences for street dealers) on purity-adjusted prices.

Moreover, many theoretical arguments call into question prior models used to justify the assumption that tougher enforcement mechanically translates into corresponding price increases. Though complications to the model, in particular dynamic aspects, have been discussed elsewhere,² we believe that this paper offers some useful advances in understanding of why enforcement might fail, at the margin, to raise prices.

The question then is what are appropriate goals for drug enforcement if we can neither assume that such measures raise prices nor assume that raising prices would automatically reduce the social harms associated with drug use? How should progress be measured?

This paper is an early exploration of that question, with no claim to a firm conclusion. We are sure that there is no unitary goal to drug enforcement policies. Rather, there are multiple proper goals. Goals and measures vary by agency, substance, and level of market targeted. An imaginary drug czar, cannot ask her supply side office to identify a single indicator of success, as she might once have if she subscribed to what we will refer to as the standard model of drug markets.

For simplicity, we focus on policing (broadly defined as apprehending or otherwise altering the behaviour of drug dealers, traffickers and producers through police actions), rather than prosecution or regulation.³ We ignore demand side policing, since we think decriminalisation of simple possession might be most desirable.

Section I briefly summarises the research evidence available on enforcement and prices, justifying our initial skepticism. Section II then provides a more detailed theoretical account of how the standard model might apply to some components of the distribution chain but is unlikely to apply to other components and the consequences in terms of the effect of higher stringency on prices. Section III explores the consequences, both positive and negative, of more stringent enforcement: some of these are unintended effects and others are the result of strategic choices. Section IV draws some policy implications from the analysis.

I. WHAT DO WE KNOW ABOUT THE EFFECT OF DRUG ENFORCEMENT ON PRICE?⁴

Simply put, there is minimal evidence in support of the core proposition that drug enforcement raises price. We word that cautiously not merely from scholarly prudence, but because the research base is so weak that any stronger statement is unwarranted.

We have identified only eight published studies, meeting minimal research standards, relating price at some point in the drug distribution system to drug enforcement efforts, varying from the source country level to retail sale. There is limited additional literature on the price effects of tighter regulation of precursors, dominated by the contributions of Cunningham and collaborators;⁵ we do not include that because it involves use of regulatory rather than police authority, raising input costs directly.

The studies are primarily of cocaine markets, with just two involving heroin. The programmes covered include: eradication, interdiction, high-level domestic enforcement and retail enforcement. The studies employ a variety of measures of enforcement (seizures, arrests, incarceration) and use prices at different levels of the distribution system. Mejia, Restrepo and Rozo⁶ found that a variety of interventions in Colombia may have accounted for the rise in retail prices in the US in 2007. One interdiction study found short-term retail price increases resulting from enforcement surges.⁷ Moreover, one of the retail studies found a 5-15% increase in retail cocaine prices from 1983-1996 as a consequence of enforcement intensification, which included a ten-fold increase in incarceration for cocaine offenses.⁸ The other studies have found no effect.

The challenges facing such studies are numerous and daunting. Purity-adjusted price is difficult to measure and rarely available.⁹ The proper measure of enforcement is a rate of penalty per unit flow. However, the numerator has many elements (arrest, incarceration, asset seizure, drug seizure), and there is no basis for determining the appropriate weights for each. In addition, the denominator is impossible to measure, and very difficult to proxy. The problems are both conceptual and empirical. There may be natural experiments or quasi-experiments, such as the restriction on the spraying of Colombian coca fields near the

Venezuelan border (exploited by Mejia and Restrepo)¹⁰ that can help empirically but only in a limited way.

The evidence comes almost exclusively from the US. The intensity of enforcement, certainly in terms of incarceration, may be so much higher in that country that the findings, which are about marginal changes in enforcement, have little claim to generalisability to other nations. There is no consistency across the few studies of any one stage of the distribution system.

Given the number and variety of these problems, it is hard to see that the literature is likely to be strengthened in the near future. Policy decisions will have to be made with minimal research guidance about the impact of increasing the intensity of policing or penalties at any stage of the distribution system.

Note that we have considered only the incremental or marginal effects of enforcement in mature markets. That reflects the difficulty of obtaining such measures for smaller and emergent markets with limited supply chains and small consumer bases of mostly new users. Enforcement, mounted early enough and targeted appropriately, may sufficiently raise prices or otherwise deter users and sellers so the market does not reach maturity. Such successes would not be susceptible to this kind of evaluation.

II. WHAT ARE THE VALUES AND LIMITS OF THE ECONOMIC MODEL OF DRUG ENFORCEMENT/MARKETS?

The previous section informs our sceptical take on the empirical evidence. But what about the theory?

Here we set out the standard model that has been used to predict that more stringent enforcement will raise price, and then consider how applicable it might be to different segments of the market. Within the standard economic framework, competitive markets are characterised by free entry and exit by firms, no one of which is able to dictate prices. Within such markets, prices closely reflect marginal costs. Information (including pricing information) is transparent. Transaction costs are negligible. Firms structure themselves to most efficiently meet market demand at the prevailing price of what they produce. These are the assumptions underlying the widely used Risks and Prices model.¹¹

The current public debate over drug policy largely centres on adverse unintended consequences of drug policing, whether in American cities at the retail end or the spraying of coca crops as part of eradication programmes.

Assume for the moment that these notions characterised the drug markets. Then the most basic enforcement strategies that aim to reduce drug consumption are readily illustrated in a standard supply-demand framework. Interdiction and other supply-side enforcement efforts raise marginal production costs, shifting the supply curve up by this amount at whatever stage in the supply chain is affected by the particular enforcement action. The resulting equilibrium price will rise, and the quantity of drugs sold will decline, as the market equilibrium moves along the market demand curve.

In fact, drug markets are not well-functioning by the standards applied to the global markets for sneakers or breakfast cereal or even by the standards applied to more concentrated markets such as word processing software or smartphones. Illegal drug markets differ in important ways from the simplified models taught in Economics 101. They differ even more from the competitive ideal than do many legal markets that are characterised for example by monopoly or asymmetric information (*i.e.* where sellers know more than buyers or vice-versa). Illegal drug markets display many distinctive features such as imperfect information about product quality (sellers are often as ignorant as buyers about purity), about other prices (since transactions are clandestine) and self-selection into the trade on characteristics such as a willingness to take physical and legal risks. The addictive character of illegal drugs introduces other market failures, as well.

All of these characteristics have been discussed in earlier papers.¹² None of them have considered, as we do in the following pages, how these characteristics might lead to different responses to enforcement interventions and how they might differ

across the many distinct elements of the drug trade, particularly the many levels of the cocaine and heroin trades.

We consider here, for expositional purposes, four levels of the cocaine industry; production, smuggling, high-level domestic distribution and low-level distribution. This should be seen as describing a mature mass market; there are other sources of deviation from the standard model when the drug is still emerging.

Producers: We start with the segment for which the difference between the standard competitive model and what is observed in drug markets is slightest. Farmers growing coca in the Andes are many in number (according to the UN, in Colombia alone there are over 300,000 people living in 65,000 households that cultivate coca), are price takers, perhaps facing a monopsonist (a single buyer of a good or service), and purchase all relevant inputs in competitive markets.¹³

These producers operate under varying degrees of legal pressure that will affect their efficiency relative to a legal producer; for example, they cannot effectively invest in R&D and generate rents from developing a new strain of coca bush that might be more productive. Yet the simple model ought to do well in predicting their response to such interventions as eradication or alternative development. Because this stage accounts for such a small proportion of the value-added between the original plants and final product markets, it is unclear how much increases in farmers' marginal costs (and thus equilibrium prices of their output) raises actual drug prices paid by users.

The fully competitive model seems less applicable to the next two levels in the supply chain, though some aspects of these markets are familiar from industrial organisation accounts of oligopoly and monopolistic competition.

Smuggling: Relatively few smuggling organisations account for a large share of the market. Following the break-up of the Cali and Medellin syndicates in the 1990s, a greater number of autonomous organisations smuggle multi-tonne shipments of cocaine out of Colombia. Simple arithmetic suggests that the largest ten organisations might account for about 50 % of the total.¹⁴

The technology of smuggling is varying and non-standard; some use corrupt connections in Venezuela,¹⁵ others substitute relatively expensive technology

for expensive corruption payments (e.g. sending submersibles from the Colombian to the Mexican coast)¹⁶ and yet others use higher risk methods that economise both on corruption and technology (e.g. sending shipments concealed in legitimate freight).¹⁷

The smugglers' costs are often determined in idiosyncratic bargaining. What does a Honduran colonel charge for allowing a 250 kg shipment to land safely at a remote airport? How much market power does he have in this transaction: he might be constrained by awareness that an equally biddable colonel controls a neighbouring border zone that is almost as convenient for cocaine smuggling. Do the pilots who fly these planes even have a rough estimate of the risk they face of apprehension and the expected penalty conditional on being apprehended?¹⁸

One of the retail studies found a 5-15% increase in retail cocaine prices from 1983-1996 as a consequence of enforcement intensification, which included a ten-fold increase in incarceration for cocaine offences. The other studies have found no effect.

Standard economic models appear more strained for this sector of the industry: though competitive pressures are not wholly unfamiliar from other complex network models of industrial organisation. Because local opportunities and local knowledge are so important, efficient producers may not be able to expand or replicate their efforts in broader contexts.

The high-level domestic distribution sector within the US or any European country is less well understood.¹⁹ Corruption and violence certainly play a smaller role than in the smuggling market: cases involving high-level cocaine distributors paying US enforcement agencies are rare and pay-offs to high-level Dutch or British police almost unheard of. DEA records a total of 5 agents killed in the line of duty between 2006 and 2010, underscoring the rarity of systematic violence directed at US drug enforcement personnel.²⁰ Direct evidence is rare regarding the commercial calculations of high-level domestic distributors, though many investigative strategies aim to increase perceived risk, for example through

elaborate undercover operations that increase uncertainty about the reliability of customers and colleagues.

For the **retail and low-level wholesale markets** we are back to very large numbers of supply side participants. Even for a single city retail market, Caulkins and Reuter,²¹ using standard numbers, suggest that a metropolitan area with 1 million inhabitants (e.g. Birmingham, Alabama around 2005) might have had 3,300 cocaine sellers, the vast majority of them retailers. Buyers shop around,²² both because drug dealers are unreliable (often sick, jailed or out of stock) and perhaps to learn about prevailing price and quality. Sellers' major costs include time, both their own and those of others that they employ: there may well be a standard wage for working as a look-out for a street cocaine dealer in Atlanta in 2005. The standard model, on its face, looks more plausible for this segment of the market. The factor intensity within the production process of enforcement-vulnerable inputs, and producers' ability to shield or to substitute away from these vulnerable inputs, would both influence the translation between enforcement and ultimate market prices.

In fact, though, it may be weak for many different reasons. As noted above, Caulkins and various collaborators have already identified a long list of threats. For example, assume that policing tends to weed out the most violent sellers first, this may not be a result of drug policing strategy but because homicidal drug dealers get picked up by the homicide squad. Then, Caulkins, Reuter, and Taylor²³ show that this might lead to reductions in price as the market becomes less violent and attracts more sellers with high aversion to physical risks; this is purely a theoretical result, though one that perhaps is more rooted in the realities of mature drug markets than are other models that generate perverse results.²⁴

None of this reasoning and observation suggests that economics is irrelevant to understanding drug markets or that such enforcement efforts are unwise or ineffective. It is just a reminder that the standard models of how increasing risks and certain other costs, the tool that policing/eradication/interdiction brings to bear, may not have the consequences predicted by the simple economic model. With neither theory nor evidence supporting the proposition, it is time to turn to the other consequences of drug enforcement.

III. OTHER EFFECTS OF DRUG ENFORCEMENT

The current public debate over drug policy largely centres on adverse unintended consequences of drug policing, whether in American cities at the retail end or the spraying of coca crops as part of eradication programmes. Legalisation proponents stress these harms as the principal reason to consider a dramatic alternative.²⁵ Public health advocates, even if not pressing legalisation or depenalisation, emphasise the harms from current enforcement efforts as the basis for major policy reforms.²⁶ Yet, as we describe below, drug policing can also have positive consequences, unrelated to any price effects.

Aggressive enforcement has been criticised for contributing to the alienation and further marginalisation of minority communities, for example in Seattle.²⁷ *The Wire* grimly and persuasively documents the accompanying harms in extreme form for Baltimore. Such policing efforts have contributed substantially to the incarceration of low-level retailers and drug couriers who are easily replaced.²⁸ Prioritising drug law enforcement may contribute to increases in property crime as manpower and resources are directed away from such crimes.²⁹

'You can't regulate what you prohibit,' dictates an old policy adage. By prioritising controlling drug markets, police ignore some of the negative consequences of their actions, and may lead police to overlook opportunities for more socially-useful enforcement practices. Efforts to suppress local drug markets may focus enforcement resources on dealers with the greatest market share or on those who can be most readily apprehended rather than those who impose the greatest social harms.

In some instances, prioritising market disruption may itself introduce disorder which can increase violence in the short-term.³⁰ For example, enforcement strategies in Mexico that focused on organisational decapitation have contributed to cartel fragmentation and a surge in violence as increasing numbers of groups fought over fewer trafficking routes.³¹

Interdiction efforts can shape smuggling routes, sometimes with mixed results. A shift away from maritime toward terrestrial trafficking routes for Colombian cocaine in the last decade has been devastating for many smaller nations in Central America and Mexico.³²

Drug policing, even if aimed at sellers (many of whom are also users) can negatively impact the immediate health and wellbeing of drug users as it induces unsafe behaviours and displaces criminal activity. For example, users begin to fear law enforcement involvement and adopt unhygienic practices such as the rental of drug paraphernalia to avoid detection.³³ Drug law enforcement can displace drug use activity; arresting or citing users that possess paraphernalia, such as syringes, are associated with higher incidence and prevalence of HIV and HCV.³⁴

Illegal drug markets display many distinctive features such as imperfect information about product quality (sellers are often as ignorant as buyers about purity), about other prices (since transactions are clandestine), self-selection into the trade on characteristics such as a willingness to take physical and legal risks. The addictive character of illegal drugs introduces other market failures as well.

Some police departments, faced with increases in overdoses—particularly from heroin and prescription opioid use, are starting to depart from traditional enforcement goals that emphasise the market itself. In these cases, police have been issued with Naloxone kits to reverse overdose. One study in Ohio found that training and equipping officers with Naloxone is associated with reduced opioid overdose deaths.³⁵

One important, but poorly articulated, aspect of drug law enforcement is the manner in which agents of the state maintain the rule of law and state legitimacy. Poorly governed or impoverished communities and territories are susceptible to drug production or selling activity. This includes cities in consumer nations and sparsely populated hinterlands of producer nations. Smartly applying drug law enforcement, by focusing on violent and disruptive actors, may improve the rule of law as well as community relations. The Drug Market Initiative in High Point, North Carolina and the Colombian government's shift toward security and state presence post-Plan Colombia are examples by which the state can reassert itself in communities and territories that are troubled by drug activity and violence.⁴⁰

That said, as noted above, policing is probably most successful at preventing the establishment of new drug markets: such markets are vulnerable to the removal of a few key providers and to simple interruption where networks are not yet established and new users are most readily deterred or diverted into the use of other substances. Enforcement is weaker at controlling mature markets. The elimination or substantial shrinkage of established markets may necessitate unsustainable levels of enforcement that do not conform to the democratic principles of a free and equal society.

In sum, drug law enforcement, like any other state intervention in a market, has many consequences, intended and unintended. Well targeted, normatively sensitive and intelligently informed policing that takes into account the lifecycle of a drug market⁴¹ will often improve social welfare. This is not always possible in the real world, with individuals and agencies that have their own interests and constraints. A simplified version of our task then is to maximise the net benefit, taking into account both the positive and negative consequences. The final section turns to goals and metrics. Given space limitations, we focus here on policing of markets in American cities.

Police also have the power to shape the supply of drugs in more socially positive ways.³⁵ Drug policing can improve community safety by focusing on 'hotspots' such as open-air markets or areas known to retail drugs and which contribute to violence or public disorder.³⁶ It turns out, against criminology theory expectations, that there is a diffusion of benefits rather than displacement of crime. In some circumstances, domestic drug enforcement may reduce crime and violence through other mechanisms, improving community safety by policing criminogenic drug users or dismantling violent retail operations.³⁷

Local police can directly address supply-side threats to public health by implementing or supporting harm reduction interventions and through orienting investigation to reduction of harms. Police can identify and warn the public about adulterated or exceedingly potent batches of drugs entering the market.³⁸ Efforts can then be made to investigate and shut down the supply of these sources.

IV. GOALS AND METRICS FOR DRUG ENFORCEMENT

Drug markets present a particular challenge to police. Both buyer and seller are willing participants in a market transaction. The lack of any complainant or victim removes a central prop of policing against violent and property crimes, even white-collar crimes. In contrast to robbery or assault, police often rely on undercover or intrusive means to infiltrate drug markets. At the other end of the production system, coca farming, the task is similarly complicated by the fact that the police and/or military are being asked to deprive low-income rural households of a principal source of income.

Drug market enforcement also defies simple outcome measures. For modern police, with their increasingly sophisticated geographic databases, reports of crime incidents are the standard measure of success. Flawed though reports may be, they have a face, validity and reality. For drugs there is as yet no counterpart. Arrests (perhaps weighted by importance) and quantities seized have long been the two metrics used to evaluate operational success. From this standpoint, a department police may look good at its job. However, often the other consequences, discussed above, are more salient.

We focus on established mass markets since these are almost certainly responsible for most of the harm associated with drugs. New markets may involve drugs that are more dangerous to users but it is precisely that danger which typically leads to the demise or at least sharp shrinking, of these markets.

One way to provide a coherent framework for assessing the goals of drug enforcement is to apply the same framework that now is so widely used in the analysis of demand side policy, namely harm reduction. Although the term ‘harm reduction’ is often used to denote specific interventions such as syringe exchanges, the term is most helpful in identifying a set of guiding questions which ought to inform drug policy and drug law enforcement.

We ignore demand side policing, since we think decriminalisation of simple possession might be most desirable.

Caulkins and Reuter,⁴² attempting to bring human rights to drug enforcement generally, suggested that drug enforcement could have four positive goals:

1. Reducing the amount of drug use (which one might denote *use reduction*).
2. Reducing the harm that drug users experience per unit of drugs used (which might be denoted as *micro harm reduction*).
3. Reducing the harms that drug users impose on others (which might be denoted as *use-externality reduction*).
4. Reducing the harms caused by production, trafficking and distribution of drugs (which might be denoted as *market-externality disruption*).

Useful as Caulkins and Reuter’s four categories above are, this list is incomplete because it fails to recognise the role that drug policing may play in crime control generally. Drug sellers and producers are frequently involved in other criminal activities, both as part of the drug business (e.g. violence and corruption) and separately. To the extent that drug-market participation complements or promotes other crimes, drug policing can thus be a means of apprehending offenders who pose a risk apart from their provision of illegal drugs. Of course drug-market participation may also substitute for participation in other types of crimes. Street-level drug sellers earn wages and act under the managerial supervision of drug-selling organisations. It is at least theoretically possible that suppressing a particular drug market may lead some participants to commit other types of crime.

We briefly consider each of the goals in turn, identify the mechanisms by which policing can attain these goals, and then turn to the issue of metrics.

Reducing drug use: Even without reliable price effects, policing of drug suppliers can reduce the quantity consumed. Making sellers discreet and markets less geographically concentrated can raise the time required and difficulty faced by drug buyers to find a willing seller. That old insight of Moore⁴³ has been only lightly explored in the research literature and is not part of the discussion of drug policing generally. Cell phones and internet connections may have transformed the ways in which buyers and sellers find each other, but the fact that traditional drug policing still turns up so many sellers and buyers on the street suggests that the transformation is far from complete.

Reducing the harm that drug users experience per unit drug consumed: These involve the classic harm reduction issues. Having police distribute Naloxone, in addition to not making needle possession a target for arrest, exemplifies the positive approach, as does the spread of warnings about dangerous batches, discussed previously. Curbing enforcement practices that promote needle-sharing (e.g. aggressive enforcement of paraphernalia laws) reduces harms stemming from blood-borne infectious diseases.

Reducing the harms that drug users impose on others: The classic example of these harms is property crimes generated by the high cost of a drug habit. Caulkins and Reuter⁴⁴ note that drug users are often irresponsible parents and partners, and that police can attempt to systematically ameliorate this by checking whether social services are needed in the households of those arrested for drug selling. However, that goes beyond what might reasonably be assigned to supply side policing. Supply-side enforcement can sometimes be especially helpful when it is focused on substances associated with large user-induced externalities.

Reducing the harms caused by production, trafficking and distribution of drugs: Many drug enforcement efforts aim to close down open-air retail markets or at least to force these markets to be discreet. Such measures reduce the actual or perceived danger of specific neighbourhoods, even if these have negligible impact on the prices or quantities of drugs actually consumed. At the other end of the production system, that goal can lead to targeting strategies for eradication: to target producing areas where alternative development programmes give farmers more opportunity for obtaining a decent living without growing coca or opium poppies.

Policing is probably most successful at preventing the establishment of new drug markets; such markets are vulnerable to the removal of a few key providers and to simple interruption where networks are not yet established and new users are most readily deterred or diverted into the use of other substances. Enforcement is weaker at controlling mature markets.

Even if we have articulated the correct principles, to be useful we must turn these into metrics that can be used by managers to motivate their officers to take them seriously. We offer just three suggestions here:

1. Develop criteria for the existence and harmfulness of drug markets, drawing on relatively easily obtained information. One outcome criterion might be the number and severity of such markets, at least in areas where such markets are at a high risk of emerging. Criteria might include violent offenses, weapons charges or serious property crimes committed by likely users and sellers in a particular location.
2. Track the criminal histories of those arrested by the drug squad so that there is an incentive to target those who are involved in the most serious non-drug crimes as well as major dealers. Particular emphasis might be placed on buyers and sellers involved in gun offences, since gun violence in drug markets is strongly associated with homicide.
3. Track the flow and engagement of drug selling arrestees with the drug treatment system for some period after arrest.

The feasibility of such metrics must be established and requires greater management and implementation skills than we possess. However, there is no doubt that a new set of metrics to align with a new set of goals is required.

CONCLUSION

Drug policy discourse was once anchored in debates over whether supply-side enforcement could appreciably increase production costs, thus raising equilibrium prices, reducing use and ultimately reducing drug-related social harms. The supposed efficacy of supply-side enforcement is now contested across the supply chain in most markets for most substances. In mature markets, there is surprisingly little evidence that marginal increases in enforcement raise equilibrium prices. The overall market impact of more-intensive supply-side measures is generally limited.

At first blush, this is a chastening turn in the research and policy consensus. On reflection, though, this is neither good nor bad news. However disappointed police might be that their efforts rarely appreciably move equilibrium drug prices, this knowledge might also be liberating. Law enforcement might now enjoy greater leeway to focus on those social harms most amenable to police interventions.

Police can also, in good conscience, do less if this reduces the harms associated with enforcement efforts which do not, at the margin, seriously disrupt drug markets. Police will have plenty to do in most large cities of Europe or North America. If their role in drug markets is now less central or urgent, they will hardly be standing idle. ■

Reducing crime: One of the oldest insights about policing is that specialised units focus only on the offences for which they are responsible. In a world of non-specialised offenders, such units often ignore other crimes; the burglary squad was uninterested in the drug activities or the gun sales of burglars.⁴⁵ Much of the harm caused by drug dealers arises from other offences. Drug enforcement should therefore target the most dangerous or the most violent drug-involved offenders within a particular drug market.

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Drug Policing: What is it Good For?

Michael Shiner

SUMMARY

- The notion that policing cannot stamp out demand for drugs and should be reoriented to reduce associated harms is not new.
- The difficulties of enforcement are reflected in the emergence of a global drug trade 'of enormous proportions' – 3% of world trade, making it the third largest sector behind oil and arms.
- The prevalence of drug use varies sharply between countries, but not in a way directly related to drug policy: repressive regimes do not have lower rates of use than liberal regimes.
- The claim that prohibition represents an effective price control mechanism is problematic, not least because there are other, more efficient, ways of achieving the same goal. Under legalisation, taxes could increase drug prices.
- Established drug markets have proved highly resilient in the face of significant seizures.
- Policing can cause or exacerbate drug-related harm through ineffectual market reduction strategies.
- The alternatives are problem oriented strategies which reduce harm even if the size of the market remains unaltered.
- Problem oriented strategies may also mitigate the police's reputational damage associated with enforcement-led approaches.

Years ago I spoke at a drugs conference alongside a police chief from Canada. We were both fans of *The Wire*, which he described as 'the most realistic' depiction of drug policing he had ever seen. In the show's 'bravest and most radical storyline', Major 'Bunny' Colvin creates a series of 'free-zones' in Baltimore's Western District, where drug enforcement is not a police priority and dealers are given immunity from arrest and prosecution.¹ The aim is to push the street level drug trade into the free-zones where it will be 'least harmful.' The experiment is successful in clearing drug dealing off residential street corners, which show signs of coming back to life; public health workers and harm reduction experts move into the free-zones, distributing condoms and clean injecting equipment; and the crime rate drops by 14 per cent in five weeks. When Bunny informs his bosses about this policy of selective non-enforcement they accuse him of having 'legalised drugs' and of having 'lost his fucking mind.' He is effectively demoted and forced into premature retirement on a reduced pension. During the subsequent post-mortem, the Mayor, impressed by the reduction in crime, thinks about trying to salvage the initiative, musing: if only 'we can call this shit something other than what it is.' But he is quickly reminded of the political realities and the free-zones are shut-down. This apparently fanciful tale encapsulates the central paradox of drug policing - what is politically acceptable cannot be achieved, but what is achievable is not politically acceptable.

THE ORIGINS OF HARM REDUCTION POLICING

The notion that policing cannot stamp out demand for drugs and should be reoriented to reduce the associated harm is not new and nor is the idea of free-zones entirely fictitious. Dorn and South made the case for harm reduction policing some 25 years ago on the basis that it 'seems easier for the legal apparatuses to reshape patterns of crime, including drug markets, than to prevent them.'² In making their case, Dorn and South describe how policing is implicated in creating or exacerbating some of the harms associated with drug markets. Noting that suppliers and enforcement agencies interact with each other, they argue that the cultivation of informants and the escalation of penalties pushed the drug trade into being more security conscious and violent than it would otherwise have been. This increasing brutality, they claim, had been used to legitimise heavier law enforcement, reinforcing the spiral of violence. It was to reverse this spiral that Dorn and South raised the possibility of extending the principle of harm reduction to policing:

'Given that crimes such as drug distribution may be occasioned in ways which are more or less socially harmful (e.g. with or without shootings), it follows that the policy of harm minimization can be invoked. This concept is now widely accepted as an aim in relation to drug consumers: minimizing the social, legal, and medical harms that may be associated with drug consumption, as well as trying to reduce drug consumption itself, are now accepted as the twin goals of prevention. It may now be time to discuss harm minimization in relation to drug distribution. The question is, given that we cannot totally prevent illegal drug markets (and there is reasonable consensus on that proposition), what sort of markets do we least dislike, and how can we adjust the control mix so as to push markets in the least undesired direction?'

The practicalities of harm reduction policing were simultaneously being explored in Zurich, Switzerland, where something like a free-zone was created in Platzspitz park, with a view to containing the city's growing heroin problem.⁴ Police tolerated small-scale dealing and public injecting so long as it remained geographically contained, while clean needles were distributed to users to combat the spread of HIV.

The Platzspitz attracted users and dealers from outside the city and the 'needle-park,' as it came to be known, was closed down in 1992 amid complaints from local residents and concerns among politicians about the city's international reputation. The social workers and doctors involved in the Platzspitz initiative insisted that it had its advantages, noting that the concentration of users in one place meant they could be given clean injecting equipment and be helped quickly in cases of overdose. Problems persisted despite the closure of the needle-park and were arguably more difficult to address because the addict population had dispersed. In time, various harm reduction initiatives, including needle exchanges, supervised injecting sites and, eventually, heroin assisted therapy were introduced across Switzerland, displacing the traditional reliance on law enforcement. These innovations have yielded significant benefits in the form of HIV prevention and crime reduction, convincing policy-makers and persuading a sceptical Swiss public.⁵

THE CHALLENGE OF DRUG POLICING

Drug offences pose a particular challenge to law enforcement because they represent a form of 'victimless' or 'consensual' crime. The crux of the problem here is that if 'the victim' is a willing participant then 'there is no party to the act who has an interest in being the plaintiff'.⁶ This creates practical difficulties for policing, because crimes are typically investigated and convictions secured on the basis of information provided by victims and witnesses. In the absence of specific intelligence, police tend to rely on a more proactive and discretionary approach to drug offences than other forms of street crime.⁷ Such tactics can reshape local drug markets, but are resource intensive and their effects are difficult to sustain over the longer-term: activities that may be displaced to other areas often return once the operation is over.⁸

The difficulties of enforcement are reflected in the emergence of a global drug trade 'of enormous proportions'.⁹ A flurry of activity aimed at strengthening international drug control during the early 1970s was followed by an 'explosive worldwide growth in production and trafficking of virtually all types of illicit drugs'.¹⁰ The scale of the problem can be gauged from estimates that

illicit drugs account for 3% of world trade, making it the third largest sector behind oil and arms.¹¹ The global prevalence of drug use is currently considered to be stable, with around 246 million people aged 15 to 64 years or 5% of the population having engaged in such behaviour during the last year.¹² Official estimates also point to 187,100 drug-related deaths over the same period. The prevalence of drug use varies sharply between countries, but does not do so in a way that is straightforwardly related to drug policy: countries with stringent regimes do not have systematically lower rates of use than those with more liberal regimes.¹³ Despite massive investment in enforcement efforts, for example, the US and UK have been left with significant drug problems.¹⁴

Drug offences pose a particular challenge to law enforcement because they represent a form of 'victimless' or 'consensual' crime. The crux of the problem here is that if 'the victim' is a willing participant then 'there is no party to the act who has an interest in being the plaintiff.'

It has, nonetheless, been suggested that the failure of prohibition may have been overstated. Caulkins argues this point, claiming that prohibition increases drug prices far beyond what they would be in a legalised market, thereby constraining availability and use.¹⁵ Elsewhere, with Reuter, Caulkins suggests that 'enforcement acts almost like a tax' and that 'it is hard to identify any large costs of delivering drugs to final users other than those directly related to illegality and enforcement'.¹⁶ There is broad agreement that prohibition does increase the price of illegal drugs, though the size of the increase is a matter of dispute,¹⁷ and there is reasonable evidence that demand for some drugs, at least, is responsive to price.¹⁸ The claim that prohibition represents an effective price control mechanism remains problematic, however, not least because there are other, more efficient, ways of achieving the same goal. Under legalisation, governments could levy taxes on drugs to push prices up. The WHO has noted that raising taxes 'is the most cost-effective measure for reducing tobacco use,' while also increasing revenues

that can be used for state services, including healthcare:¹⁹ 'Raising tobacco taxes so that they account for at least 70 percent of retail prices would lead to significant price increases, induce many current users to quit, and deter numerous youth from taking up tobacco use, leading to large reductions in the death and disease caused by tobacco use'.²⁰

While insisting that prohibition pushes prices up, Caulkins acknowledges that it 'clearly fails if it is saddled with the impossible aspiration of eliminating all drug use' and has been pursued in the US 'far beyond the point of diminishing returns'.²¹ Established drug markets have proved highly resilient in the face of significant seizures and market disruptions are mostly due to happenstance rather than concerted enforcement efforts: there are no clear examples of large-scale arrests of dealers disrupting a market and it is extremely difficult for enforcement agencies to achieve sufficient reductions in supply to increase retail price.²² Despite massive investment in enforcement efforts and substantial increases in the number of people imprisoned for drug offences, the price of heroin and cocaine has fallen in the US over the last 30 years; an apparent paradox that led Caulkins and Reuter to conclude: 'Most of the advantages of prohibition can be attained with modest levels of overall enforcement coupled with targeting of dealers whose behaviour poses a particular risk to the community (e.g., use of juvenile distributors, violence against competitors)'. Ultimately then, Caulkins and Reuter seem to agree with Dorn and South: elimination of the drug market is unrealistic and enforcement should concentrate on reducing associated harms. A problem remains, however, because some of what prohibition does to push prices up - even with modest levels of enforcement - causes or exacerbates harm. Caulkins and Reuter themselves have noted 'in passing' that high prices are responsible for some of the violence in drug markets, since they provide an incentive for theft and make the trade attractive to those with a proclivity to violence.²³ We might add that prohibition also provides near monopoly-profits for those willing to break the law, creating opportunities for corruption and criminal diversification, while pushing dependent drug users into acquisitive crime in order to fund their drug use.²⁴

Faced with resilient drug markets and the limitations of what enforcement can achieve, few national governments have been willing to be as openly 'pragmatic'

as the Swiss. A more common response has been one of evasion and denial in an effort to maintain the foundational 'myth' of sovereign state control.²⁵ Drug offences, perhaps more than any other, have exposed the inability of nation states to control crime within their territorial borders and yet political administrations have routinely disregarded evidence that 'drug use is not responsive to criminal penalties and that criminalisation brings its own pathologies (notably street violence and disrespect for authorities).'²⁶ The US 'war on drugs' provides one of the clearest manifestations of the desire to re-impose control and has 'all the hallmarks of a sovereign state dealing with its limitations by denying they exist'.²⁷ Away from the gaze of the mass media and politicians, however, the criminal justice state has had to come to terms with the realities of widespread offending. Various 'adaptive strategies' have been used to preserve the viability of the system and to maintain a sense of efficacy. As well as making much greater use of cautions and fixed penalties to divert cases away from courts, police have scaled down expectations, redefined their aims, and modified the criteria by which success is judged.²⁸ Rather than seeking to eliminate the drugs trade, the focus has shifted onto managing or containing the problem by disrupting the market and settling for modest improvements at the margins. Success is proclaimed not on the basis of prevalence of drug use or even price, but on the number of arrests made and the amount of drugs seized. The rationale here is summarised by Bean:

'If low-level policing means moving dealers to a different site, displacing them, then so be it. This constitutes an advance. It means the new site is likely to be second best as far as the dealers are concerned, otherwise they would have selected it as their favoured site, and it also means that it will take longer to re-establish contacts. Dealing is about creating an atmosphere of trust, which means trust regarding the security of the deal as well as the quality of the drug supplied. Low-level policing helps destroy that trust, and makes the drug market less secure for those operating within it... No-one is suggesting that these measures solve the problem, but they offer a more coherent approach than chasing high-level dealers, busting them and then chasing their replacements... A uniformed police presence, posted strategically in the middle of the drug market, may be all that is required and it is likely to act as a reassuring sign to the local population that something is being done. Whether this will eliminate dealing is a moot question.'²⁹

THE HARMS OF DRUG POLICING

Harm reduction recognises that policy interventions may have adverse consequences.³⁰ That attempts to limit the availability of controlled substances are themselves a source of significant harm is not seriously in dispute. In 2008, the Executive Director of the UNODC identified the following unintended consequences of drug control:³¹

- ***The consequences of a huge criminal black market***: which thrives by getting prohibited substances from producers to consumers. The financial incentives to enter this market are enormous and there is no shortage of criminals competing to claw out a share of a market in which hundred fold increases in price from production to retail are not uncommon.³²
- ***Policy displacement***: the need for law enforcement has diverted attention away from public health, which is 'clearly the first principle of drug control' but has been 'displaced into the background, more honoured in lip service and rhetoric...[than] in actual practice'.³³
- ***Geographical displacement or the balloon effect***: squeezing drug supply in one place through tighter control often produces an increase in activity in another place.
- ***Substance displacement***: if the use of one drug is controlled by reducing supply or demand, suppliers and users move on to another drug with similar psychoactive effects, but less stringent controls.
- ***The way we perceive and deal with users of illicit drugs***: a system appears to have been created in which those who are addicted to drugs find themselves excluded and marginalised, heavily stigmatised, and often unable to find treatment even when they may be motivated to want it.

Policing can cause or exacerbate drug-related harm in three main ways: firstly, by increasing the violence associated with drug distribution; secondly, by increasing the health harms directly related to drug use; and thirdly, by damaging the legitimacy of

the police.³⁴ Although drug distribution is replete with possibilities for violence, its actual role is often overstated. Criminal organisations do not lie outside the general rules of human organisation and drug dealing networks adapt to environmental factors, particularly the need for security: highly flexible networks, often based on relationships of trust that are insulated by frequent 'cut-outs', seem best adapted to this context.³⁵ The primary motives are economic rather than criminal, moreover, and 'to a large degree, those who participate in drug dealing and brokerage are most usefully viewed as small business entrepreneurs and as rational economic actors'.³⁶ Based on their study of middle market drug distribution in the UK, Pearson and Hobbs note that business principles predominate and 'violence-avoidance' is the general rule because violence attracts attention and is 'bad for business'; that violence is most usefully understood as a consequence of market dysfunction and disorganisation; and that, where it does occur, violence is essentially instrumental, to secure contract compliance or to enforce debt collection.³⁷

Although law enforcement provides the default response to violence in drug markets, the evidence suggests that such responses are likely to be counter-productive. According to a recent systematic review of the literature:

'...drug law enforcement interventions are unlikely to reduce drug market violence. Instead, and contrary to the conventional wisdom that increasing drug law enforcement will reduce violence, the existing scientific evidence base suggest that drug prohibition likely contributes to drug market violence and increasing homicide rates and that increasingly sophisticated methods of disrupting illicit drug distribution networks may in turn increase levels of violence.'³⁸

Faced with this apparently 'paradoxical' association, the authors identify several 'causative mechanisms' that explain how policing might reshape drug markets in ways that increase violence. Research, they note, has shown how the removal of existing drug distribution networks has the perverse effect of creating a lucrative vacuum that others will seek to fill. Under these circumstances, 'violence may be an inevitable consequence of drug prohibition when groups compete for massive profits' without recourse to courts and other means of resolving disputes peacefully.³⁹ The authors also point to a process of 'target

Despite massive investment in enforcement efforts and substantial increases in the number of people imprisoned for drug offences, the price of heroin and cocaine has fallen in the US over the last 30 years; an apparent paradox that led Caulkins and Reuter to conclude: 'Most of the advantages of prohibition can be attained with modest levels of overall enforcement coupled with targeting of dealers whose behaviour poses a particular risk to the community (e.g., use of juvenile distributors, violence against competitors).'

hardening,' whereby drug organisations become increasingly militarised in the face of enhanced law enforcement.

As well as displacing potential public health responses, policing contributes to the 'risk environment' of drug use by encouraging high-risk behaviours and undermining harm reduction efforts.⁴⁰ In their 'seminal'⁴¹ ethnographic study of Australia's principal street level heroin market, Maher and Dixon describe how users and dealers adapt to intense police pressure to avoid detection.⁴² Among other things, police crackdowns were found to encourage oral and nasal storage and transfer of heroin, increasing the risk of transmitting infectious diseases and overdose (if heroin is swallowed inadvertently or to conceal it from the police). Numerous studies have shown how police pressure can exacerbate the risks associated with injecting.⁴³ Access to sterile syringes is one of the main planks of harm reduction, but injecting drug users are often reluctant to access syringe exchanges or carry syringes for fear of being arrested. Under such conditions, users are more likely to share syringes with others, use discarded syringes or attend 'shooting galleries,' increasing the risk of transmitting blood-borne pathogens such as HIV. The threat of detection and confiscation creates pressure to inject quickly and users may rush the process, further increasing the risks of abscesses, bacterial infections and overdose. Police crackdowns also increase careless disposal of syringes as users may simply drop their injecting equipment on the street to avoid being stopped or arrested. Having documented this kind of heightened risk-behaviour, Maher and Dixon show that police pressure resulted in an 'alarming' increase in Hepatitis C among injecting drug users.⁴⁴ A similar link was identified by a US study, which found that various indicators of legal repressiveness, including the number of 'hard' drug arrests and police employees, were positively associated with the prevalence of HIV among injecting drug users, while having no effect on rates of injecting drug use.⁴⁵

As well as prompting increases in risk-behaviour, police activity can disrupt users' engagement with services if it is undertaken in the vicinity of needle exchanges or treatment agencies and may discourage users from seeking medical assistance during or following an overdose out of fear that they will be arrested. Finally, physical confrontation between drug users and police is 'a common source of health-related harm' involving physical searches

as well as use of physical restraints (chokeholds), stun guns and pepper spray: perhaps the most severe example of such harm comes from Thailand, 'where a federally ordered police crackdown resulted in reports of thousands of extra-judicial killings of suspected drug users and dealers.'⁴⁶

Enforcing drug laws runs the risk of significantly damaging the legitimacy of the police and criminal justice system. The impact of police contact on public trust and confidence is famously asymmetrical: poor or unsatisfactory contact has a large negative effect, while good or satisfactory contact has a much smaller positive effect.⁴⁷ This pattern is particularly marked in relation to police initiated encounters and is likely to be all the more so when such encounters are based on a high degree of discretion. For most of the last decade, police in England and Wales have conducted close to a million stop-searches a year, around half of which have been for drugs.⁴⁸ The vast majority of these drug searches were targeted at low-level possession offences (mainly of cannabis) and fewer than one-in-ten resulted in arrest. Ethnographic research suggests that drug searches are often based on stereotypes about who 'looks likely,'⁴⁹ while a recent inspection found that more than a quarter of stop-searches lacked sufficient grounds to justify the lawful use of the power.⁵⁰ Speculative searches for minor 'consensual' offences in the absence of objective grounds are likely to promote defiance and a sense of alienation, undermine respect for the law and co-operation with the police, and may even lead to self-help violence.⁵¹

The policing and prosecution of drug offences is not applied equally to all those who use drugs and the 'deliberately inflicted pains of drug control have usually fallen most heavily on the poor and visible minorities.'⁵² Drug policing in England and Wales weighs heavily on black and minority ethnic communities and is a key driver of ethnic disparities throughout the criminal justice system.⁵³ Massive disparities are also evident in the US, where the 'war on drugs' reproduces historically entrenched patterns of racial disadvantage.⁵⁴ These disparities challenge the promise of equality before the law and foster a sense of disillusionment that is contributing to a crisis of legitimacy: most African Americans consider the 'war on drugs' to be 'unfair by design' and this perception negatively affects their expectations of the police and the nature of their engagement with the criminal justice system.⁵⁵

THE CHALLENGE OF HARM REDUCTION POLICING

Harm reduction targets the proximate causes of specific harms and demands that the potential costs of an intervention are weighed against its potential benefits.⁵⁶ This requires an analytic perspective that, in the context of policing, has an affinity with problem oriented approaches. The emphasis here is on developing a robust understanding of a particular issue and developing a more effective strategy for dealing with the underlying problem rather than simply responding to a specific incident.⁵⁷ Problem oriented policing also places considerable value on preventative responses that do not depend on the criminal justice system and engage other public agencies, the community and the private sector. It also carries a commitment to implementing the new strategy, rigorously evaluating its effectiveness, and building a body of knowledge that supports further professionalisation. According to a recent review of street-level drug law enforcement, problem-oriented policing is more effective than community-wide policing or targeted enforcement activities in 'hot spots,' all of which were found to be a marked improvement on 'standard' law enforcement tactics (such as preventive patrols) that are geographically unfocused.⁵⁸

The UK Drug Policy Commission advocated a similar 'problem-solving' approach when it called for drug-related law enforcement to be refocused on addressing harms. Such an approach 'requires a more explicit consideration and broader understanding of drug harms at all stages of the enforcement process.'⁵⁹ This entails:

1. **Defining the problem:** both in terms of the harms caused and the features of drug markets that produce these harms.
2. **Prioritising areas for action:** consult with community members to understand their concerns and perceptions of how drug markets affect their lives.
3. **Considering possible responses and their likely impact:** to ensure that even when displacement and the potentially harmful side effects of enforcement are taken into account, there is likely to be a clear 'net reduction' in harm to communities.
4. **Identifying measures of success and impact:** these should go beyond numbers of arrests and seizures, price or levels of purity, to demonstrate real gains in reducing drug problems.
5. **Implementing an operation:** taking steps to mitigate any likely increase in harms caused by enforcement interventions, while maximising the potential for reductions in harm.
6. **Evaluating to understand the impact of operations on 'real world' harms:** considerably more effort and resources are required to demonstrate a sustainable improvement for the relevant communities.

Policing can combat drug-related harms in various ways other than trying to limit the extent of drug use. It can do so by reducing the harm users experience per unit of consumption, by reducing the harms users impose on others, and/or by reducing the harms caused by production, trafficking and distribution of drugs.⁶⁰ Most existing studies focus on unit-harm to users and identify enforcement activities that should be avoided to reduce such harm. To this end, it has been recommended that police should not interact with

injecting drug users during the injecting process; should not arrest or interfere with people for possessing syringes or confiscate injecting equipment; and should keep their distance from needle exchanges, treatment centres and supervised injecting facilities.⁶¹ Caulkins and Reuter identify various ways in which police may play a more active or 'positive' role in promoting harm reduction, noting that they are already engaged in some such practices. This more active role might involve referring drug users to treatment and/or social services; being trained in overdose resuscitation and the use of related medications; warning users when there are tainted or particularly dangerous drugs on the market; participating in early warning systems designed to detect emerging drug trends; cracking down on particularly violent dealers; and helping to enforce health, safety, and building codes to protect drug users (for example, by ensuring dance venues provide free water to reduce the risks associated with club drugs).⁶²

The positive contribution police can make to reducing harm to users is evident from jurisdictions with very different approaches to drug control. In Portugal, for example, the emphasis on enforcement has been displaced by a general shift toward public health interventions. Drug possession was decriminalised in 2001 and police now refer users to a 'dissuasion commission,' made up of medical experts, social workers and legal professionals. While non-dependent first-time offenders rarely face any further action, the commission can draw on various sanctions to encourage dependent users into treatment.⁶³ The introduction of this new arrangement was supported by a raft of harm reduction measures, including significant expansion of drug treatment and methadone maintenance, and has been followed by reductions in problematic drug use, HIV infection and drug-related deaths.⁶⁴ The role of enforcement is also being reconsidered in the US even though drug possession remains firmly criminalised. Several cities have adopted Law Enforcement Assisted Diversion (LEAD) for low-level drug and prostitution offences. This innovative programme provides officers with specialised harm reduction training and enables them to refer drug users directly to housing support, treatment and other services without sending them to court.⁶⁵ If an offender agrees to participate in the programme and completes the intake process, criminal charges from the arrest are not filed.⁶⁶ Early indications suggest that LEAD not only reduces the number of people processed by the criminal justice system, but also reduces recidivism and improves health and well-being among participants.

The most distinctive contribution policing can make to harm reduction is by addressing market related harms.⁶⁷ While the adaptability of drug markets frustrates efforts to eradicate supply, it is this very flexibility that enables police to mould distribution practices in ways that reduce harm even if the size of the market remains unaltered: an open market may be changed into a closed one, for example or be pushed into a non-residential area. According to Caulkins and Reuter: 'For enforcement to suppress a particularly noxious part of the market, it is not necessary to make that submarket or that selling practice uneconomical; it is only necessary to make it uncompetitive relative to other, less noxious forms of selling.'⁶⁸ They go onto identify three broad policing strategies for achieving this kind of market regulation:

Focused deterrence or 'pulling levers' is a problem-oriented strategy that targets specific criminal behaviours carried out by a small number of chronic offenders who are vulnerable to sanctions and punishment. Offenders are directly confronted with carefully collected evidence of their involvement and are informed that continued offending will result in all potential sanctions,

or levers, being applied. This message is reinforced through crackdowns on those who continue to offend. Desistance among targeted offenders is rewarded through positive incentives, including access to social services as well as education and job opportunities. Focused deterrence was pioneered by The Boston Gun Project, which led to a sharp reduction in youth homicide, and has been widely replicated in the form of Operation Ceasefire. It has also been successfully used to combat open drug markets. A recent meta-analysis concluded that focussed deterrence is a very promising approach that has medium-sized crime reduction effects.⁶⁹

Place-based enforcement uses police resources to move drug markets into areas where they are less harmful. This may mean pushing dealing activity away from schools, treatment centres, play-grounds and residential neighbourhoods into abandoned industrial areas. Where the aim is to displace rather than eradicate the market, police can use methods that are less expensive than arrest and prosecution. Caulkins and Reuter cite the example of a particularly problematic crack house in Charleston, South Carolina, that was shut down simply by parking a marked police car in front of the house for a few days: 'Customers were unwilling to walk past the car to buy drugs, so the crack house was soon abandoned. The sellers presumably shifted operations elsewhere, but the pressing problem was addressed quickly and with minimal resources.'⁷⁰

Targeting behaviours that are particularly harmful, including the use of violence, employment of juveniles or selling near schools and treatment centres is a 'natural extension' of problem-oriented policing, which recognises 'there are many important drug-related problems above and beyond drug use per se'.⁷¹ Concentrating enforcement activities on dealers who engage in such damaging behaviours may put them at a competitive disadvantage compared with those who engage in less harmful practices.

Problem oriented strategies may also mitigate the reputational damage associated with enforcement-led approaches. By promoting preventative responses that do not depend on the criminal justice system, such strategies are less reliant on the kind of speculative, coercive tactics that are so damaging to public trust and confidence. The emphasis on working with partners, responding to community concerns, and reducing the collateral damage associated with drug markets would also be expected to enhance police legitimacy. This kind of approach is particularly important for communities that are at the sharp end of enforcement-led activities. The US based LEAD programme emerged out of litigation over racial disparities in drug arrests and is attracting considerable interest from political leaders and law-enforcement officials as a means of improving police/community relations in the post-Ferguson era.⁷² Where coercion is deployed, trust and confidence may be protected by ensuring officers proceed in ways that are - and are seen to be - procedurally and distributively fair.⁷³

CONCLUSION AND BRIEF COMMENTS ON THE 'METRICS DEBATE'

Prohibition sets the police an impossible task, the morality of which is weakened when enforcement itself becomes a source of harm.⁷⁴ Reorienting police activity toward the goal of harm reduction offers a viable alternative that is not only more efficient, but is also more ethical. There are, no doubt, significant barriers to such a move, not least within police agencies,⁷⁵ but there are good reasons to think that these barriers can be overcome. Harm reduction fits comfortably with key developments in modern policing, including the rise of intelligence-led approaches and problem-oriented strategies, as well as the emphasis on community engagement and partnership-working.⁷⁶ In other words, harm reduction does not represent an alternative to current police practices so much as a reorientation of focus. A recent survey of police enforcement personnel carried out by the UK Drug Policy Commission found widespread support for the basic premise of harm reduction: 90 % of respondents thought it is very unlikely that the UK drug market will be eradicated in the foreseeable future; 68 % that the success of enforcement activity should be judged by its impact on drug harms; and 64 % that it is possible to reduce the harms caused by drug-markets without a reduction in use or sales.⁷⁷

Policing should not undermine other aspects of drug policy, but should form part of a coherent strategy. The prevalence of drug use does not provide a good target for drug policy as a whole because it is largely unresponsive to prevention and law enforcement efforts, while treatment and harm reduction programmes yield other benefits, including lower crime, less transmission of blood-borne pathogens and fewer drug-related deaths. These metrics would make for good police performance indicators, alongside drug-related violence. The key point here is the same for policing as it is for treatment, prevention or any other aspect of drug policy:

'The proposition that policy can do little to influence prevalence of use may seem nihilistic. Far from it. We know that bad policy choices can make drug use, drug distribution, and production more harmful. All that policy changes can in fact do is to reduce the harmfulness of these activities.... [and] this proposition has enormously liberating effects for policy. At present, many laws and interventions are justified because they might reduce drug use, even though we know with greater confidence that they cause harms. If prevalence of use is no longer seen as a plausible policy goal, then the harms can be avoided.'⁷⁸

This is precisely what 30 years on the job had taught Bunny Colvin. ■

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Uncle Sam's Cocaine Nosedive: A Brief Exploration of a Dozen Hypotheses

Beau Kilmer

SUMMARY

- Heavy consumption of cocaine has created a tremendous amount of morbidity and mortality, with the US having spent billions of dollars domestically and internationally trying to reduce its availability.
- In the late-2000s, there was an unprecedented decline in the US cocaine market: RAND estimated that the total consumption of pure cocaine decreased by roughly 50% from 2006 to 2010. Concurrently, the purity-adjusted price increased by more than 40% at the retail level.
- Despite the size and the swiftness of the consumption decrease, there is no consensus about which policies or factors are responsible for the drop.
- This essay briefly explores twelve hypotheses for the decline which are neither exhaustive nor mutually exclusive. It pays special attention to the period immediately preceding the consumption decrease, noting that there was a 40% decline in the purity-adjusted retail price from 2000 to 2006. Whether this price decrease was simply part of a larger trend, attributable to policy decisions, a random fluctuation or something else, has yet to be determined.
- If further research suggests that much of the consumption drop in the US is attributable to supply-side policies, this does not mean that supply reduction is the optimal approach for reducing problem consumption; much depends on the particular drug, stage of the epidemic, characteristics of the country and the perspective of the decision maker. It would, however, challenge the conventional wisdom that supply-side interventions can do little to influence mature consumption markets.

Cocaine consumption and trafficking have generated a significant amount of dependence, morbidity, and mortality in the US.¹ Of course, calculations of the harms imposed by cocaine must also consider the consequences of government efforts to control cocaine. While prohibition raises the money price of cocaine, increases search costs and minimises marketing (which helps suppress consumption), it is also responsible for increasing violence, incarceration and corruption, which has affected cities throughout the US as well as production and trafficking countries south of the border.

However, beginning in 2006, there was an unprecedented decline in cocaine consumption in the US. From 2006 to 2010, RAND estimated that the total amount of pure cocaine consumed in the US may have decreased by 50%,² leading Caulkins et al.³ to argue that 'the downturn competes with the 2001 Australian heroin drought as the greatest 'success' in modern recorded drug history at the population level. Declines associated with the Australian heroin drought were proportionately larger—closer to 80%—but the US cocaine market is vastly larger in absolute size.'

Despite the size and the swiftness of the decrease, there is no consensus about what caused the drop. Indeed, the stunning decline has garnered surprisingly little analysis in the research literature.⁴ Understanding what caused the drop carries with it important policy implications considering the US has spent billions of dollars domestically and internationally trying to reduce the availability of cocaine. Much of the academic literature suggests that supply reduction efforts—at best—can shift trafficking patterns or have a short-lived impact on the retail market.⁵ Especially

with cocaine, few observers believe that increasing the intensity of supply-reduction efforts can have a substantive effect on demand. If supply-reduction efforts are responsible for the decrease in the consumption of cocaine in the US, it would challenge the conventional wisdom that supply-side interventions can do little to influence mature consumption markets.

The goal of this essay is to draw attention to the large decline in US cocaine consumption and stimulate discussions and further research in this area. After providing evidence of the decrease, it briefly explores twelve potential hypotheses that fall into three general categories: supply-reduction policies, other explanations for a reduction in supply, and a shift in demand for cocaine in the US. It then pays attention to the period immediately preceding the consumption decrease, noting that there was a significant drop in cocaine prices between 2000 and 2006 informing the twelfth hypothesis: mean reversion in retail cocaine prices.⁶ These hypotheses are neither exhaustive nor mutually exclusive, and some seem more plausible than others.

EVIDENCE FOR AMERICA'S COCAINE NOSEDIVE

For any addictive substance, a minority of heavy users account for most of the consumption.⁷ Since household surveys do a poor job of capturing heavy users of cocaine, heroin, and methamphetamine in the US (see, e.g., Rhodes et al),⁸ information from other sources must be combined to generate estimates of the users and how much they consume and spend. I worked on a RAND team tasked with generating the 2000–2010 estimates for White House Office of National Drug Control Policy (ONDCP). Our approach differed in important ways from previous efforts and there was a special focus on displaying the uncertainty surrounding these estimates.

Figure 1 presents our annual estimates for each of the last 10 years of the number of individuals who used powder or crack cocaine on four or more days in the past month. The ratio of the higher to lower estimates is roughly 2.3:1 and the uncertainty could be larger.⁹ Focusing on the middle estimates, there was about a 10% increase from 2002 to 2006 followed by a 22% decline between 2006 and 2010. The number of those who used cocaine on 21 or more days in the previous month decreased by 27% from 2006 to 2010 while the comparable figure for those who used on 4 to 10 days decreased by 19%.

Since heavy cocaine users tend to use more per use day than less frequent users (see e.g., Frijns and van Laar),¹¹ we would expect the change in pure cocaine consumed from 2006 to 2010 to exceed the change in the number of users consuming on four or more days in the past month. Multiplying the number of users by average annual spending (by type of user) generates total expenditures and dividing this by the average price paid per pure gram purchased generates the total amount of pure cocaine consumed in the US. The middle estimate for pure metric tonnes of cocaine consumed hovered around 325 between 2004 and 2006 and then plummeted by roughly 50% (Figure 2).

While Figure 2 suggests there is a large amount of uncertainty surrounding these consumption figures, the size of the decline is consistent with a number of supply-side figures (which

are used as inputs for neither the user nor the consumption estimates). These measures are discussed in more detail in Kilmer et al.,¹³ but highlights include:

■ Colombian cocaine production.

The US gets most of its cocaine from Colombia¹⁴ and the US State Department¹⁵ estimated that pure cocaine production in Colombia decreased from 510 tonnes in 2006 to 260 tonnes in 2010.

■ Cocaine border seizures.

Total cocaine seizures fell from about 160 tonnes in 2006 to about 80 tonnes in 2010.¹⁶

■ Interagency Assessment of Cocaine Movement (IACM).

Estimates of cocaine leaving South America for the US were reported to have increased from 2006 to 2007, but were then followed by nearly a 50% drop from 2007 to 2010.¹⁷

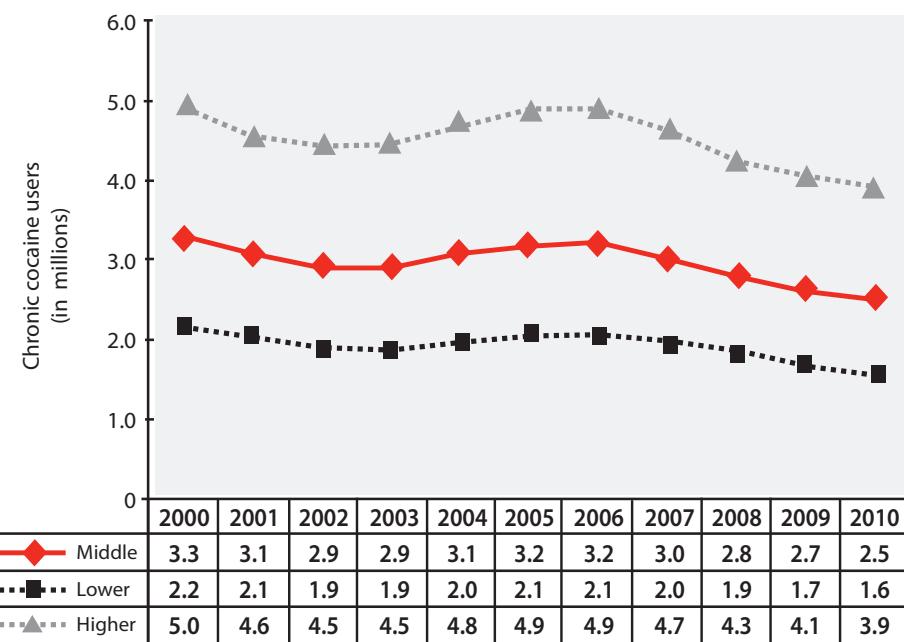


Figure 1. Estimated number of those who used cocaine four or more times in the past month, 2000–2010 (in millions)¹⁰

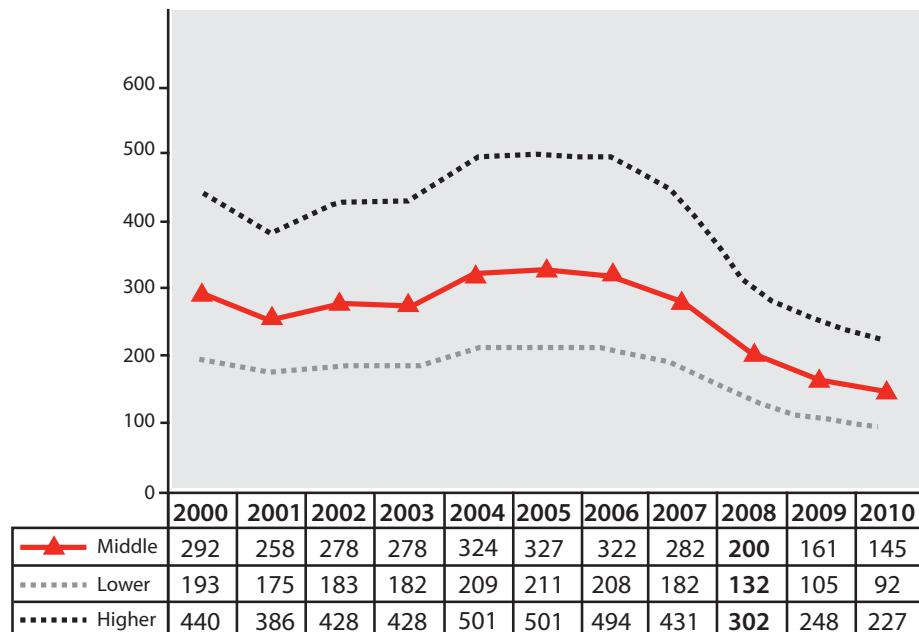


Figure 2. Pure cocaine consumption in the US (metric tonnes)¹²

While each of the aforementioned estimates has its idiosyncratic limits and is surrounded with uncertainty, the fact that each of them suggests the amount of pure cocaine available to be consumed in the US could have decreased by 50% during the last half of the 2000s is noteworthy... explanations are neither mutually exclusive nor exhaustive and fall into three general categories: supply-reduction policies, other explanations for a reduction in supply, and a shift in demand for cocaine in the US.

Obviously, no one knows precisely how much pure cocaine is consumed in the US or anywhere else. Thus, researchers and decision makers are forced to triangulate from multiple data points. While each of the aforementioned estimates has its idiosyncratic limits and is surrounded with uncertainty, the fact that each of them suggests the amount of pure cocaine available to be consumed in the US could have decreased by 50% during the last half of the 2000s is noteworthy.

SUPPLY-REDUCTION POLICIES

Hypothesis #1. Coca eradication in Colombia. The UNODC attributes much of the reduction in Colombian coca available over this period to intense spraying and a large increase in manual eradication efforts.¹⁹ Figure 3 displays estimates of hectares eradicated as well as potential production. The aerial eradication figures did increase, but the available evidence suggests this approach tends to have a small effect,²⁰ if any.²¹

Figure 3 also indicates that hectares of coca bush eradicated manually in Colombia increased from 6,000 in 2004, and more than 30,000 in 2005, to a peak of 96,000 hectares in 2008. Because it typically takes 18–24 months before coca cultivated in Colombia ends up on US streets²³ the changes in manual eradication correlates with the large drop in consumption observed after 2007. Since a hectare of coca can produce roughly 3 to 8 pure kilogrammes of cocaine hydrochloride (there is a lot of debate about this yield figure, see e.g., Washington Office on Latin America),²⁴ manual eradication of 90,000 hectares could be part of the story; however, it would require some strong assumptions about how growers responded to these losses. Further complicating these

HYPOTHESES FOR THE US COCAINE DROP

This section highlights a number of potential explanations for the reduction in cocaine consumed in the US and/or reduction in Colombian cocaine available for consumption (building on Caulkins et al. and Kilmer et al.).¹⁸ These explanations are neither mutually exclusive nor exhaustive and fall into three general categories: supply-reduction policies, other explanations for a reduction in supply, and a shift in demand for cocaine in the US.

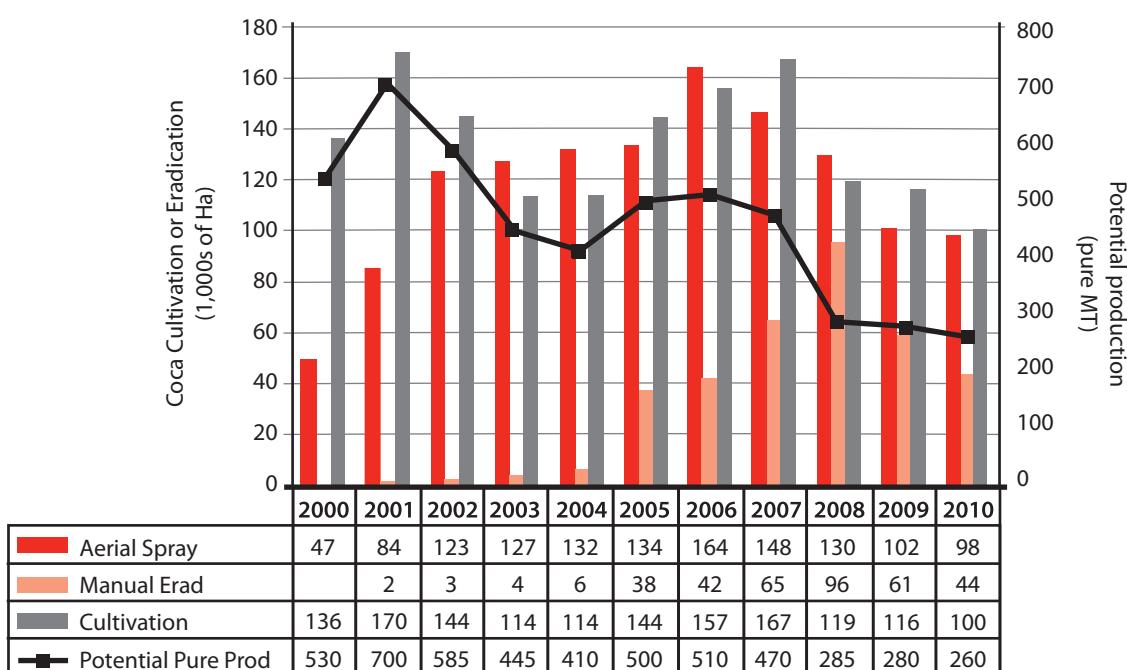


Figure 3. Coca cultivation, eradication, and potential pure production in Colombia²²

calculations, the UN also notes that: 'Since 2005, probably due to increased counter-narcotics pressure, the per-hectare yields of coca fields went down in many growing regions of Colombia.'²⁵

Hypothesis #2. Reduction in the availability of precursor chemicals used to produce cocaine hydrochloride. A paper by Cunningham et al.²⁶ suggests another explanation. Their analysis of seizure data from the DEA's System to Retrieve Information from Drug Evidence (STRIDE) suggests cocaine availability dropped in response to US regulations on two chemicals produced in the US: potassium permanganate in October 1989 and sodium permanganate, its direct substitute, in December 2006.²⁷ Potassium permanganate and sodium permanganate are interchangeable liquid oxidants used to remove impurities from coca base in cocaine manufacture. The authors report that the first regulation led to a temporary drop in seizure volume, but the authors find that after the latter, 'cocaine seizure amount dropped 22%, price rose 100%, and purity dropped 35% through at least early-2011.'

In a published comment on the paper, Caulkins²⁸ argued that 'Cunningham et al.'s analysis of the apparent effectiveness of cocaine essential chemical controls is either

the most important drug policy paper of this century or it is wrong. There is little middle ground.' He then recommended that; 1), the analysis should be replicated by other authors using the same data and 2), researchers should conduct similar analyses of other countries' chemical control interventions, noting that 'if chemical controls work, then controls implemented by any country that supplies chemicals to the coca laboratories should affect purity, prices and seizures in every country supplied by those laboratories.'

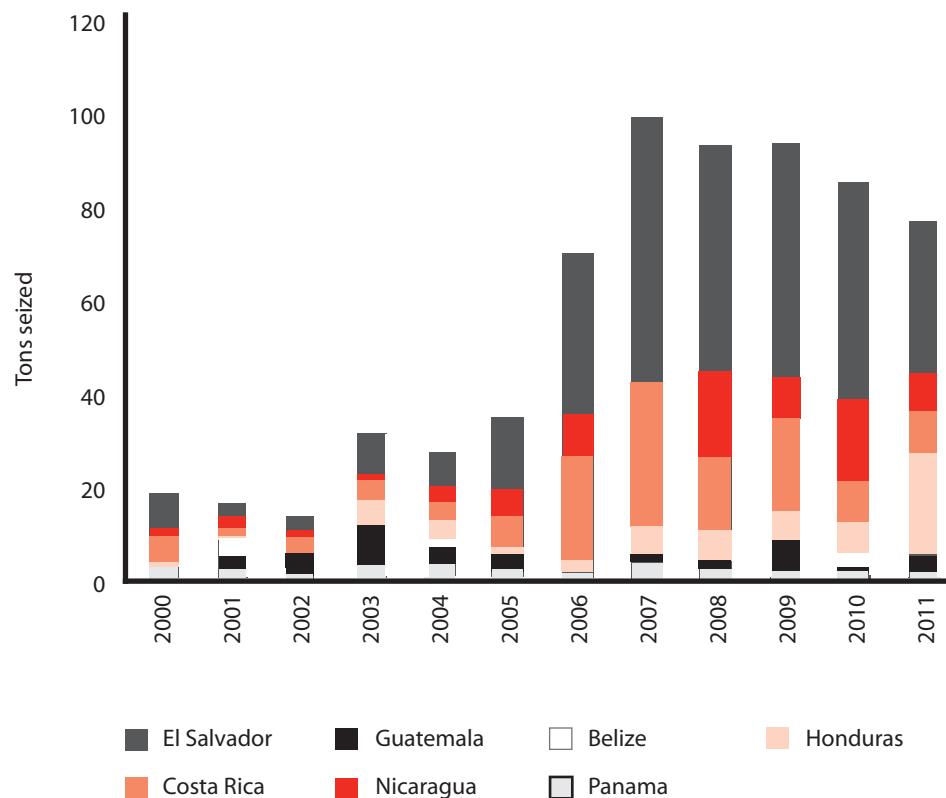
Hypothesis #3. Interdiction efforts in Colombia and Central America. Another plausible explanation offered by Mejia²⁹ is the increased focus on interdiction efforts in Colombia after 2007, noting that 'cocaine seizures increased from 127 metric tonnes in 2006 to 203 in 2009 (an increase of 60%) and the number of destroyed laboratories increased from 2,300 to 2,900 (an increase of 26%)'. Mejia argues that this shift reduced the net supply of Colombian cocaine by more than 50%.³⁰

But the increase in cocaine seizures in this period was not limited to Colombia: UNODC³¹ reports that beginning in 2006, there was a large increase in cocaine seizures Central America (Figure 4). Not all of the cocaine seized in Central America is targeted

for the US (e.g., UNODC notes that Costa Rica has been a significant source of cocaine for Europe, but this may have declined in recent years) and it is important to take these data with heaps of salt. First, there may be double-counting as multiple countries may take credit for the same seizure.³² Second, these seizures are not potency-adjusted, so it is unclear how much pure cocaine is actually removed from the market. Third, seizures do not tell us what is exported, only what is detected. Still, the increase from about 35 tonnes seized in Central America in 2005 to more than 100 tonnes in 2007 is noteworthy, raising the possibility that some of the reduction in US consumption may not be entirely attributable to actions in Colombia.³³

Hypothesis #4. Fragmentation of criminal organisations in Colombia. Garzón and Bailey³⁵ argue that the Colombian cocaine chain experienced a 'double shock' from 2006 to 2008. In addition to the increased focus on interdiction described in the previous hypothesis, the authors reference work from Rico³⁶ noting that the cartels 'were weakened by government offensives and by internal disputes. The demobilisation of paramilitary groups, with more than 30,000 members, had an important influence on the illegal drug chain. Criminal organisations

Figure 4. Distribution of cocaine seizures in Central America, 2000-2011³⁴



entered a phase of adaptation characterised by the fragmentation of the large structures and the emergence of multiple groups.' The implication is that this changed drug-trafficking structures in Colombia, leading to less coca production and fewer exports.

As Kilmer et al. argue, there may have been a 'perfect storm' with the rapid increase in manual eradication, increase in interdiction, reduced availability of sodium permanganate, instability in Mexico, increase in non-US demand, etc. Together, these events may have had more of an impact on cocaine consumption in the US than the sum of their effects had they occurred at different times, but this is very much an open question.

They cautiously conclude, 'Overall, we consider that stepped-up bilateral cooperation must be taken into account as a force of change, without overestimating the role that the Merida Initiative may have played in this dynamic.'³⁹

This hypothesis also raises questions about what happened to the markets for other drugs that are exported from Mexico to the US. I discuss this next.

OTHER EXPLANATIONS FOR A REDUCTION IN COCAINE AVAILABLE IN THE US.

Hypothesis #6. Increased violence in Mexico made it harder to get cocaine to the US. Given the eruption of violence in Mexico following President Calderon's crackdown on drug trafficking organisations in late-2006,⁴⁰ this might have made it harder for the DTOs to move cocaine through Mexico and into the US. But if this was the case we would also expect other drugs that are produced in Mexico, such as marijuana and heroin, to be more expensive in the US.

In the 2000s it was estimated that 40% to 67% of the marijuana consumed in the US came from Mexico.⁴¹ National retail prices were flat over this period while the THC of commercial-grade marijuana from Mexico was increasing;⁴² suggesting that the potency-adjusted price for marijuana likely decreased. As for heroin, the purity-adjusted retail heroin prices in the US fell from \$330 a gram in 2000 to \$209 in 2005, increased to \$304 in 2006 and \$327 by 2008, and then seemed to fall below \$200 by 2011 (all in 2012 \$). The large jump in heroin prices appeared to happen before Calderon's crackdown, but a rigorous evaluation of this hypothesis (and Hypothesis #5) should look beyond national annual prices. More could

In addition to these efforts, Garzón and Baily suggest that the Merida Initiative — which infused more than \$2 billion into Mexican efforts to disrupt organised crime and support legal reforms since late 2007 — led to improved cross-border collaboration and intelligence sharing that may have had an impact; however, they are quick to note the difficulty of assessing the impact of this cooperation on efforts to reduce drug trafficking.

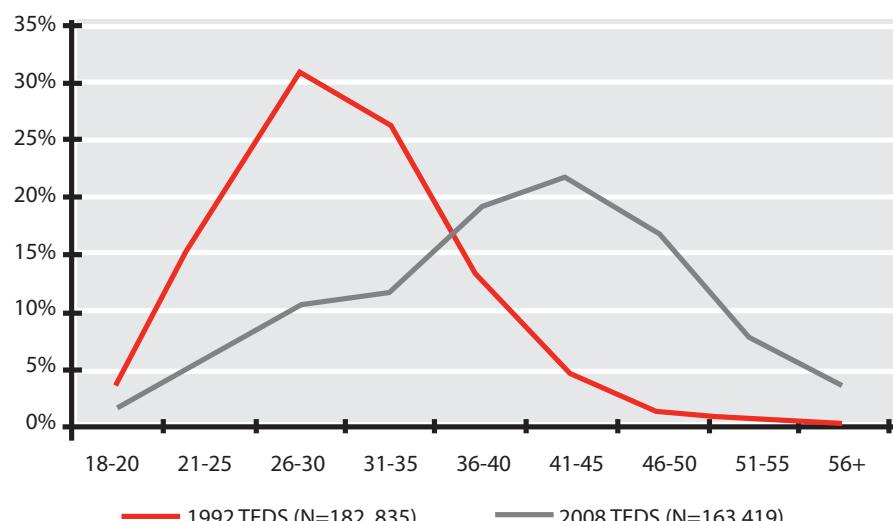


Figure 5. Age Distribution of Adult Crack Cocaine Treatment Admissions, 1992 and 2008⁵⁴

be learned by focusing on both retail and wholesale prices in different regions of the US, and, if possible, on a quarterly or biannual basis.⁴³

Hypothesis #7. Shift away from coca production in Colombia. Another explanation for the drop in Colombia coca production is that there was a shift from coca crops to illegal gold mining. Rico and Reuter⁴⁴ note that 'The rapid rise in the international prices of gold combined with the reduction of the average profit in cocaine smuggling for the Colombian [drug trafficking organization] DTOs as a consequence of the market power of Mexican DTOs (Rico 2013) created powerful economic incentives for a deep and ongoing transformation of the landscape in Colombian rural areas.' In addition, one of the authors interviewed former coca farmers, who suggested that gold mining provided a larger net income, lower risk of enforcement interventions, greater certainty in payment, and less stigma. Rico and Reuter further note that some Colombian DTOs actually prohibited some farmers from cultivating coca in gold mining areas, so as to reduce the prospect of government intervention.⁴⁵

The question here is how much of this shift to mining is what caused the reduction in pure cocaine available in the US versus being a consequence.⁴⁶

Hypothesis #8A. Increased demand for Colombian cocaine outside of the US. Another explanation for the reduction in cocaine consumption is that some of the cocaine produced in Colombia was

shipped to other countries instead of the US. Amphetamines are and have always been the stimulant of choice in Europe, but in the 2000s cocaine became more popular. Information about cocaine consumption is not tracked on an annual basis, but UNODC estimated that between 1998 and 2008 the amount of pure cocaine exported in Europe increased from 63 tonnes to 124 tonnes.⁴⁷ After assessing cocaine-related deaths in nine European countries, Corkery⁴⁸ concluded 'There is a mixed picture ... During the 2000s, there was generally an increasing upward trend in such cases, followed by a decline in most countries. Peaks occurred in different years.' This is consistent with a review of annual reports submitted to the EMCDDA from 2007 to 2010 by Mena et al.⁴⁹

Cocaine from multiple countries is exported to Europe, and UNODC estimates that from 2008 to 2010 25% of the cocaine seized in Europe came from Colombia. Of course, we cannot assume that means 25% of the cocaine used in Europe came from Colombia; we also do not know how this has changed over time. Beyond Europe, there was also a reported increase in cocaine consumption in Brazil and Argentina in the 2000s.⁵⁰

Hypothesis #8B. Decline in demand for cocaine in the US

A reduction in supply that increases the price of cocaine will subsequently reduce consumption (see, e.g., Gallet).⁵¹ But there are other reasons why the demand for cocaine may have decreased in the US that may be independent of or intertwined with the price change.

Hypothesis #9. Heavy cocaine users were aging out of the market. Researchers have noted that the average age of cocaine treatment seekers increased throughout the 1990s and 2000s (see Figure 5),⁵² which is consistent with a story that some heavy cocaine users were aging out of use.⁵³ While this could be a partial explanation for the reduction in consumption, it is difficult to tell a story about why there was such a sharp decline for this group after 2006.

Hypothesis #10. Substitution away from cocaine to other substances. Others have hypothesized that some cocaine users may have shifted to other drugs such as cannabis during this period.⁵⁴ While it is plausible that some heavy cocaine users may have replaced cocaine for other substances over this period, I am not aware of any studies which have documented this.

Hypothesis #11. A reduction in disposable income due to the 'great recession.' Another hypothesis is that the 'great recession' accelerated the reduction in consumption since users had less money available for cocaine. However, there is a bit of timing issue here. Consumption started to decrease around 2006, but the great recession did not start until December 2007, and many did not feel its effects until later.⁵⁵ Yes, some were feeling the pinch before the official start, but this could not have been the only driver, especially given the price increase beginning in 2006 (Figure 6). However, one cannot rule out that the reduction in income may have intensified the price effect for some users.

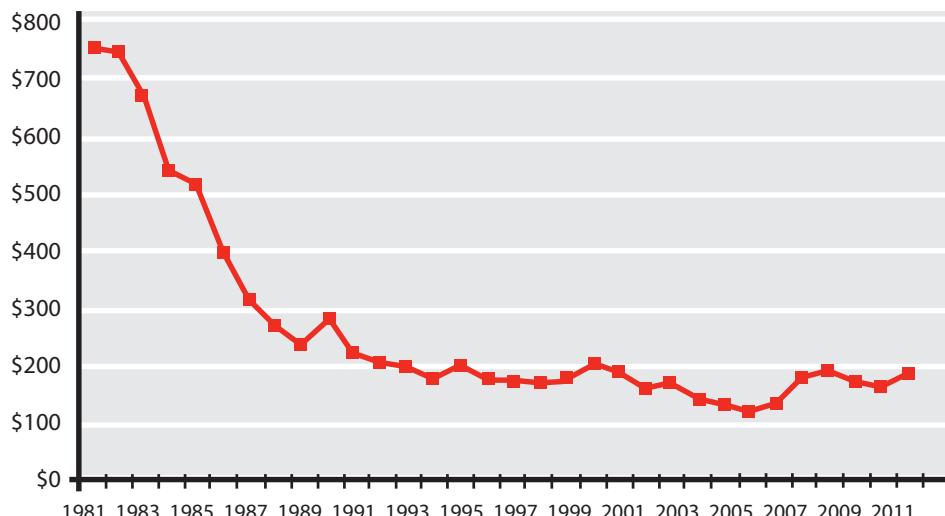


Figure 6. Retail powder cocaine prices in the US (per gram), 1981-2012 (adjusted to 2012 \$)⁵⁷

WHAT HAPPENED IN THE US BEFORE 2006?

The long-standing price decline in the purity-adjusted price of cocaine in the US before 2006 has been well documented, and used by some to raise questions about the ability of supply-side interventions to raise prices (e.g., Pollack and Reuter).⁵⁸ Since the ONDCP price series begins in 1981 and there was a very large drop in retail powder prices in the 1980s, charts such as those in Figure 5 (often with a measure of a supply side intervention such as incarceration on the other Y-axis) make it hard to see what has happened since that drop. Separate prices for crack-cocaine (which accounted for about 75% of cocaine consumption in the 2000s)⁵⁹ were not included in the ONDCP price series until 1986. Figure 6 plots the retail prices for both powder and crack cocaine from 1986 to 2012. After the large drop in the 1980s, Figure 7 suggests the inflation-adjusted prices stabilised, fluctuating around \$200 per gram for most of the 1990s (in 2012 \$). After 2000, purity-adjusted prices steadily declined, bottoming out in 2006 at about 40% of the 2000 value.

We can also get some insight into the pre-2006 period by examining other indicators. Figures 8 and 9 display publicly-funded treatment admissions involving cocaine and cocaine-involved overdose deaths, respectively. In both of these series there seems to be a steady increase from 2001 through 2006, followed by a large decline. While the number of total treatment admissions to facilities receiving public funding over this period increased by 11%, the share of admissions mentioning cocaine increased 17% from 535,000 to 624,000.

Figure 7. Retail powder and crack cocaine prices in the US (per gram), 1986-2012 (adjusted to 2012 \$)⁶⁰

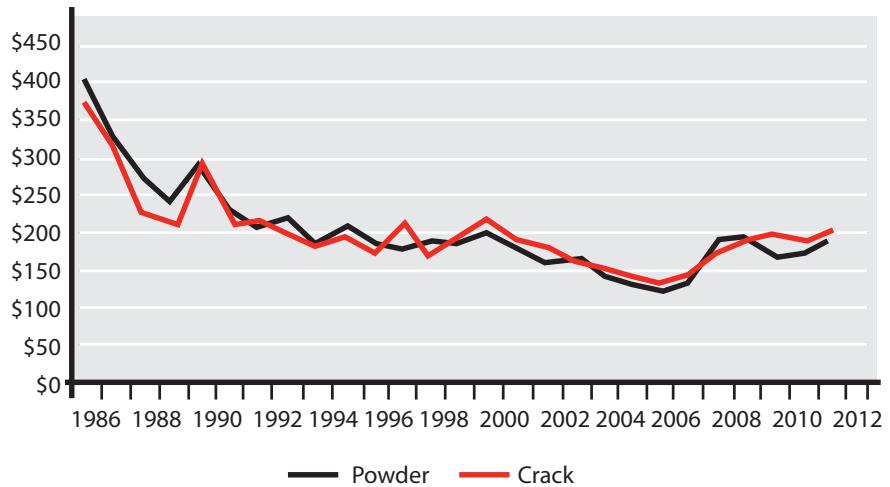
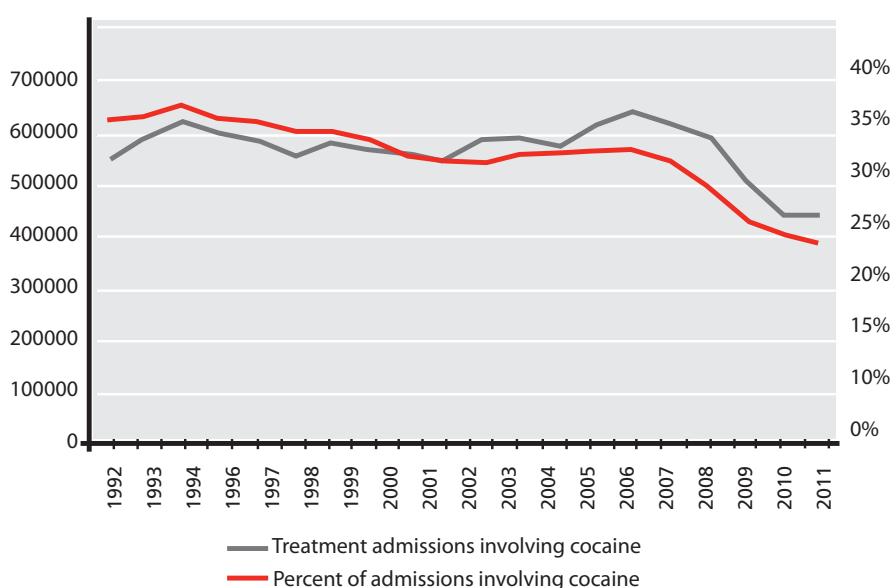


Figure 8. Treatment admissions mentioning cocaine in TEDS, 1991-2011⁶¹



Insights from Figures 7 through 9 could be used to tell this story about the 2000 to 2006 period; as the price of cocaine plummeted, more people experienced problems with cocaine; some died, others were more likely to seek treatment.⁶³ Of course, one cannot prove this based on a simple trend analysis, but it is consistent with the sharp reversals in treatment admissions and overdose deaths over the 2006–2010 period when retail prices increased by 40%.

This reversal suggests another potential explanation for some of the post-2006 price increase (and subsequent decline in consumption): ‘mean reversion’.

Hypothesis #12. Mean reversion in cocaine prices

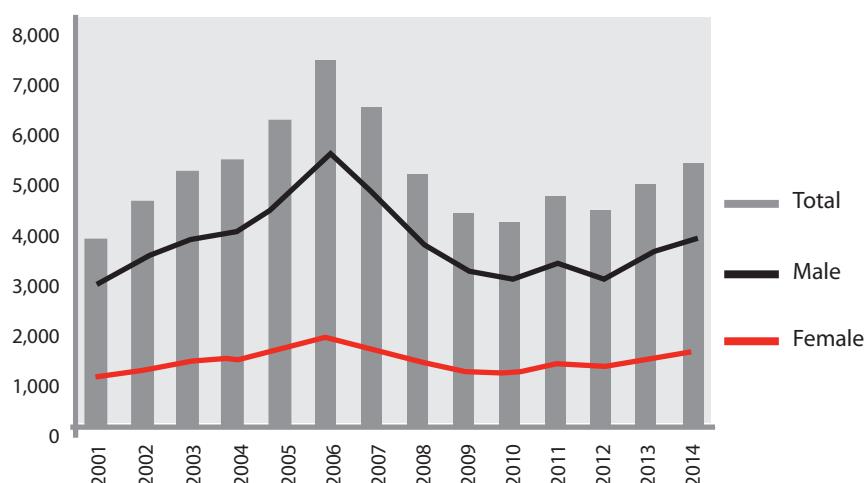
Mean reversion is a statistical concept often used in the finance literature to suggest that prices and stock returns eventually move back to their historic mean.⁶⁴ Like its statistical cousin ‘regression to the mean,’ it can cause problems for policy analysts, especially when the policy change being evaluated was implemented

when the outcome of the interest was particularly high or low. Going back to Figure 7, there was a lot of fluctuation in the purity-adjusted crack prices in the 1990s (around \$200 per gram), with a three-year increase from 1998 to 2000 before the big decrease; however, the price in 1998 was very close to the price in 2003 (circa \$165 per gram). There was a further \$30 decline from 2003 to 2006, followed by the historic increase that bought the prices back closer to \$200 per gram benchmark.

Whether this price decrease was simply part of a larger trend, attributable to policy decisions, a random fluctuation or something else has yet to be determined; however, Figure 2 suggests that there was a large *decrease* in potential pure production in Colombia from 700 tonnes in 2001 to 410 tonnes in 2004. Thus, it will be hard to tell a story about an increase in cocaine supply to the US leading to the 2000 to 2006 price drop unless it involves storage and/or cocaine produced from coca grown outside of Colombia.

Even if further research suggests much of the consumption drop is attributable to supply-side policies, this does not mean that this is the optimal approach for reducing problem consumption. Much depends on the particular drug, the characteristics of the country, and the stage of the epidemic.

Figure 9. National Overdose Deaths from Cocaine in the US, 2001–2014⁶²



Source: National Center for Health Statistics, CDC wonder

CONCLUSION

At this point it is not possible to say how much of the decline in US cocaine consumption can be attributable to policy decisions. Caulkins et al.⁶⁵ suspect that some combination of supply-side factors likely accounted for the large price increase and subsequent consumption decline, but do not make any statements about the role of eradication versus other supply-side phenomena. Garzón and Bailey⁶⁶ conclude that ‘supply reduction through disruption and interdiction can reduce and redirect cocaine trafficking but at the cost of negative outcomes and collateral damage, at least in the short term.’

As Kilmer et al.⁶⁷ argue, there may have been a ‘perfect storm’ with the rapid increase in manual eradication, increase in interdiction, reduced availability of sodium permanganate, instability in Mexico, increase in non-US demand, etc. Together, these events may have had more of an impact on cocaine consumption in the US than the sum of their effects had they occurred at different times, but this is very much an open question.

This essay also pays attention to the period immediately preceding the consumption drop and raises the possibility of another potential explanation: mean reversion. While much of the emerging discussion about cocaine consumption focuses on the post-2006 period, this insight suggests that future research should also attempt to explain why the retail purity-adjusted price of both powder and crack cocaine decreased nearly 40% from 2000 to 2006. Since the pre-2006 price collapse may also be attributable to policy choices, this suggests that existing hypotheses may need to be updated.

Even if further research suggests much of the consumption drop is attributable to supply-side policies, this does not mean that this is the optimal approach for reducing problem consumption. Much depends on the particular drug, the characteristics of the country, and the stage of the epidemic. For example, Tragler et al.⁶⁸ argue that the optimal mix of supply- and demand-side reduction policies can shift depending on the stage of the drug epidemic, with demand reduction generally becoming more attractive as the markets mature.

In addition, assessments will also depend on one’s perspective: what may be optimal from a US perspective may not be optimal in other countries. For example, after noting that supply-reduction can reduce and redirect cocaine trafficking in the short run, Garzón and Bailey⁶⁹ argue ‘that for Latin American countries the ‘benefits’ of maintaining an anti-drug strategy that emphasises interdiction are far outweighed by the costs in terms of instability, insecurity, and public health problems’.

Finally, it is important to remember there are a number of different policies with varying levels of efficacy that fall under the labels of ‘supply’ or ‘demand’ reduction. Policy discussions are more productive when debates focus on specific interventions, programmes or laws instead of these vague categories—especially since actions by criminal justice agencies do not exclusively fall into the ‘supply reduction’ category.⁷⁰

METRICS

The elimination of the Arrestee Drug Abuse Monitoring (ADAM) programme in the United States makes it more difficult to understand drug problems and drug markets in the Western Hemisphere. Drug consumption in the U.S. fuels drug production, drug trafficking, and drug problems throughout the Western Hemisphere. Thus, knowledge about consumption in the U.S. as well as data on drug expenditures and drug markets is critical for measuring changes in revenues to criminal organisations, and also in assessing the efficacy of various drug control efforts. Given the concentration of heavy drug users who are arrested and incarcerated in the U.S., the ADAM programme — which interviewed arrestees on drug use, drug purchases, and conducted drug tests (for validation purposes only) — was an invaluable source for informing these metrics. While the National Survey on Drug Use and Health is useful for understanding what is happening with alcohol and marijuana, it does a poor job of tracking heavy users of cocaine, heroin and methamphetamine.

Along with colleagues, the author of this paper used a plethora of data sources to generate the 2000-2010 national estimates of drug consumption, drug users, and drug expenditures for the White House Office of National Drug Control Policy (ONDCP), but ADAM was arguably the most important source for understanding what was happening with the markets for the more expensive drugs. Unfortunately, ADAM was eliminated in 2004, partially resuscitated in 2007, and eliminated again after 2013. Until the programme is re-funded, or a suitable alternative that collects information from heavy users (in non-treatment settings) in the U.S. is developed, our efforts to understand the dynamics of cocaine, heroin, and methamphetamine consumption and trafficking in the Western hemisphere will be hampered. ■

NOTES

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- 2 B. Kilmer, S. Everingham, J. Caulkins, G. Midgette, R. Pacula, P. Reuter, R. Burns, B. Han, and R. Lundberg, 'What America's Users Spend on Illegal Drugs, 2000–2010' (Washington, DC: Prepared for the Office of National Drug Control Policy, Washington, DC: Executive Office of the President, 2014).
- 3 J. P. Caulkins, B. Kilmer, P. H. Reuter, and G. Midgette, 'Cocaine's Fall and Marijuana's Rise: Questions and Insights Based on New Estimates of Consumption and Expenditures in US Drug Markets', *Addiction* 110 (2015): 728–36.
- 4 Notable exceptions include recent analyses by J. K. Cunningham, R. C. Callaghan, and L. M. Liu, 'US Federal Cocaine Essential ("Precursor") Chemical Regulation Impacts on US Cocaine Availability: An Intervention Time-Series Analysis with Temporal Replication', *Addiction* 110, no. 5 (2015): 805–20; D. Mejia, 'Plan Colombia: An Analysis of Effectiveness and Costs' (Washington, DC: Brookings Institution, 2015), <http://www.brookings.edu/~/media/Research/Files/Papers/2015/04/global-drug-policy/Mejia--Colombia-final-2.pdf?la=en>; J. C. Garzón and J. Bailey, 'Displacement Effects of Supply-Reduction Policies in Latin America: A Tipping Point in Cocaine Trafficking, 2006–2008', in *The Handbook of Drugs and Society*, ed. H. H. Brownstein (West Sussex: Wiley, 2016); D. Rico and P. H. Reuter, 'Taking the Balloon Effect Seriously: Assessing Plan Colombia', (Forthcoming).⁵ J. P. Caulkins and P. H. Reuter, 'How Drug Enforcement Affects Drug Prices', *Crime and Justice* 39, no. 1 (2010): 213–71.
- 6 Given the serious data lags and loss of an important data system, this essay does not attempt to provide insights to what has happened to US cocaine consumption since 2010. These gaps are further discussed in the section on metrics at the end of this paper.
- 7 See P. J. Cook, 'Paying the Tab: The Costs and Benefits of Alcohol Control' (Princeton, NJ: Princeton University Press, 2007); Kilmer et al., 'What America's Users Spend on Illegal Drugs, 2000–2010'.
- 8 W. Rhodes et al., 'What America's Users Spend on Illegal Drugs, 2000–2006' (Washington, DC: Executive Office of the President, 2012).
- 9 From Kilmer et al., 'What America's Users Spend on Illegal Drugs, 2000–2010': 'The error band in this figure reflects only one source of uncertainty: The 95-percent confidence interval surrounding the share of adult male arrest events involving a positive drug test for cocaine. There are many other sources of uncertainty, but those other sources of uncertainty do not stem from sampling variability and so do not lend themselves to quantification. Thus, readers should not consider these as lower or upper bounds or as a 95-percent confidence interval for the number of chronic cocaine users.'
- 10 From Kilmer et al., 'What America's Users Spend on Illegal Drugs, 2000–2010'.
- 11 T. Frijns and M. van Laar, 'Amphetamine, Ecstasy and Cocaine: Typology of Users, Availability and Consumption Estimates', in *Further Insights into Aspects of the Illicit EU Drugs Market*, ed. Franz Trautmann, Beau Kilmer, and Paul Turnbull (Luxembourg: Publications Office of the European Union, 2013), http://ec.europa.eu/justice/anti-drugs/files/eu_market_full.pdf.
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- 13 See Chapter 7 of Kilmer et al., 'What America's Users Spend on Illegal Drugs, 2000–2010'.
- 14 UNODC, 'Transnational Organized Crime in Central America and the Caribbean: A Threat Assessment' (Vienna, 2012), <https://www.unodc.org/toc/en/reports/TOCTACentralAmerica-Caribbean.html>.
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- 19 UNODC, 'UNODC Reports Steep Decline in Cocaine Production in Colombia', 19 June 2009, <https://www.unodc.org/unodc/en/press/releases/2009/june/unodc-reports-steep-decline-in-cocaine-production-in-colombia.html>.
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- 21 Based on an analysis of a natural experiment, Mejia et al., 'On the Effects of Enforcement on Illegal Markets', argue that spraying campaigns have a small and significant effect. Rico and Reuter, 'Taking the Balloon Effect Seriously', raise questions about this finding that will hopefully be addressed in future research. Also, see S. Rozo, 'On the Unintended Consequences of Anti-Drug Programs in Producing Countries', *Online-Paper Collection Association for Public Policy Analysis and Management*, 2014.
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- 25 UNODC, 'World Drug Report', 2011, https://www.unodc.org/documents/data-and-analysis/WDR2011/The_coca-cocaine_market.pdf.
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- 27 As Cunningham et al., 'US Federal Cocaine Essential ("Precursor") Chemical Regulation Impacts on US Cocaine Availability', note: 'To date, four US regulations have targeted cocaine manufacturing chemicals. The first, implemented 30 October 1989, regulated potassium permanganate and the solvents methyl ethyl ketone (MEK), toluene, ethyl ether and acetone. The second, implemented 22 October 1992, regulated sulfuric acid and hydrochloric acid. The third, implemented 19 May 1995, regulated methyl isobutyl ketone (MIBK), a solvent whose use in cocaine manufacturing increased following the 1989 regulation [20]. The fourth, implemented 18 December 2006, targeted sodium permanganate, a direct potassium permanganate substitute. Of these chemicals, potassium permanganate and sodium permanganate, being choke chemicals, may be most critical to realizing impacts on cocaine availability. Potassium permanganate's regulation in the United States is of particular interest, as the world's largest potassium permanganate producer is a US company.'
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- 29 Mejia, 'Plan Colombia: An Analysis of Effectiveness and Costs'.
- 30 Mejia, 'Plan Colombia: An Analysis of Effectiveness and Costs'. For additional insight on the shift in enforcement in Colombia, see J. C. Castillo, D. Mejia, and P. Restrepo, 'Scarcity without Leviathan: The Violent Effects of Cocaine Supply Shortages in the Mexican Drug War' (Center for Global Development, 2014), http://www.cgdev.org/sites/default/files/scarcity-leviathan-effects-cocaine-supply-shortages_1.pdf.
- 31 UNODC, 'Transnational Organized Crime in Central America and the Caribbean: A Threat Assessment'.
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- 33 UNODC, 'Transnational Organized Crime in Central America and the Caribbean', notes that by the mid-1990s 'an ever-increasing share of the cocaine entering the United States did so over the southwestern land border. Initially, direct shipments to Mexico were favoured, with stopovers in Central America largely limited to refueling. After 2000, and especially after 2006, law enforcement increased the risks of shipping directly to Mexico. Consequently, Central America took on new importance as a transit and storage area, and parts of the Caribbean were reactivated.'
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- 36 D. Rico, 'Las Dimensiones Internacionales Del Crimen Organizado En Colombia: Las BACRIM, Sus Rutas Y Refugios', in *The Criminal Diaspora: The Spread of Transnational Organized Crime and How to Contain Its Expansion*, ed. J. C. Garzón and E. Olson (Washington, DC: Woodrow Wilson Center, 2013).
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- 39 Garzón and Bailey, 'Displacement Effects of Supply-Reduction Policies in Latin America'.
- 40 V. Rios and D. Shirk, 'Drug Violence in Mexico: Data and Analysis through 2010' (San Diego, CA: Transborder Institute, 2011).
- 41 B. Kilmer, J. P. Caulkins, and B. M. Bond, 'Reducing Drug Trafficking Revenues and Violence in Mexico: Would Legalizing Marijuana in California Help?' (Santa Monica, CA: RAND, 2010).
- 42 Kilmer et al., 'What America's Users Spend on Illegal Drugs, 2000–2010'.
- 43 One might also attempt to gain additional insights by examining purity-adjusted methamphetamine prices, but accounting for the large amount of production in the US (and production in other countries like Canada), would complicate these efforts. Also, there is tremendous uncertainty about what happened with the US methamphetamine consumption from 2006 to 2010 (see Kilmer et al., 'What America's Users Spend on Illegal Drugs, 2000–2010').
- 44 Rico and Reuter, 'Taking the Balloon Effect Seriously'.
- 45 *Ibid.*
- 46 For additional thoughts about the complexity of this relationship using data through 2014, see J. C. Garzón and J. Wilches, 'The Reasons for the Surge in Coca Cultivation in Colombia' (Washington, DC: Woodrow Wilson Center, 2015), <https://www.wilsoncenter.org/article/the-reasons-for-the-surge-coca-cultivation-colombia>.
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- 56 M. W. L. Elsby, B. Hobijn, and A. Sahin, 'The Labor Market in the Great Recession' (Washington, DC: Brookings Institution, 2010), http://www.brookings.edu/media/Projects/BPEA/Spring-2010/2010a_bpea_elsby.PDF, note: 'Unemployment rose from a prerecession low of 4.4 percent to reach 10.1 percent in October 2009.'
- 57 ONDCP, 'National Drug Control Strategy: 2014 Data Supplement', 2015, https://www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/ndcs_data_supplement_2014.pdf.
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- 59 Kilmer et al., 'What America's Users Spend on Illegal Drugs, 2000–2010'.
- 60 ONDCP, 'National Drug Control Strategy: 2014 Data Supplement'.
- 61 Based on Inter-University Consortium for Political and Social Research [distributor], 'United States Department of Health and Human Services'. Includes any mention, not just primary.
- 62 Chart reproduced from NIDA, 'Overdose Death Rates', 2015, <http://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>.
- 63 Some may wonder if this increase in cocaine treatment admissions had lasting impact on the market; thus, contributing to the post-2006 decline. The increase may have had some effect, but I have seen no research assessing this claim.
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- 70 For example, diversion to treatment and other services; reducing overdose deaths by administering Naloxone; abstinence orders in combination with frequent testing and swift-certain-fair sanctions for those whose consumption leads them to repeatedly threaten public health and safety.

Cuidado: The Inescapable Necessity of Better Law Enforcement in Mexico

Vanda Felbab-Brown

SUMMARY

- Major human rights violations related to the drug violence, whether perpetrated by organised crime groups or military and police forces, persist in Mexico.
- President Peña Nieto's administration has relied on the military and Federal Police: with similar lack of planning, prepositioning and operational design as preceding President Calderón's administration.
- A 2012 CIDE study suggests over 60% of Mexico's 250,000 prisoners, including 80% of female inmates, were jailed for drug crimes; 36% for marijuana offenses.
- Civil society has sought to advance policy innovation: e.g. influencing the Supreme Court decision in November 2015 to allow individuals the right to grow and distribute marijuana for personal use.
- Policy innovations, such as decriminalising drug use, are important but not sufficient to tackle organised crime.
- These innovations need to be coupled with comprehensive law enforcement (beyond high-value targeting), extending state presence, developing socioeconomic anti-crime efforts and strengthening citizen-state bonds.
- Indeed, robust state presence and effective law enforcement is needed to ensure that organised crime is excluded from a legal drug trade.
- Policing and rule of law are indispensable elements of suppressing violent criminality and illegal economies. So is regulating the legal economies so that they are not socially or environmentally destructive.

Even as the administration of Mexico's President Enrique Peña Nieto has scored important reform successes in the economic sphere, its security and law enforcement policy toward organised crime remains incomplete and ill-defined. Despite the early commitments of his administration to focus on reducing drug violence, combatting corruption, and redesigning counternarcotics policies, little significant progress has been achieved. Major human rights violations related to the drug violence, whether perpetrated by organised crime groups or military and police forces, persist – such as at Iguala, Guerrero, where 43 students were abducted by a cabal of local government officials, police forces and organised crime groups. This has also been seen in Tatlaya and Tanhuato, Michoacán, where military forces have likely been engaged in extrajudicial killings of tens of people.² Meanwhile, although drug violence has abated in the north of the country, such as in Ciudad Juárez, Monterrey and Tijuana, government policies have played only a minor role. Much of the violence reduction is the result of the vulnerable and unsatisfactory narcopeace – the victory of the Sinaloa or Gulf Cartels.

The July 2015 spectacular escape of the leader of the Sinaloa Cartel and the world's most notorious drug trafficker – Joaquín Guzmán Loera, known as El Chapo – from a Mexican high-security prison was a massive embarrassment for the Peña Nieto government. Yet it serves as another reminder of the deep structural deficiencies of Mexico's law enforcement and rule-of-law system which persists more than a decade after Mexico declared its war on the drug cartels.

The Peña Nieto administration often pointed to the February 2014 capture of El Chapo as the symbol of its effectiveness in fighting drug cartels and violent criminal groups in Mexico. The Peña Nieto administration's highlighting of Chapo's capture was both ironic and revealing: ironic, because the new government came into office criticising the anti-crime policy of the previous administration of Felipe Calderón of killing or capturing top capos to decapitate their cartels; and revealing, because despite the limitations and outright counterproductive effects of this high-value-targeting policy and despite promises of a very different strategy, the Peña Nieto administration fell back into relying on the pre-existing approach. In fact, such high-value-targeting has been at the core of Pena Nieto's anti-crime policy. Moreover, Chapo's escape from Mexico's most secure prison through a sophisticated

tunnel (a method he had also pioneered for smuggling drugs and previously used for escapes) showed the laxity and perhaps complicity at the prison, and again spotlighted the continuing inadequate state of Mexico's corrections system.

In September 2015, in his yearly state-of-the-nation address, President Peña Nieto committed himself to refocusing the final three years of his administration on deepening the rule of law, strengthening law enforcement and justice institutions, and combatting organised crime. That is indeed what Mexico needs to do. As discussed below, policy innovations in Mexico, such as legalisation of marijuana and depenalisation of drug use, are important and promise many benefits. But they are unlikely on their own to reduce the power, violence, and impunity of Mexico's organised crime. They need to be coupled with extending state presence, making socioeconomic anti-crime efforts in Mexico smarter and sharper, and strengthening the bonds between Mexico's citizens and the state. Crucially, they need to be coupled with improving law enforcement policies. There is no escape for Mexico from figuring out how to provide better policing. Some ways to start developing better policing as well as improving the larger anti-crime strategy, including its rule of law and socioeconomic components, are suggested below.

FIZZLED ENERGY AND SAME OLD PROBLEMS OF PEÑA NIETO'S ANTI-CRIME STRATEGY

At the outset of his administration, President Peña Nieto identified the need to reduce violence in Mexico as the most important priority for his security policy. That was the right decision. Even if criminals are mostly killing other criminals (as the previous administration of President Felipe Calderón pointed to in order to belittle the deaths), violence in any form, including violent criminality, is highly costly and corrosive for society. Yet, according to the Mexican government, between 2007 and 2014, a staggering 164,000 people were murdered.³

After a year in office, Peña Nieto claimed important progress toward his objective of reducing violence by half in the first 6 months in office – with a 30% decrease in organised crime-related homicides.⁴ At the beginning of September 2014, the Peña Nieto administration released further crime and anti-crime policy data, claiming that Mexico's homicide rate for 2013 decreased slightly to 19 per 100,000, compared to 22 per 100,000 in 2012, with a total of 22,732 homicides in 2013.⁵ Country-wide violence appeared to continue dropping in the first half of 2014, with the State of Mexico, Guerrero, Chihuahua, Michoacán, Tamaulipas, Sinaloa, Jalisco, and Baja California registering the highest murder rates.⁶ But the downward trend was not sufficiently sustained, and levelled off well before reaching the goal of a 50% reduction. Additionally, homicides in the first seven months of 2015 were running about 3 percent above the 2014 figures.⁷

Moreover, the biggest drops in violence were experienced in the north of the country – Tijuana, Ciudad Juárez, and Monterrey – where the violence reduction cannot necessarily and solely be attributed to government policies. Rather, it has been the outcome of new balances of power being established among criminal groups in previously highly contested hotspots, including the victories of the Sinaloa and Gulf Cartels against their rivals. Many of these balances of power among the drug trafficking organisations (DTOs) had already emerged in the last years of the Felipe Calderón administration. After a decade of carnage that gave rise to new DTOs – Los Zetas, La Familia Michoacana, Los Templarios – and saw their demise, Chapo's Sinaloa cartel, the largest, most powerful, and widespread of Mexico's drug trafficking groups, remains the victor. In these areas of newly established criminal control and

deterrence, even kidnapping and extortion might be levelling off and becoming more predictable, although they are overall on the rise overall in Mexico.⁸ The outcome has been that the Mexican government has for the most part averted its eyes from the areas where violence declined, even as major law enforcement challenges remain there and the job is less than half accomplished.

The Peña Nieto administration has mostly focused on putting out immediate security fires in areas where fighting among drug trafficking groups has newly erupted, such as Jalisco, Tamaulipas, and the State of Mexico. Furthermore, the administration has often inadvertently triggered many of these outbreaks of violence. Despite its rhetoric and early ambitions, the Peña Nieto administration fell straight back into relying on the Mexican military in combination with the Federal Police to cope with criminal violence.⁹ Moreover, it did so with an essentially analogous lack of planning and

According to the Mexican government, between 2007 and 2014, a staggering 164,000 people were murdered.

and largely unable to deter violence escalation and reescalation. In fact, much of the security policy reform momentum that surrounded the Peña Nieto administration at the outset of its six-year term has prematurely dissipated. Key pillars of the policy are plodding along meekly, including the national *gendarmerie*, the new intelligence supercentre, and the *mando único*. Concurrently, deadlines for vetting all police units for corruption and links to organised crime have been repeatedly missed and extended. As with many institutional reforms in Mexico, there are large regional variations in the quality and even design of the reforms being implemented. However, at least the Mexican Congress, overall a weak player in setting and overseeing anti-crime policy in Mexico, approved a new criminal code in the spring of 2014. The so-called National Code of Penal Procedure (*Código Nacional de Procedimientos Penales*) is critical in establishing uniform application of criminal law across Mexico's thirty-one states and the Federal District, and standardising procedures regarding investigations, trials, and punishment.¹¹

Instead of pushing ahead with institutional reforms, the Peña Nieto administration has highlighted poor coordination among national security agencies and local and national government units as a crucial cause of the rise of violent crime in Mexico. It has thus defined improving coordination as a key aspect of its anti-crime approach without also focusing on the substance of the policies.

New forms of violence – the rise of militias in Michoacán and Guerrero and their co-optation by organised crime – have also emerged. In some ways, the willingness of the government to act against the militias, including to arrest and prosecute some, has been more encouraging than its other anti-crime policies. After initial neglect and back and forth between a tough line and embrace of the militias, the ultimate plan of folding them into the Rural Defense Corps was the least bad option.¹² However, the government has failed to effectively enforce these plans. In Guerrero, the government has not even been able to get the militia groups to sign onto the deal. In both Michoacán and Guerrero, many of the militias have become important sources of conflict and abuse, hardly acting as a stabilising force.

The militia option might seem seductive in the short term at a moment of crisis, but it spells long-term problems for security, rule of law, and state legitimacy, as much in Mexico as it has in Colombia and Afghanistan.

prepositioning, and essentially the same operational design, as the previous Felipe Calderón administration. In particular, the current administration has adopted the same non-strategic high-value targeting that defined the previous one's posture. Perhaps with the exception of targeting the *Zetas* and *Los Caballeros Templarios*, this interdiction posture continues to be undertaken mostly on a non-strategic basis as opportunistic intelligence becomes available, but without forethought, planning, and prepositioning required to avoid new dangerous cycles of violence and renewed contestation among local drug trafficking groups. This recrudescence of high-value targeting is partially the outcome of institutional inertia in the absence of an alternative strategy, and of the relative operational simplicity of such a targeting pattern, compared to a more effective, but also more demanding, policy of middle-level targeting of the kind that is recommended below.¹⁰

The overall deterrence capacity of Mexico's military and law enforcement forces and justice sector continue to be very limited

Smuggled marijuana likely constitutes not much more than a fifth of the revenues generated by the DTOs or about \$1.5 billion a year, as a 2010 RAND study argued. Those are not bankruptcy numbers.

To the extent that Mexico's struggle against criminality is not merely about reshuffling who has control and power in the criminal market, but about a broader extension and deepening of the rule of law and accountability in Mexico, any official endorsement of the militias fundamentally contradicts that project.

The Peña Nieto administration's focus on socioeconomic anti-crime policies and other crime prevention measures is laudable. But its signature anti-crime socioeconomic approach – the so-called *polígonos* programme – has not been well-operationalised and is not integrated with law enforcement efforts. The discreet efforts remain scattered: the theory, implementation, and monitoring parameters of the national crime prevention strategy are not yet adequately worked out. These deficiencies undermine the programme's effectiveness and risk, dissipating the relatively small amount of resources allocated to the effort. Monitoring and evaluation of the effectiveness of socioeconomic anti-crime efforts, including the *polígonos* approach, is particularly weak and nebulous.¹³

Importantly, the Peña Nieto administration committed itself to paying greater attention to human rights issues, such as allowing civilian claims of human rights violations by Mexico's military forces to be tried in civilian courts and establishing a victims' compensation fund.¹⁴ But the efforts to increase rule of law, justice, and the protection of human rights and to reduce impunity and corruption remain very much a work in progress, with policies and outcomes varying widely among Mexico's states. Moreover, the cover-ups at Iguala and Tlatlaya, uninterested investigations of extrajudicial killings, and corruption scandals involving the president and his wife¹⁵ made the promise sound utterly hollow.

MOVES TOWARD MARIJUANA LEGALISATION IN MEXICO

Although the Peña Nieto administration has failed to improve the core elements of security, civil society has sought policy innovations. As a result of the activism of *Mexican Society for Responsible and Tolerant Consumption (SMART)*, in November 2015 the Mexican Supreme Court declared that individuals (up to a group of four people) have the right to grow and distribute marijuana for personal use. The legal judgement, not yet reversing existing laws but providing the basis for their overhaul, was based on the principle of human rights, and endorsed recreational activities (including recreational marijuana use) that do not harm others.¹⁶ Following the judgement, the Mexican Senate proposed legalising medical marijuana. The court ruling also set off a national debate on increasing limits of personal possession of marijuana and other drugs. In 2009, Mexico decriminalised possession of up to 5 grams (0.18 ounce) of marijuana and small amounts of hard drugs, but limits were set at very low levels.

Reducing the number of people arrested and imprisoned for nonviolent drug offenses are crucial and worthy goals. Mostly imprisoning users does not *reduce* drug use, and under some circumstances can even exacerbate it. Imprisoning people usually violates human rights and can destroy people's lives and social productivity. Crowded prisons are financially costly and often, particularly in Latin America, schools for criminals. A 2012 study by the Mexican think tank CIDE argued that over 60% of Mexico's 250,000 prisoners, including 80% of female inmates, were jailed for drug crimes; 36% of which for marijuana offences.¹⁷ Stigmatising and punishing users undermines efforts to stem the spread of HIV/AIDS and other communicable diseases. For all those reasons, depenalising drug use is the right policy.

But proponents of legalisation in Mexico also claim that legalisation would reduce the violence, power, and impunity of organised crime.¹⁸ They make at least two arguments: Legalisation of marijuana (and possibly other drugs) would reduce the income of criminal crime groups, which would either push them out of crime altogether or make them more peaceful. Drug legalisation would free Mexico's law enforcement to concentrate on other crimes, including murders, kidnappings, and extortions.

However, there are good reasons to doubt those arguments, particularly in the case of Mexico. First, smuggled marijuana likely constitutes not much more than a fifth of the revenues generated by the DTOs or about \$1.5 billion a year, as a 2010 RAND study argued.¹⁹ Those are not bankruptcy numbers.

Second, without robust state presence and effective law enforcement (both of which are elusive in significant parts of Mexico), there can be little assurance that organised crime groups would be excluded from the legal drug trade. In fact, they may have numerous advantages over legal companies and manage to hold on to the trade, perhaps even resorting to violence to do so. Nor does mere legalisation mean that the state will suddenly become robust and effective. Persistent deficiencies in the state explain why there is so much illegal logging alongside legal logging, for example or why smuggling in legal goods take place. If the state does not physically control the territory where marijuana is cultivated – which in Mexico it often does not – the DTOs could continue to dominate the newly legal marijuana fields, still charge taxes and structure the life of the growers, and even find it easier to integrate into the formal political system. Many oil and rubber barons started with shady practices and eventually became influential (and sometimes responsible) members of the legal political space. But there are good reasons not to want the very bloody Mexican capos to become legitimised.

In Italy, gambling, including slot machines, were legalised precisely on the basis of the argument that legalisation would take gambling resources away from the mafia. In fact, even as the gambling lobby and gambling itself, including socially-ruinous gambling addiction, rapidly expanded, the mafia was able to dominate the legal gambling business. It was able to increase its profits, use gambling to enter new regions of Italy and set up loan-sharking and extortion rackets there, and exploit the legal gambling for laundering illicit drug money, just as it has previously used agriculture, trucking, and restaurants.²⁰

The increase in US demand for heroin, spurred by prescription opiate abuse and dependence, is once again stimulating expansion of poppy cultivation in Mexico and in Guatemala.

The cultivation of illicit crops employs thousands, perhaps tens of thousands, of people. In fact, poppy cultivation is among the most labour-intensive illicit economies, enabling those who sponsor it – whether insurgent groups or organised crime groups – to obtain extensive political capital.

Third, a grey marijuana market would likely emerge. If marijuana became legal, the state would want to tax it – to generate revenues and to discourage greater use. The higher the tax, the greater the opportunity for the DTOs to undercut the state by charging less. The narcos could set up their own fields with smaller taxation, snatch the market and the profits, and the state would be driven back to combating them and eradicating their fields. Such grey markets exist alongside a host of legal economies, from cigarettes, to stolen cars, to logging and wildlife trade. As for example in the case of illegal logging alongside legal concessions, such grey markets can be violent, dominated by organised crime, generating corruption, and exploitative of society. In Mexico itself, legal and illegal logging and violence coexist in the same space in Michoacán and Guerrero, for example.²¹ Combatting wildlife trafficking in eastern and southern Africa has taken on the form of bush wars, with heavy firepower and high proclivity to use it by poachers, even the illegal trade exists alongside a legal one or feeds into legal distribution markets in China, such as in ivory.

Fourth and worse yet, Mexican DTOs can hardly be expected to take such a change lying down. Rather, they may intensify the violent power struggle over remaining hard-drug smuggling and distribution (notably, the shrinkage of the US cocaine market is one of the factors that precipitated the current DTO wars²²). The DTOs could intensify their effort to take over other illegal economies in Mexico, such as the smuggling of migrants and other illegal commodities, prostitution, extortion, and kidnapping, and also over Mexico's informal economy – trying to franchise who sells tortillas, jewellery, clothes on the zócalo – to mitigate their financial losses. They are already doing so. If they succeed in franchising the informal economy and organising public spaces and street life in the informal sector (40% of Mexico's economy), their political power over society will be greater than ever. They would also seek to extort legal economies, whether restaurants in Ciudad Juárez and Tijuana, foreign businesses such as Coca Cola and mining in Guerrero or avocado and lime farmers and legal logging and mining in Michoacán. In fact, they have already expanded into such extortion, and indeed, some of the bloody escalation of violence has been precisely over turf rights to extort legal businesses.²³

Nor would law enforcement necessarily become liberated to focus on other issues or turn less corrupt: The state would have to devote some resources to regulating the legal economy and enforcing the regulatory system. Even in the much more peaceful Colorado and Washington,

the two first US states to legalise marijuana, police have to suppress smuggling out of the states and devote resources to policing the new profitable, taxed, and nonviolent legal marijuana trade.²⁴ Corruption could well persist in a legal or decriminalised economy. In Brazil, after drug possession for personal use was decriminalised, the deeply corrupt police did not clean up. Instead, they often continue to extort users and franchise pushers by threatening to book users for greater amounts than personal limits unless they pay a bribe or buy from their pushers.²⁵

Legalisation is not a panacea.²⁶ There are no shortcuts to improving Mexico's law enforcement. Rather, legalisation of marijuana in Mexico would be more viable if Mexico first got the DTOs under control and pulled off effective law-enforcement and justice reform.

NOT JUST POT, BUT POPPY CULTIVATION

Meanwhile, even if legalisation of marijuana cultivation for personal consumption in Mexico also reduced industrial-scale marijuana plantations for export – or, more likely, if expanding commercial cultivation of marijuana in the United States priced out illegal cultivation in Mexico, another illegal crop is flourishing in Mexico. The increase in US demand for heroin, spurred by prescription opiate abuse and dependence, is once again stimulating expansion of poppy cultivation in Mexico and in Guatemala.

Poppy cultivation in Mexico is nothing new; in fact, it dates back to pre-WWII. Since the 1980s, Mexico did not disclose consistent data and undertook an uneven effort to monitor the levels of poppy cultivation and marijuana in the country. Nonetheless, it is estimated that poppy in Mexico cultivation in the 1990s and 2000s decades hovered between 20,000–25,000 hectares per year, compared to perhaps 30,000–40,000 hectares cultivated yearly with marijuana.

²⁷ This is a rather substantial level of poppy cultivation – on par with Burma in the 2000s and higher than Thailand at its peak in the 1960s.²⁸ At the same time, about 15,000–20,000 hectares of opium poppy have been eradicated in Mexico during the 1990s and early 2000s, alongside some 20,000 to 30,000 ha of marijuana. In the first seven months of 2015, over 17,000 hectares of poppy were eradicated (and only some 2000 hectares of illegal marijuana).²⁹ Eradication of illicit crops in Mexico has historically been carried out by the Mexican military, often as a result of US pressure.

During the 1970s, the Mexican authorities became concerned about a possible penetration of the drug trade by leftist guerrillas, such as the Popular Revolutionary Army (EPR). The result was a trifecta of sometimes contradictory policies: cooperation between Mexican authorities and Mexican drug traffickers to fight against the guerrillas; the sponsorship of anti-leftist militias by the Mexican state, sometimes connected to drug trafficking groups, and, paradoxically, also the temporary consent by Mexican authorities to an intense eradication campaign sponsored by the United States, including aerial spraying. Whether as a result of the anti-guerrilla policies or the guerrillas' own internal weaknesses, the guerrilla groups failed at the time to significantly penetrate the drug trade and have not managed to robustly participate in it since.

Nonetheless, from 2007 when President Calderón decided to deploy the Mexican military to fight against drug trafficking groups and presumably provide public safety, the intensity of eradication in Mexico fell off: since fewer soldiers were available for this task. At the same time, prime areas of poppy cultivation, such as in Guerrero and Michoacán, became hotly contested among Mexican drug trafficking groups, such as La Familia Michoacana, Los Zetas, the Sinaloa Cartel, the Acapulco Cartel, Jalisco New Generation Cartel, and a myriad of splinter groups, such as the *Guerreros Unidos* presumably behind the Iguala abduction. Their fighting has tremendously increased the fundamental insecurity of local populations, even as they depend on poppy and illicit crop cultivation for basic economic survival. The outcome has been the rise of anti-organised-crime militias as well as the co-optation of militias by organised crime.

The cultivation of illicit crops employs thousands, perhaps tens of thousands, of people. In fact, poppy cultivation is among the most labour-intensive illicit economies, enabling those who sponsor it – whether insurgent groups or organised crime groups – to obtain extensive political capital.³⁰ That is very much the case in Mexico where, like in other parts of the world, the poppy farmers are some of the poorest and most marginalised citizens, often also members of indigenous groups. And in some areas, such as in the state of Michoacán, the drug economy – both cultivation and trafficking – represents a substantial portion of the local economy.

Yet, Mexico has historically shown little interest in developing alternative livelihoods strategies toward illicit crop cultivation,

even rejecting US assistance for such programmes.³¹ Indeed, serious alternative livelihoods efforts would require extending both state presence, engaging in broader and more equitable development and sustaining the resources and political wherewithal to tackle political and economic power distribution in Mexico and the social marginalisation of many of its communities. It is much easier to occasionally simply eradicate the crops and the farmers' livelihoods.

An intense eradication campaign in the poppy and marijuana cultivation areas will severely complicate the efforts of the Mexican military and law enforcement forces to pacify the festering Michoacán and Guerrero, rid them of the rule of violent organised crime, and perhaps for the first time bond its residents with the Mexican state. Neglecting those areas – despite an umpteenth *Plan Guerrero* (a government package of socioeconomic interventions mostly amounted to discreet handouts) – is cheaper and easier. But it comes at substantial and complex costs to the local residents and ultimately to rule of law in Mexico.

One of the most dramatic incidents involving Guerrero's self-defence forces took place in early May 2015 in the town of Chilapa. Although small in size, Chilapa is strategically-located on the foothills of a major poppy growing area and a major logistical hub for the drug trade since it is the place with the only gas station in miles. Following an assassination of a local political candidate in April 2015, 300 civilians armed with rifles, machetes, and sticks, followed by pickup trucks with men sporting high-calibre weapons, seized the town. Although the Mexican military and federal and municipal police were present, they failed to act against the self-proclaimed self-defence group. Whether out of intimidation, indifference, complicity or on orders from higher up, the military and police stood by while for several days the militias controlled the town, set up checkpoints, and detained people. At least 11 of those detained (and perhaps as many as 30) have not been seen since. Townspeople believed that the self-defence force, which after several days left on its own accord, was actually the criminal gang Los Ardillos, fighting over the important heroin-turf with another gang, Los Rojos.³² Regardless of whether the armed invasion was by a self-defence force that ran amok or the self-defence label was appropriated by an organised crime group, its effect on the community was the very opposite of increasing security. Yet

another demonstration that there is no easy escape – neither legalisation nor negligence – from extending effective and equitable state presence and rule of law in Mexico, including effective and better-designed law enforcement.

CONCLUSIONS AND POLICY RECOMMENDATIONS

Despite how tired the Mexican public is with the awful criminal violence, and with politicians' unfulfilled promises to eradicate it, the Peña Nieto administration must not drop the ball in developing and implementing a comprehensive law enforcement strategy. Without capable and accountable police who are responsive to the needs of the people from tackling street crime to suppressing organised crime and who are backed-up by an efficient, accessible, and transparent justice system, neither legal nor illegal economies will be well-managed by the state.

What is needed is a comprehensive law enforcement strategy (beyond high-value targeting), to sharpen Mexico's anti-crime socioeconomic policies, and better integrate them with policing. Policing and rule of law are indispensable elements of suppressing violent criminality and illegal economies and regulating the legal ones so they are not socially or environmentally destructive. However, for policing and law enforcement to be effective, they require that local populations do not fundamentally see them as contrary to their human security, an attitude that will prevent them from being respected and internalised by the citizens.

Without capable and accountable police who are responsive to the needs of the people from tackling street crime to suppressing organised crime and who are backed-up by an efficient, accessible, and transparent justice system, neither legal nor illegal economies will be well-managed by the state.

In Mexico, such a strategy includes:

■ *Making Interdiction More Strategic*

Interdiction must move beyond the current nonstrategic, non-prioritised, opportunistic targeting posture. The most dangerous groups should be targeted first, with an eye toward local stability. Targeting plans should be based on robust assessments of what kind of law enforcement operations will trigger violence, and on strategies to mitigate and prevent such outcomes, such as through force prepositioning.

■ *Switching from High-Value Targeting to Middle-Layer Targeting*

Interdiction should shift away from predominantly high-value targeting to middle-layer targeting, particularly in a way that simultaneously arrests as much of a group's middle operational layer as possible. This may seem a marginal technical change; in fact, it has profound positive implications regarding the ability of criminal groups to react to interdiction hits *vis-à-vis* law enforcement agencies and toward each other, overall limiting their capacity for violent reaction.³³

■ *Keeping a Law Enforcement Focus on Areas Where Violence Has Declined*

The Peña Nieto administration must not avert its eyes from areas where violence has declined; instead it should work with local authorities to deepen police reform and institutionalise rule of law in those areas. It also must analyse why violence has not exploded in other parts of the country and reinforce the stabilisation dynamics there by strengthening law enforcement and the rule of law.

■ *Resurrecting A Momentum on Police Reform*

In order to strengthen the deterrence and response capacity of its law enforcement, the Peña Nieto administration also needs to double up on police reform, by enhancing capacity, beefing up vetting and reducing corruption, adopting proactive and knowledge-based policing methods, achieving a

sufficient density of permanent-beat deployments, and developing local knowledge.

■ *Dismantling Militias*

The Mexican government needs to retain the resolve to monitor the militias diligently; prosecute those who engage in criminal acts, such as extortion and murders; and use any opportunity it can to roll them back and dismantle them.

■ *Doubling Up on Justice and Human Rights*

In 2016, the new accusatorial justice system is supposed to be fully functional throughout Mexico. As such, the Peña Nieto administration must undertake a serious push to assist states in switching to the new system. This must include increased efforts to protect human rights and civil liberties and reduce corruption.

■ *Making the Polígonos Anti-Crime Socioeconomic Interventions More Rounded and Integrated*

The logic and mechanisms of specific *polígonos* projects should be articulated and clarified and subjected to careful evaluation and monitoring. The projects need to be better connected and integrated with one another in a particular area, not discrete isolated programmes. Assessments of cross-boundary dynamics and interactive processes across polygons and between polygon and non-polygon areas should be built into the projects' designs. It is also crucial to integrate the projects' designs with local law enforcement efforts.

■ *Bringing the State and Rural Development to Historically-Neglected Areas*

Beyond limited handouts and politically-motivated buyoffs,³⁴ Mexico needs to extend the state, including its role in socioeconomic development, to the neglected underdeveloped areas. Alternative livelihoods and socioeconomic anti-crime measures need to be a part of the package. But for these measures to be effective in reducing such undesirable economies in a lasting way, effective security needs to be established in the rural regions.

Moreover, alternative livelihoods programmes cannot be construed as merely crop substitution or temporary cash-for-work programmes. They must address all the structural drivers of illicit economies.³⁵ They must encompass the generation of sufficient employment opportunities, such as through the promotion of high-value, labour-intensive crops as well as through off-farm income, infrastructure building, distribution of new technologies, marketing help and the development of value-added chains, facilitation of local microcredit, and establishment of access to land without the need to participate in the illicit economy, to name a few of the most prominent components. Incorporating broader human development aspects, including improving access to health and education, and reducing social and ethnic marginalisation, is crucial.

Alternative livelihoods also need to be integrated into overall development strategies, with attention paid to whether overall economic growth leads to job creation or capital accumulation while exacerbating inequality.

■ *Decriminalising Drug Use, But Also Focusing on Drug Use Reduction and Prevention*

Mexico should move away from incarcerating users and toward depenalising drug use and reducing penalties for low-level dealers.³⁶ Public health approaches to drug treatment should be emphasised, acknowledging addiction as an illness requiring medical treatment. They should adopt harm reduction measures which produce far better policy outcomes, such as needle-exchanges, safe-injection sites, and distribution of life-saving anti-overdose medications. However, casual users under community supervision can be effectively dealt with through mild, short, swift, and reliable penalties, such as demonstrated in US Project Hope.³⁷ Drug prevention measures – not very effective overall, but nonetheless cost-effective, should focus on early-age interventions and confidence-building, including peer pressure resistance.³⁸

METRICS/INDICATORS:

To monitor the success of such strategies and in drug policies overall, the following metrics and indicators are proposed:

1. Number of homicides (geographically disaggregated), changes in levels of violent crime (such as murders, assaults, armed robberies, and extortion), including the level of discrimination across these crimes (e.g. amount of innocent bystanders getting caught in the crossfire),
2. Number and intensity of violent fights among or within criminal groups following arrests of major criminals,
3. Efficiency in the level of prosecution (i.e. the percentage of arrests leading to imprisonment),
4. Public satisfaction with police-performance, including public self-identification on how likely they are to report a crime, disaggregated by prosperous versus poor areas,
5. Survey breakdown of which authority citizens would seek for dispute resolution, such as formal courts, militias or criminal groups,
6. Efficiency of police internal affairs units: reflected in convictions and/or employment contract termination of law enforcement officials,
7. Arrestee and prisoner surveys measuring their fear or respect for the justice system; including disaggregated data for the police, prosecutors, and judges,
8. Number of people living in slums and poor rural areas, and the levels of violent crime in these areas,
9. Number of people working in the informal or criminal economies,
10. Prevalence of militias,
11. Number of extrajudicial killings by security forces as well as 'citizens militias',
12. Effective prosecution and roll-back of militia members and units that violate government-specified terms of operation. ■

NOTES

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UNGASS 2016: The focus on 'harm reduction' is making us blind to reducing the broader harms of organised crime

Mark Shaw

SUMMARY

- The dangers of widening the space for health policy approaches to consumption strategies are associated with a return to traditional law enforcement practices further down the supply chain – perhaps as concession to 'hard liners.'
- Evidence demonstrates that a broader set of harms from the growth of criminal networks and violence in certain states are only exacerbated by hard line criminal justice and militarised approaches.
- There is a need to widen the scope of harm reduction to the supply chain of illicit drugs in its entirety, and to organised crime itself.
- This does not mean a 'softer' approach on drugs, but only that a wider set of policy alternatives beyond narrow law enforcement are required if we are to succeed in sustainably limiting the harms of these illicit markets (and the policies employed to tackle them).
- There is a need to make a linkage between security and development issues, not in order to 'securitise' development, but in order to protect development interventions from criminal exploitation – and to deliver services where they are needed most.
- As political momentum focuses around UNGASS 2016 and the implementation of the Sustainable Development Goals, there is a potentially unprecedented opportunity to push this debate further.

The debate around what is generally termed 'harm reduction' – treating drug abuse as a health policy issue rather than a law enforcement one – has been a central feature of discussions around drug policy for at least the last decade. It is now gathering significant momentum as countries, most notably in Latin America and Europe, have embraced its core tenants. Coverage of the run-up to the Special Session of the United Nations General Assembly on the World Drug Problem (UNGASS) in April 2016 has centred on the concept of 'harm reduction' and how it is interpreted. As has been widely noted, what is remarkable in the current discussion is the degree to which the health policy aspects can be openly discussed in a way that was simply not possible even a few years ago. That is a feature of how rapidly the debate is now evolving. While, in the medium term, this may not lead to a change in the overall drug control framework itself, it has and will continue to, stretch the boundaries of the possible within the current international drug control regime.

One concern, however, is whether that widening space for debate could come at a cost: by shifting the discussion of health policy approaches at the front-end where drugs are consumed, but returning to a set of established law enforcement practices further down the supply chain. Indeed, that may be part of a subtle concession to the 'hard liners': more talk of health approaches balanced by harder law enforcement responses. While the latter may not necessarily be wrong in its entirety, it harks back to a language of the past at a time when there is an urgent need to consider a wider set of alternatives. Evidence and experience has shown that a broader set of harms that are resulting from the growth of criminal networks, including prolific violence in certain states, are only exacerbated by hard line criminal justice and militarised approaches. If the full harms of drug trafficking and use are to be addressed, then a broader understanding of harm reduction must be introduced.

In short, in the space provided by the rapidly developing discussion around development and security, symbolised most clearly by the UN Agenda for Sustainable Development 2030 (ASD2030), we are missing an opportunity if a multi-dimensional harm framework is not also applied to the issue of organised crime. This argument considers the possibility of widening the scope of the

harm reduction concept to the drugs supply chain in its entirety, and to organised crime itself, and considers the policy implications of doing so. Just as in the case of the drug use debate, this does not mean a 'softer' approach on organised crime, but only that a wider set of policy alternatives beyond narrow law enforcement are required if we are to succeed.

FROM 'HARM REDUCTION' TO REDUCING HARM

Language and labelling has always been an important feature of the drug policy discussion, even though the terms used, including 'harm reduction' itself, may have widely different meanings in different contexts. However, it is seldom noted that in the context of the current debate, and no matter which side of the aisle you are on, to talk about 'harm reduction' almost always means discussing policy options where drugs are bought and used at what could be called the 'front-end' of the market. The term has become exclusively associated with healthcare policy interventions. Yet, the term 'harm reduction' or perhaps better stated 'the reduction of harm', is far from a unique concern, and one that occurs in a wider set of public policy debates.¹

What is remarkable in the current discussion is the degree to which the health policy aspects can be openly discussed in a way that was simply not possible even a few years ago. That is a feature of how rapidly the debate is now evolving. While this may not lead in the medium term to a change in the overall drug control framework itself, it has and will continue to, stretch the boundaries of the possible within the current international drug control regime.

Development and humanitarian practitioners for example often refer to the 'do no harm' principle, meaning that their actions should not exacerbate any situation where they intervene.² While it is not often stated in that way, the arguments around 'harm reduction' in the drug policy field, and the response to the war on drugs itself, revolves around a similar premise: policy interventions should be people centric, should aim to reduce harm, and should not create a greater set of harms in their implementation than are already present.

Despite this focus on 'harm reduction,' and its alignment with medical and health interventions in the drugs debate, the orientation of the current discussion has led to cutting off harm reduction principles as soon as the upper reaches of illicit economies are discussed: that is, essentially along the supply chains which move the drugs, and in countering the organised criminal groups who control these. This is regrettable, partly because the development donor community is increasingly broadening their capacity to address organised crime, and the ASD2030 offers new opportunities here, as it recognises organised criminal networks and markets as a cross-cutting, multidimensional threat to the achievement of sustainable development objectives. Of its 169 targets, more than 13 per cent (23 targets in total) stand at risk if criminal markets are not addressed.³ The 2015 OECD *States of Fragility* report recognised the need to move toward a more multi-dimensional understanding of what is needed to achieve sustainable development, redefining the concept of the 'fragile state' and bringing several middle-income countries with disproportionately high levels of crime-related violence, sub-national conflict or poor access to justice, into focus.⁴ The explicit linkage between these development objectives and safety is unprecedented in terms of the objectives of the UN, and provides a mandate to make such concerns central to debates.

In fact the failure to extend the principle of 'harm reduction' up the trafficking chain is leading to an unexpected anomaly; while 'harm reduction' principles must apply at the front-end of drug markets, where substances are sold and used, further up the chain, we need to renew our efforts on 'supply reduction,' hunting down traffickers and tackling organised crime. And, taking such an approach is curious coming from those who have long argued against the war on drugs, but now with advances being made on front-end harm reduction are tone deaf to a wider set of harms. Arguably, a new set of standard terminology is needed, that can span analysis and responses across illicit drug markets from beginning to end, and particularly in responses to organised crime. Timing is crucial too: responding to contemporary challenges of organised crime is a critical public policy issue for global policy makers and is likely to remain so.

IT'S NOT ALL ABOUT THE MONEY

As indicated, accompanying the call to reduce harm has been a renewed focus on organised crime and its role in facilitating the drug trade. This was the conclusion of the two regional Commissions on Drugs for Latin America and West Africa.⁵ Criminal justice driven strategies along the supply chain – at source and in transit – have broadly failed to have the desired impact at reducing supply or the potency of criminal groups. Though the criminal justice approach may have served as a mechanism to get more conservative forces on board in the front-end 'harm reduction' debate, the way the debate has been framed has largely side-stepped an important opportunity to consider a wider set of solutions to organised crime and illicit trafficking.

Instead, now the area of experimentation comes in trying to alter market conditions to bring down the prices of illicit drugs, thereby shifting the risk-return equation for criminal groups, and reducing their profits. Reducing criminal profits, particularly from drug trafficking, is not a new discussion at all. It has become the mantra of the sophisticated law enforcement official encapsulated in the much (over?)used phrase 'follow the money.'

Efforts and innovations in alternative livelihoods and other 'supply reduction' strategies both in the Americas and in the opiate producing countries of Central and West Asia have failed to provide consistent returns on investment, and have largely ignored the versatility and legitimacy that trafficking groups can gain with local populations when they provide and control the major livelihood generator of the region. Subsequently, the remaining parameter for policymakers appears to be to decriminalise the sale and use of drugs and introducing regulated legal channels, thereby reducing its profitability in the illicit market and commensurately the strength of criminal groups.

While distinguishing the profits made from drug trafficking from those in other illicit markets can be complicated, given that criminal groups engage in multiple illicit activities, the trafficking of illicit narcotics remains an important contributor to their business. Profits from drugs remain on most estimates, both those globally and for different regions, to be the mainstay of organised crime. At a global level, the scale of criminal proceeds from transnational organised crime is equal to approximately 1.5 % of global GDP. Of this, about half relate to trafficking in drugs.⁶ There are some exceptions to this, for example the smuggling of oil or illicit mining in West Africa,⁷ but for the most part and at a global scale this assertion holds true.

THE END OF ORGANISED CRIME?

A broader point is worth making as a preface to this discussion: using ‘harm reduction’ policy alternatives around drug use should be supported on the grounds that the evidence suggests that it is viable, genuinely reduces harm to the individuals involved, and is cost effective in the longer term. That is, that ‘harm reduction’ mechanisms should be supported in their own right, rather than for any savings that they might bring for law enforcement.

The discussion on profits is important however when considering the impact of front-end decriminalisation as it is now widely advocated. While claims have been made that the decriminalisation (or legalisation) of use will reduce the profits made by organised crime, the evidence suggesting that this may be the case is decidedly mixed. Perhaps most pertinently, an examination of other markets where front-end use is or has been legal suggests that organised crime remains active along the supply chain, and makes good money in doing so.

Two illustrative examples can be found comparing the smuggling of cigarettes, including counterfeit ones, and the trafficking of a variety of products harvested from endangered species such as elephant ivory or rhino horn. While the sale of rhino horn has not been illegal in many jurisdictions, the profits made by organised crime in poaching and supplying the product has nonetheless been immense.⁸ Unless illicit commodities are universally legalised, with uniform levels of taxation and regulation, criminal networks will still maximise the opportunity to arbitrage between markets, as the illicit cigarette industry has highlighted most effectively. Even in the cases where complete legalisation is possible, as seems possible in the case of cannabis, commercial opportunities generated by legal sale may provide criminal opportunities to launder large quantities of illicitly produced product, much the same way as in several regions (the Balkans and in parts of Africa) as occurs with the market for smuggled cigarettes.⁹ All of these arguments suggest that we should be suspicious of claims that legalising products at point of sale reduces organised criminal profits.

As the variety of forms of criminal enterprises have globalised and proliferated, the focus of governments globally – though in Europe most notably – have been divided amongst competing threats. While priorities may have shifted, the weight of years of policy and bureaucratic emphasis remains, and most police agencies, certainly in the developed world and in many places in the developing world too, retain a strong focus on finding and seizing illicit narcotics.¹⁰ Whether they have been successful is another debate, but the fact remains that policing drugs markets

is still a primary priority for law enforcement. Proponents of front-end harm reduction policies suggest that one cost saving that may result from legalisation or de-penalisation may be reducing law enforcement attention to street level drug use and by doing so save resources or at least allow them to be redistributed elsewhere.

There is some merit in these arguments. However, in most police bureaucracies what appears easy from an external perspective – that funds are shifted from front-end policing to sophisticated organised crime investigations – will be easier said than done. Firstly, these require different styles of police capacity, resources and disciplines. So, yes, there may be savings, but it is questionable whether they will find their way into supporting high-end or externally focused investigations. In fact, in most cases where savings accrue, they are likely to free up policing for greater visibility and more crime prevention focused work – an objective that is laudable in its own right. Secondly, it should not be forgotten that front-end harm reduction requires much more effective cooperation between police and other authorities, notably those in the health sector, which in itself may be costly both in terms of time and money.

In the context of the current debate, and no matter which side of the aisle you are on, to talk about ‘harm reduction’ almost always means discussing policy options where drugs are bought and used at what could be called the ‘front-end’ of the market. The term has become exclusively associated with healthcare policy interventions. Yet, the term ‘harm reduction,’ or perhaps better stated ‘the reduction of harm,’ is far from a unique concern, and one that occurs in a wider set of public policy debates.

MEASURING HARMS ALONG THE ILLICIT SUPPLY CHAIN

Nevertheless, the renewed focus on harm is useful, not only because it is the best response to drug use, but because it could change our overall analytical paradigm. The question is, do we simply do more of what we have done – enormous expenditure on law enforcement, with mixed or at least uneven results – or do we think more creatively at the back-end too?

One approach is to extend the harm reduction analysis to illicit trafficking chains themselves, at least in terms of how we prioritise actions to respond. For a start, as stated, it would make our language and approach more consistent. The harms at the market end of the supply chain have been broadly agreed are mainly health ones, but what about further up the supply chain?

Illicit trafficking causes multiple harms around which a growing body of analysis has been written.¹¹ However that discussion is generally a motivation for why we should tackle organised crime as a whole rather than a strategy, based on limited resources, of how we should prioritise some aspects or harms in particular. This is however the purpose of public policy: organised crime must be managed, and we need to begin by focusing (and that means prioritising) where harm is considered the greatest.

An important body of literature has also cautioned that organised criminal activity may also bring, at least in the short term, some significant benefits, particularly for communities who may receive few services from the state. Therefore, resources from illicit activities are essential for survival, and the abrupt breaking down of criminal markets where no legitimate livelihood alternatives are provided may cause critical harms to local communities' economic and social development prospects.¹² The 'do no harm' principle may well apply in such cases.

Broadly, however, there is consensus that organised crime is in fact causing significant and escalating levels of harm. The nature of those harms is diverse, and in places where states have relatively limited institutional authority and capacity, these may have significant long-term consequences.

Identifying the harm caused by organised crime does vary by market of course. So the trafficking of illicit environmental products may have particular consequences for ecosystems or sustainable tourism for example. But three broad and particularly powerful harms characterise most organised crime supply chains. These are primary or significant harms, and while there are undoubtedly others, these are the most important. They are:

- The harm caused by violence associated with illicit drug markets.
- The harm caused by the distorting impact of illicit funds on politics and political processes.
- The harm caused by long-standing impunity and damage to the rule of law.

In none of these cases will an exclusively law enforcement or security based response be adequate to addressing the scope of the challenge – and law enforcement officials are the first to recognise this reality.¹³ None of the responses implemented in these three areas should solely be based on a law enforcement approach. And, indeed, to conceive of the responses too narrowly will mean that a focus on developing more comprehensive and sophisticated alternatives would have been lost from the outset. These three issues are not in and of themselves new, but they have not been as directly connected to the discussion on global policy responses to organised crime as is warranted by a more coherent and strategic approach.

Each of the three areas is discussed briefly in turn.

ENDING VIOLENCE

Violence, and homicide in particular, causes great human and financial costs. The 2011 *World Development Report* calculated that areas exposed to prolonged violence and conflict experienced a 20 % loss in development performance in comparison to more stable and peaceful peers.¹⁴ Yet pervasive violence is, although not always, associated with competition around drug markets. Such violence, particularly when the homicide rate is extremely high, is the result of street or gang violence around low-level drug markets. Take the case of Cape Town, where the 2014 homicide rate is some 65 murders per 100,000 people. That rate, which has increased exponentially over the last couple of years, is a direct result of gang conflicts fuelled by efforts to control local drug markets.

A number of the governments in Central America have noted that the war on drugs is just as potent and violent as any intra-state conflict or insurgency.¹⁵ The increasing power of criminal groups in Latin America has created a violent threat to children and youngsters who cannot achieve a decent lifestyle in their home states, triggering large scale displacement of populations both inside and outside their countries, with significant humanitarian and protection consequences.¹⁶ Central American cities, many of which have homicide rates above 100 victims per 100,000 people, suffer from the problem in an extreme form. In Central America and Mexico, an estimated 30% of murders are directly attributed to organised crime or gang violence.¹⁷

Regrettably, despite extensive efforts, we have surprisingly little to show for our efforts to reduce street level gang related drug violence in the cities of the developing world. Efforts that have focused on the manifestations of violence and conflict without assessing the role of illicit flows and criminal networks as causal factors have similarly been unsuccessful. For example, analysis of experimentation with gang truces, including those most recently in the Americas between 2012-14, showed that the most successful of these achieved their primary objective to reduce the rate of violent homicides in the short term, but in the medium- to long-term they were challenged to achieve sustainability whilst trafficking activities continued.¹⁸

This debate is not a new one, but the challenge is now of great urgency, with the growth of mega-cities and the intersection between drugs, criminal networks and terrorism in several of them.¹⁹ However, violence is not associated with all criminal markets, and is often locally contained, amongst the most marginalised, in major urban complexes. This necessitates that we need to rethink urban security, redoubling our efforts to seek better solutions for the urban poor, and a concerted effort to make a linkage between security and development issues, not in order to 'securitise' development, but in order to protect development interventions from criminal exploitation – and to deliver services where they are needed the most. That in its own way is the route to undercutting criminalised violence. As political momentum focuses around the UNGASS and the implementation of the ASD2030, there is a potentially unprecedented opportunity to push this debate further forward.

PROTECTING POLITICAL PROCESSES

A second and related question is the harm related to illicit trafficking and its impact on political processes, most pertinently illegal money entering into politics or funding political interests. This is of increasing concern in many developing countries where drug trafficking is prevalent. For example, a study in Kenya showed significant cross-over between political and criminal interests linked to drug trafficking.²⁰ The same applies in many countries, particularly as the emphasis on reducing the levels of violence around political campaigning has required more insidious and covert levels of political manipulation.²¹

Given the absence of electoral transparency, legislation in the majority of jurisdictions is lacking – and even where the legislation exists, the capacity to oversee, regulate and enforce that legislation is inadequate – understanding the influence of key criminal figures on political and electoral process is thus a significant challenge. Nevertheless, closer examination of the realities in several places suggests that the issue is one of considerable urgency. The modus operandi of important criminal figures is to ensure that they have political protection to safeguard their businesses and ensure that they are not prosecuted.

AN END TO IMPUNITY

Though the criminal justice approach may have served a mechanism to get more conservative forces on board in the front-end ‘harm reduction’ debate, the way the debate has been framed has largely side-stepped an important opportunity to consider a wider set of solutions to organised crime and illicit trafficking.

One of the most effective ways of doing so is to provide much needed funding to political parties, securing the political endorsement of those in a position to create and enforce the law. In many jurisdictions, therefore, this has created a degree of complicity between criminal enterprises and politics.²²

In such cases there is little that law enforcement agencies can do. In one prominent African country, a senior police investigator informed the author that his unit was entitled to go after most cases, but it was clear from the messages that they received that some people and cases were to be left alone. The common link between these cases was people who provided funds for political activities and in some cases personal benefit.²³

The point here is that a set of policy solutions beyond simple support to law enforcement agencies is required. These must focus on raising the costs of blurring the distinctions between crime and politics: what one recent Indian delegate to a conference in Mexico called the ‘criminalisation of politics and the politicisation of crime’.²⁴ There are no easy solutions here but we need to start with:

- A much greater focus in many countries on the issue of political party funding, and from where it is drawn.
- Sustained support for civil society and free media in countries where criminal funding plays a significant role in shaping political choices.

As this association and criminalisation of the state continues and strengthens, the result is the creation of widespread impunity for criminal acts. Impunity causes harm because it generally means high-level traffickers (often with political connections) operate unimpeded, while lower level people are targeted: people who are almost always from excluded and marginalised communities. In many contexts, those involved in protecting drug trafficking accumulate enormous influence and are untouchable. This is particularly the case in states where justice institutions have been compromised or weakened, such as in periods of conflict or post-conflict.

In many, although not all, such instances there is little chance of justice being served. In Guinea-Bissau or in several Central American states the police, prosecutors and judges are often too scared or too compromised to challenge the powerful. Those who engage in drug trafficking and those who protect them are highly unlikely to be prosecuted. That level of impunity causes severe damage to states, undercutting their long-term ability to deliver services and compromising key institutions.

How to end impunity in such cases is and will be a key challenge for future policy making. So, what options are available?

The standard international response in such cases has been to provide training and institutional support for law enforcement agencies. But such efforts are largely wasted when there is little protection for those officials who will have to conduct high-level investigations, arrests and prosecutions. No matter how willing or well trained the police were in Guinea-Bissau for example, there was little chance of making real headway. Where arrests were made and drugs or money seized, ‘high-level’ interventions quickly ensured that the good work was undone.²⁵

What is required are responses that partner across borders, to provide alternatives to compromised institutions. In many cases this is only possible when states have become so weak that international intervention is mandated by the Security Council or at least when an intervention can no longer be resisted by corrupt elites. Notwithstanding, doing so creates important precedents and lessons that can be applied in future cases.²⁶

That is essentially what occurred in the case of maritime piracy where courts in external states tried suspects from a state (Somalia) where justice infrastructure was weak or compromised. Although admittedly this did not lead to the arrest and trial of high-level people, it was a unique partnership between the North and South. While it presented a range of political challenges for both sides, it was largely successful in bringing to trial low-level pirates, sending an important and widespread message about the need for respecting the rule of law. Over a longer period, a UN Commission has acted to investigate high-level government officials in Guatemala on organised crime and corruption charges, and while the results have arguably been mixed,²⁷ the Commission has played a key recent role in a major corruption scandal that brought down the government.

While important, high-level targeting and prosecutions are not by themselves sufficient to prop up a weak justice sector and support it in a fight against organised crime. In order for actions that reduce impunity to have a long-lasting effect, they must be coupled with measures to increase the exposure of criminals and other drivers of illicit activities and organised crime in general. Such programmes complement the high-level interventions to reduce impunity by making it more difficult to achieve impunity in the first place.

In future then, *the question should be less about how assistance can be delivered to law enforcement agencies, but how a set of institutions can be created that build a partnership between different interests and seek to isolate corrupt or criminal elites*. Could a regional court to try drug trafficking cases be agreed in West Africa for example? Can we push forward more cases (such as in Guatemala) where internal and external partners work together in new hybrid institutions, protected from local corrupting influences, to bring high-level traffickers, within the framework of the rule of law, to book? Developing such arrangements must be the focus of global public policy responses to organised crime.

Efforts and innovations in alternative livelihoods and other ‘supply reduction’ strategies both in the Americas and in the opiate producing countries of Central and West Asia have failed to provide consistent returns on investment, and have largely ignored the versatility and legitimacy that trafficking groups can gain with local populations when they provide and control the major livelihood generator of the region.

FIRST, REDUCE HARM...

In all of these three issues – impunity and compromised institutions, criminalised politics and violence reduction – the ASD2030 looms large. Security and development issues are closely intertwined and the SDGs provide perhaps the most significant foundation for advancing the discussion in a generation. We must seek to address these issues more creatively than we have in the past and from a policy perspective that is complementary to law enforcement – but not the same.

While we recognise the difference in approach, we must resist the call to simply apply only harm reduction principles to drug use and not to illicit trafficking and organised crime. While it is clear that combating organised crime and drug trafficking at high levels will still be a necessary priority, there is a growing consensus that harm reduction-based approaches at lower levels is a more appropriate response. But policies are moving forwards at different speeds, with some states experimenting more than others, and a variety of new experiments emerging as to how organised crime can be tackled, so it is crucial that we start identifying and learning lessons in a context in which the policy framework is visibly being stretched. What occurs at UNGASS 2016 has the potential to begin a reorientation of the worldwide response to illicit drugs, including how they are trafficked.

In short, the same set of public policy questions apply both to the organised crime response as they have to the demand side approaches: how can we reduce the harms being caused, in order to manage the

challenges we face? If the UNGASS cannot break free of the polarised silos that have dominated the war on drugs era, then it will be a significant opportunity missed by the multilateral system to bring forward new approaches.

This also raises a connected set of questions as to whether, in the long-run, the current international multilateral infrastructure is adequate for the division that we need to make between dealing with drugs as a health issue – and dealing with all forms of trafficking and the associated harm as a justice and development issue. If that separation is taken to its logical conclusion, drug consumption issues should be dealt with by the UN agency responsible for health issues (the WHO) and justice and by implication illicit trafficking issues, coordinated within the framework of a development agenda, should be dealt with by a separate UN entity dedicated to dealing with criminal justice aspects of cross-border crimes, such as trafficking.²⁸

As indicated at the beginning of the article, two recent regional Commissions that highlighted the requirement for harm reduction measures also drew attention to the need to tackle organised crime – but what they suggested (albeit not in much detail) is more of the same. In context of the progress made on harm reduction, the fear is that we simply draw the conclusion that ‘we must now target organised crime; implying the same set of solutions we have already tried, which is largely an exclusively law enforcement based approach. Shifting the harms discussion further up the supply chain allows us to reconceptualise how we define the nature of what we face – to prioritise what we should tackle, and rethink our approach in these areas. That is the new challenge for ‘harm reduction’.

MEASURING THE IMPACT OF ORGANISED CRIME²⁹

A key challenge of expanding the definition of what constitutes 'harm' under the framework of organised crime comes from the debate surrounding what should be the metrics by which to measure a 'successful' response to organised crime. This debate is important because the way that success is measured tends to drive the 'toolbox' of approaches that are employed in response to organised crime. For example, regarding seizures as the primary metric of success has arguably led to an over-emphasis on interdiction and disruption strategies, rather than genuine investigations into the networks perpetrating those flows. Furthermore, seizure rates (along with measuring some related crimes, such as arrests for drug offences) have proven to be a better measure of the effectiveness of government and law enforcement agencies in interdiction activities, rather than providing any indication of changes and success in curbing organised crime. Moreover, such measures provide little or no indication of the impact that criminal networks are having on the security and development of local communities.

With discussions around the establishment of the ASD2030 framework³⁰ and subsequent indicators to measure progress, employing 'illicit financial flows' (IFFs) as a proxy measure of organised crime has been proposed.³¹ Ground breaking work by Global Financial Integrity (GFI) has created widespread acceptance of the use of the International Monetary Fund's balance of payments and residual trade statistics as an acceptable measure of IFFs, and thus for organised crime as a whole.³² Yet, GFI's work focuses on the reporting of licit trade; this by definition excludes the actual volume of criminal activity that occurs outside the legitimate economy. Data on activities such as drug trafficking, the wildlife trade or human trafficking is precisely what we would seek to accumulate in order to formulate an appropriate response to organised crime. Similarly, as with seizures, the GFI metric focuses on volume of IFFs, and does not demonstrate the impact of such flows. Therefore, it provides little assistance to policymakers and practitioners who are seeking to understand the implications for development responses and how to prioritise their assistance.

Moving toward a harm reduction approach means seeking a more responsive and multi-dimensional set of metrics, and it is clear that one single indicator is unlikely to fit the bill. There is a need for a basket of indicators that will provide data across two categories, 1) the **scale** of organised crime, and 2) its **impact**. Measurements of scale would analyse the depth and forms that organised crime has assumed, and measurements of impact would look at the ways that organised crime is engaging with communities, states and the natural environment, including through violent means. It is worth noting the juxtaposition between scale and impact as the two outputs do not necessarily rise and fall with each other. In fact, a decrease in the scale of organised crime can result in a greater impact on communities. For example, in Honduras, a decrease in cocaine trafficking resulted in greater competition between criminal actors and higher levels of violence and homicide.³³

Criminal justice data does remain important, but it must be analysed as part of a wider context allowing a more nuanced combination of crime data, seizure data, law enforcement indictments on typical organised crimes, as well as homicides and other forms of crime. Examining a combination of crimes may have value: targeted assassinations or 'hits', kidnappings, disappearances, unexplained arsons, and sharp changes in crime trends may be important indicators of organised crime when local contexts are taken into account. The extent of unsolved crime, particular targeted killings and the murder of witnesses or criminal justice officials, shows the degree of power or threat (including corruption) which criminal groups may have.³⁴ One important measure that could be used is that of 'protection': how much does it cost for criminal groups to obtain local or political protection to move goods or conduct their activities? There is a surprising amount of data available on 'protection fees' and qualitative interviews often provide an indication of these amounts. Increases in protection fees may signal greater difficulty in moving goods, whereas decreasing fees may suggest a greater diversity of 'protectors' in the market. At the local level, the extent of 'protection fees,' for example in an extortion market, may provide a useful indication of the changing strength of organised crime, as well as the degree of competition between criminal groups. Using the phenomenon of protection in conflict zones may also provide

a set of typologies against which to measure the development of organised crime and its links to the state, the latter generally being the most important protection network in town.³⁵

A critical element of moving toward people-centric and human security focused responses will be the greater use of public perceptions data. In the first place, public perceptions of the presence of organised crime is essential to supplement and interpret criminal data, as there is a tendency for organised crime actions to go unreported, particularly in environments where corruption is a concern. Surveys, such as the International Crime Victims Survey, which measures crimes that affect ordinary citizens on a large scale, found that the less confidence individuals had in the police the less likely they were to report 'conventional' or not as serious crimes. Thus, in regions such as Latin America and Africa – regions where observers are witnessing high levels of organised crime – there are very low crime reporting rates.³⁶

Perhaps more important, however, is the value of public perceptions data in measuring and understanding the impact of organised crime. This is arguably the more challenging and complex category to measure, as it focuses more on the intangible effects of organised crime in areas such as on increased levels of insecurity and diminishing public service delivery. There are a number of sources already available and systematically collected that could contribute to such a composite public perceptions indicator, including the 'Ease Of-' and 'Cost Of Doing Business' surveys and indexes compiled annually by the World Bank.³⁷ Moreover, Gallup Analytics collects global data on issues such as confidence in leadership, confidence in the military and the police, corruption, entrepreneurial energy and emotions. Surveys on public perceptions of safety can reflect increased levels of violence and fear in communities as a result of organised crime, while surveys of local businesses can uncover extortion rates and reflect the impact organised crime is having on local economies. At the same time, they may also reveal the level of dependency and concern that illicit markets and actors present for the community, which in turn can nuance the direction of international investment. ■

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Addressing the Development Dimensions of Drug Policy¹

Javier Sagredo, Rebecca Schleifer and Tenu Avafia

SUMMARY

- Repressive and prohibitionist drug policies have frequently been implemented irrespective of wider development goals.
- These policies have had little effect in eradicating production or problematic drug use, while producing their own harmful collateral consequences, in particular exacerbating poverty, impeded sustainable development and threatened the health and human rights of the most marginalised people.
- The vast majority of poor farmers grow illicit drugs to meet basic needs. Crop eradication eliminates their principal source of income, driving them further into poverty and insecurity.
- In 2014, WHO's technical guidance on HIV prevention, diagnosis, treatment and care for key populations recommended decriminalising drug use to facilitate conditions conducive to providing health and social services among people who use drugs.
- Drug control agencies and development institutions have tended to operate in isolation and in some cases at cross-purposes.
- To succeed in meeting the Sustainable Development Goals as well as drug control objectives, UN entities and Member States must commit to a sustainable development approach to drugs.
- UNDP is uniquely positioned within the UN to leverage its knowledge of the similarities and differences between countries at different stages of development, and to translate that into evidence-based insights for effective, adaptable development solutions, responding effectively to country and local demand.

The relationship between drug control policy and human development is complex and multifaceted. Yet, policies aimed at prohibiting and punishing the cultivation, sale and use of certain drugs have played a disproportionate role in shaping the international approach to drug control and country responses, irrespective of countries' development goals. Drug control policies have been justified by the real and potential harms associated with illicit drug use and markets, such as threats to safety and security, health problems, crime, decreased productivity, unemployment and poverty.

However, in many countries, drug control policies and related enforcement activities focused on reducing supply and demand have had little effect in eradicating production or problematic drug use. Various UN organisations have also described the harmful collateral consequences of these efforts: creating a criminal black market; fueling corruption, violence, and instability; threatening public health and safety; generating large-scale human rights abuses, including abusive and inhumane punishments; and discrimination and marginalisation of people who use drugs, indigenous peoples, women, and youth.² Evidence shows that in many parts of the world, law enforcement responses to drug-related crime have created or exacerbated poverty, impeded sustainable development, and threatened the health and human rights of the most marginalised people.

Drug control agencies and development institutions have tended to operate in isolation from each other and in some cases at cross-purposes. Drug control policies and accompanying enforcement practices have emphasised the role of organised crime and corruption in impeding human development and focused on criminal justice solutions. Otherwise, the potential impacts of drug control policies on development outcomes have mostly been factored into development planning at the margins and often limited to 'alternative development' in areas where illicit crops are grown.³ The root causes that sustain the cultivation of illicit crops, their trafficking and use, including poverty, food insecurity, lack of land tenure or access to markets, have not received sufficient attention.

The international drug control system recognises the 'health and welfare of mankind' as its overarching concern. To succeed in meeting Sustainable Development Goals (SDGs) as well as drug control objectives, UN entities and Member States must align drug control efforts with this goal. They must commit to community development and support the provision of viable and sustainable livelihoods for the poor. They must ensure that drug control measures protect human rights and do not impede access to HIV and other health services.

In April 2016 the UN General Assembly Special Session on drugs (UNGASS 2016) will assess and debate the successes and failures of international drug control policies. There is increasing recognition of the collateral harms of current drug policies, and that new approaches are both urgent and necessary. The UNODC has stated that the UN drug conventions do not require penalisation of drug use or possession for personal use and acknowledged the role of human rights abuses against people who use drugs in fuelling HIV.⁴ UNODC Executive Director Yuri Fedotov has encouraged UN Member States to use the upcoming UNGASS on drugs and other high-level meetings as opportunities to discuss ways to rebalance international drug control policy responses to focus on health and respect for human rights, and address stigma and discrimination that limits access to services by people who use drugs.⁵

Drug control policy affects many areas of UNDP's work. UNDP is committed to providing input on the impact of drug control policies on sustainable human development that can contribute to a more comprehensive and coherent UN system-wide approach to these issues at policy and programme levels. This paper discusses UNDP's position on addressing the development dimensions of drug policy.⁶

DRUG POLICY AND HUMAN DEVELOPMENT

Each year, the UN General Assembly (UNGA) reasserts that 'countering the world drug problem' requires an 'integrated and balanced approach' that must be carried out in full conformity with the purposes and principles of the UN Charter and 'in particular' fundamental human rights norms.⁷ Yet the control system has traditionally and systematically paid less attention to human rights and development consequences than to enforcement and interdiction.

Drug control policies often leave an indelible footprint on sustainable human development processes and outcomes. Yet, drug control agencies typically have not considered the human development context of their responses. Many policies have fuelled the marginalisation of people linked with illicit drug use or markets. As a result, people who use drugs are often among the most marginalised and stigmatised people in society, vulnerable to a wide array of human rights violations. Local communities in drug-producing countries also regularly face systematic human rights violations as a result of campaigns to eradicate illicit crops, including environmental devastation, attacks on indigenous cultures and damage to health from chemical spraying.⁸

Whereas the SDGs are intended to guide global development efforts for the next fifteen years, there are potential contradictions between the proposed SDGs and many current drug policies. For example, the SDGs aim to end poverty and hunger, protect the environment, and promote sustainable livelihoods as well as health and well-being for all. But global drug policies and their collateral consequences have fuelled and escalated violence; diverted limited funds and political attention from public health to law enforcement; and impeded access to lifesaving harm reduction interventions as well as medications essential

to treat pain and drug dependence. Drug production and trafficking, and related law enforcement activities, degrade the environment, contaminating water and soil, and harming protected forests.

Guided by its Strategic Plan 2014-2017, which states that 'the challenge is to rethink development,' UNDP could play an important role in several ways: for example, first, by highlighting the linkages between drug policy, public health and sustainable human development; and second, by bringing to the discussion UNDP's knowledge, empirical experience and capacity on human development issues, thereby helping to frame the development dimensions of drug control policies and in turn providing an evidence base for development-sensitive drug control policy.

THE IMPACT OF DRUG CONTROL POLICY ON HUMAN DEVELOPMENT

Evidence shows that supply and demand reduction activities have had little marginal meaningful effect in eradicating production or on problematic drug use.⁹ Further, increasing evidence demonstrates harmful impacts of drug control policies and law enforcement practices on development outcomes, particularly poverty and sustainable livelihoods; governance and the rule of law; human rights; gender equality; the environment; and on indigenous peoples and traditional and religious practices.

POVERTY AND SUSTAINABLE LIVELIHOODS

The cultivation of illicit drug crops is strongly linked to poverty, and driven by socioeconomic, security-related, agricultural and environmental factors. As UNODC Executive Director Yuri Fedotov states, 'Let us not forget that behind the policies, we have hundreds of thousands of farmers affected by poverty, food insecurity, lack of land, instability who [as] a result engage in illicit drug cultivation. It is our common responsibility to continue addressing the livelihood of these people...'¹⁰

For many people living in conditions of poverty and insecurity, cultivating illicit crops is often considered to be their best livelihood option. Coca, opium poppy and cannabis are non-perishable, high-value-to-weight commodities that can be grown

in marginal terrain, poor soil, with limited irrigation, and can provide income for those who are land-, food-, and cash-poor.¹¹ But illicit drug economies do not address the structural drivers of illicit crop cultivation or promote improvements in access to food, housing, education and land distribution. In addition, cultivators may face violence at the hands of state eradication campaigns and criminal, insurgent, and non-state actors involved in production and trafficking.

The vast majority of poor farmers grow illicit drugs to meet basic needs. Crop eradication eliminates the principal source of income, driving them further into poverty. Evidence suggests that destruction of coca plants as well as traditional crops has affected food security, contaminated water supplies, and degraded land, forcibly displacing populations dependent on coca, as well as those who are not.¹²

Political instability, weak governance systems, poverty, loss of livelihoods, inequality, and social exclusion, as well as conditions of insecurity and proliferation of small arms in post-conflict environments, also exacerbate the vulnerability of countries, territories and communities used as transit routes and for trafficking activities.¹³ In Mexico, for example, because of underlying poverty more than 25,000 children left school in 2013 to join drug trafficking organisations, and as a result

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faced substantial danger of serious violence and human rights abuses.¹⁴

UNODC and the World Bank have identified multidimensional poverty, food insecurity, lack of land tenure, and insecurity in the face of armed conflict as key drivers of illicit crop production.¹⁵ As the European Union has observed:

[N]o single project or program can address the multiple factors that drive illicit drug production . . . Evidence points to the fact that it is a combination of improved governance, security and economic growth that will deliver the development impact required to improve the life and livelihood of primary stakeholders and reduce illicit drug [crop] cultivation. . . . [D]evelopment assistance in illicit crop producing areas should be undertaken in full compliance with the overall aims of human rights protection, poverty alleviation, conflict prevention and resolution, peace building and human security.¹⁶

'Alternative development' programmes have been promoted as a way to wean farmers from drug crop production to legal crops or other non-agricultural activities. However, these programmes have traditionally produced questionable demonstrable efficacy in terms of supply reduction or development outcomes.¹⁷ The European Union, the Organization of American States (OAS) and UNODC have all argued that efforts to address illicit drug cultivation should be mainstreamed into national poverty reduction strategies, conflict prevention efforts and development programmes.¹⁸

Successful development depends on many factors including:

- long-term investments by governments and international donors;
- integration of sustainable livelihood strategies in local, regional, and national development plans;
- coordination of drug control and development experts and agencies;
- existence of sound monitoring and evaluation mechanisms;
- local ownership;
- development markets and infrastructure for crops or products that replace them;
- meaningful involvement of farmers as citizens with rights and partners in development.¹⁹

IMPACT ON PUBLIC HEALTH²⁰

A UNODC report published in 2014 estimates that approximately 243 million people or 5.2 percent of the world's population, used illicit drugs in the past year. Of these, about 10 percent are classified as 'problem drug users:' i.e. people who engage in high-risk consumption of drugs, such as injecting drug use, and people who are drug-dependent. Worldwide, an estimated 12.7 million people inject drugs.²¹

Some of the most severe drug-related harms are associated with injection drug use. Outside of sub-Saharan Africa, up to 30% of all new HIV infections occur among people who inject drugs. Unsafe injecting practices put people who inject drugs at high risk of blood-borne infections such as HIV and viral hepatitis, in particular hepatitis B and hepatitis C.²²

A substantial body of evidence shows the effectiveness of harm reduction interventions in preventing HIV and viral hepatitis, and preventing and reversing overdose – thereby saving lives and significant amounts of often scarce monetary resources.²³ In light of this evidence, UNODC, WHO, and UNAIDS all recommend that a comprehensive package of harm reduction services be integrated into national AIDS programmes, both as a HIV prevention measure and to support adherence to antiretroviral therapy and medical follow-up for people who use drugs.²⁴

However, evidence shows that criminal laws and related enforcement policies and practice have impeded access to these lifesaving health services in many countries. These include laws and policies that criminalise possession or distribution of sterile syringes and other drug paraphernalia, Opioid-Substitution-Therapy (OST), and peer outreach to people who use drugs; government registration of people who use drugs on registries accessible to police; and abusive policing practices. This has put people who use drugs at increased risk of HIV, viral hepatitis, and premature death from overdose.²⁵

In 2014, WHO's technical guidance on HIV prevention, diagnosis, treatment and care for key populations recommended decriminalising drug use because that measure would serve as a 'critical enabler' to create conditions conducive to providing health and social services, and preventing HIV, among people who use drugs.²⁶

The drug conventions require governments to take steps to reduce supply and demand for controlled drugs. These efforts must be balanced with States' obligations to ensure an adequate supply of narcotic and psychotropic drugs for medical and scientific purposes and consistent with their human rights obligations. The obligation to provide access to essential medicines is a core component of the right to health.²⁷

Several drugs subject to control under the international drug control conventions are also on the WHO 'Model List of Essential Medicines,' including morphine for pain treatment, and methadone and buprenorphine for OST.²⁸ Yet, only a fraction of people who inject drugs have access to OST.²⁹ Three quarters of the world's population has no or insufficient access to treatment for moderate to severe pain, and each year tens of millions of people suffer untreated moderate to severe pain. Unnecessarily restrictive drug control regulations and practices are a significant barrier to access to effective pain treatment.³⁰

IMPACT ON THE FORMAL ECONOMY

Current drug control efforts have fuelled the creation of a huge criminal black market with an estimated turnover of more than \$332 billion annually.³¹ Illicit drug markets are robust due to their high value, driven by a sustained demand. While the illegal drug market may generate economic growth, economic inclusion and employment, thus improving the lives of some who are involved, it also poses a threat to long-term development objectives and outcomes.³² Illegal businesses, often associated with money laundering schemes, affect formal economies in many ways including the distortion of markets, exacerbating income inequality, undermining the rule of law and fuelling corruption.

Drug markets can also undermine economic development by eroding social cohesion, degrading quality of life and forcing skilled workers to leave, while the direct impacts of victimisation, as well as fear of crime, may impede the development of those that remain. Violence and insecurity associated with illicit drug markets also drive up the costs of legitimate trade and commercial activities, and in turn discourage investment in affected regions.³³

A substantial body of evidence shows the effectiveness of harm reduction interventions in preventing HIV and viral hepatitis, and preventing and reversing overdose – thereby saving lives and significant amounts of often scarce monetary resources. In light of this evidence, UNODC, WHO, and UNAIDS all recommend that a comprehensive package of harm reduction services be integrated into national AIDS programmes, both as a HIV prevention measure and to support adherence to antiretroviral therapy and medical follow-up for people who use drugs.

IMPACT ON GOVERNANCE, CONFLICT AND THE RULE OF LAW

Illicit drug markets undermine democracy and confidence in the criminal justice system. Weak state institutions, absence of basic infrastructure and lack of economic opportunities create enabling conditions for the drug trade to flourish. Criminal drug organisations operate and expand their business by paying off private individuals and police, judiciary and political officials at all levels. Organised crime has the potential to usurp the rule of law where the state is not present. The more the state is permeated with the influence of the drug trade, the more difficult transparency and accountability becomes. At the same time, the more public institutions and procedures are weakened, the more they are susceptible to being permeated by the illegal drug economy, in some contexts on a massive scale. The illicit drug trade can also affect income inequality which may then disturb power structures within communities, erode traditional social structures, and encourage more people to enter the illicit drug industry.³⁴

UNDP has recognised that in Latin America for example, policies focusing predominantly on repression, increased penalties and use of force have increased lethal violence and police abuse, fuelled belligerent responses from criminal organisations and provoked their fracture and geographic dispersion. Successful interdiction efforts, arrest or extradition of drug cartel leaders and destruction of drug cartels, have led to increased levels of violence, as the remaining players compete to control market share.³⁵

Enforcement pressure on one production area or transit route displaces production or trafficking routes, and related crime, violence and destabilisation, to new geographic areas and communities. Transit countries often also experience an increase in drug consumption, which in turn can lead to an increased burden on the health system.³⁶

The excessive use of criminal justice mechanisms, the disproportionality of incarceration penalties for drug-related offences and the enforcement of mandatory sentencing laws have contributed to overloading the judicial and prison systems, undermining their capacity to deliver justice and support rehabilitation. The lack of alternatives to incarceration and re-entry mechanisms and the excessive use of pretrial detention have contributed to serious prison overcrowding, facilitating human rights abuses, as well as connections to organised crime networks within prison.³⁷

HUMAN RIGHTS IMPLICATIONS OF DRUG POLICY

'Placing human rights at the centre of drug control, crime prevention and criminal justice provides an organizing set of principles that dissolves boundaries between the fields and promotes a single coherent response. Effective drug control cannot exist without fair criminal justice and successful crime prevention.. ...Such an approach represents more than "added value"; it is a legal obligation.'³⁸
-Antonio Maria Costa, Executive Director, UNODC (2010)

In many countries around the world, drug control efforts result in serious human rights abuses: torture and ill treatment by police, mass incarceration, extrajudicial killings, arbitrary detention, denial of essential medicines and basic health services. Local communities in drug-producing countries regularly face violations of their human rights as a result of campaigns to eradicate illicit crops, including environmental damage, attacks on indigenous cultures, and displacement and damage to health from chemical spraying. Communities also face serious human rights abuses by large-scale drug trafficking organisations including massacres, killings, forced displacement, sexual and physical violence and extortion.³⁹

More than 235,000 people are arbitrarily detained, often without their consent and or any form of due process, in over 1000 compulsory drug detention centres in East and South East Asia, under the guise of 'treatment' or 'rehabilitation'.⁴¹ UN guidance recognises that drug dependence is a chronic, relapsing condition and that several episodes or types of treatment may be required to overcome it.⁴² Yet in some countries, 'drug courts' have obliged many people with drug dependence to follow abstinence-based treatment and subjected them to additional penal measures if they fail 'treatment'.⁴³

The death penalty for drug-related crimes is a violation of international law. Yet 33 countries retain this penalty and up to 1,000 people are executed annually for drug offenses.⁴⁴ Drug enforcement efforts have led to extrajudicial killings by police and military. Some 2,800 people were extra-judicially executed in the first three months of Thailand's 2003 'war on drugs' campaign, at least half of whom had no connection whatsoever to drugs. According to a 2007 investigation, of 2,819 people killed between February and April 2003, more than 1,400 were unrelated to drug dealing or had no apparent reason for their killings.⁴⁵ Targeted killings of drug traffickers have also been justified as a military intervention, in violation of international humanitarian as well as human rights law.⁴⁶

IMPACT OF DRUG CONTROL POLICIES ON THE ENVIRONMENT

The 1988 Convention Against Illicit Traffic in Narcotic Drugs requires state parties to 'take appropriate measures to prevent illicit cultivation of and to eradicate plants containing narcotic or psychotropic substances.' These measures must 'respect fundamental human rights and shall take due account of traditional licit uses, where there is historic evidence of such use, as well as protection of the environment'.⁴⁷

In practice, however, eradication campaigns have had devastating consequences for the environment. Drug cultivation, production and related trafficking and enforcement activities can also cause serious harm to the environment including: deforestation, soil erosion and degradation, loss of endemic species, contamination of soil, groundwater, and waterways and the release of climate change fuelling gases including methane, carbon dioxide, carbon monoxide and nitrogen oxides, to name a few.⁴⁸

Meanwhile eradication campaigns have widely been shown as ineffective, leading Richard Holbrooke, US Special Envoy to Afghanistan and Pakistan, to comment in 2009, 'Spraying the crops just penalises the farmer and they grow the crops somewhere else ... This is the least effective program ever'.⁴⁹ Glyphosate, a herbicide used in aerial fumigation of illicit coca crops, has been associated with serious harm to physical and mental health, food security, family income and the environment. The International Agency for Research on Cancer, a specialised agency of the WHO, recently reclassified glyphosate as a probable carcinogen.⁵⁰

IMPACT OF DRUG CONTROL POLICIES ON INDIGENOUS PEOPLE, TRADITIONAL, AND RELIGIOUS PRACTICES

The criminalisation of indigenous, traditional practices done without consultation with indigenous communities raises a number of human rights and development concerns. The ban on traditional uses of coca, opium and cannabis in the 1961 Convention was passed at a time when scant attention was given to cultural and indigenous rights and before the adoption of key international instruments and relevant jurisprudence protecting the right of all indigenous peoples to free and prior informed consent relating to issues that affect them, and to maintain traditional, religious and medical practices, and to own, develop, control and use of their real property and resources.⁵¹ Criminalisation of drugs used for traditional and religious purposes likewise contradicts human rights protections for the traditional and religious uses of controlled drugs.⁵²

Meanwhile eradication campaigns have widely been shown as ineffective, leading Richard Holbrooke, US Special Envoy to Afghanistan and Pakistan, to comment in 2009, 'Spraying the crops just penalises the farmer and they grow the crops somewhere else ... This is the least effective program ever.'

UNDP SUPPORT FOR SUSTAINABLE DEVELOPMENT APPROACHES TO DRUG POLICY

UNDP's mandate provides it with a unique opportunity to support countries in adopting evidence-based and development-sensitive drug policies that address the harms caused by illicit drug production, trafficking and abuse, as well as the harm caused by drug control efforts.

Figure 1. Sample of countries with mandatory death penalty for drug offences⁴⁰

Country	Number of death sentences/ executions in 2011	Number of death sentences/ executions for drug-related offenses in 2011	% of death sentences/ executions for drug offenses
Islamic Republic of Iran	676	540	80%
Kuwait	17	3	18%
Malaysia	108	83	77%
Singapore	4	2	50%
United Arab Emirates	31	7	23%
Vietnam	69	27	39%
Yemen	29	10	34%

However, this requires, among other things, focusing not only on illicit cultivation and use but also on their root causes: poverty, social exclusion, inequality, government instability and weak of rule of law. Figure 2 provides a snapshot of how drug policy intersects with various aspects of UNDP's work as articulated in the 2014-2017 Strategic Plan.

DEVELOPMENT-SENSITIVE PROGRAMMING IN SUPPORT OF UN MEMBER STATES

Many aspects of UNDP's policy work and programme delivery in countries could support initiatives already being undertaken by UN Member States to implement development-sensitive drug control policies.

SUSTAINABLE DEVELOPMENT PATHWAYS

A substantial body of evidence has shown that drug policies anchored in economic and social development plans are more likely to result in positive development outcomes. An important opportunity exists for UNDP to support Member States' programmes to tackle poverty, inequality and exclusion in a way that empowers vulnerable populations who depend on illicit drug economies or those who experience exclusion because of problematic drug use.

INCLUSIVE AND EFFECTIVE DEMOCRATIC GOVERNANCE

UNDP's work assisting countries to maintain or secure peaceful and democratic governance, helping institutions to adapt to changing public expectations and deliver clear benefits to citizens, whether in terms of better services, improved access to resources needed for employment and livelihoods or greater security, could also provide an important pathway into the development of evidence informed drug policies anchored in human rights principles. Promoting a culture of accountability, inclusive governance and participation reduces space for corruption and infiltration of organised crime within government institutions.

UNDP's experience in the design and implementation of evidence-based, sustainable human development-oriented public policy and in the construction of more

effective governance has strong potential for helping drug policy frameworks bring greater development benefits to citizens and increased confidence and trust in public institutions, both at national and, most intensively, at sub-national level. UNDP's work in reinforcing the rule of law and citizen security should promote greater respect for citizen rights, facilitate stronger civilian oversight, help to counter drug-related discrimination and allow for faster progress in reducing drug-related gender-based violence. Moreover, UNDP's promotion of civil, political, economic, cultural and social rights should help reduce discrimination and violence experienced by women, youth, indigenous people and other minorities with linkages to drug use or drug markets.

UNDP could build on its experience working with Member States to review and shape laws and legal practices to create legal and human rights environments supportive of effective responses to HIV for people who use drugs and other marginalised populations. This work could provide a model for meaningful engagement with civil society and in particular with those most affected by drug-related problems to address drug laws, policies and practices that affect their lives and the communities in which they live.⁵³

UNDP could support longer-term efforts to strengthen democratic governance wherever it has been challenged by illicit actors of drug-markets. For example, on issues like legislative oversight, transparency of public accounts, improvements in public administration, reinforcement of local governments to deliver basic services and working with the non-governmental and private sectors. Furthermore, complementary support can be given to address justice and security sector institutions focusing on rapid restoration of access to justice and the rule of law, transitional justice measures, longer-term recovery of justice and security sector institutions and the implementation of preventive strategies to confront drug-related crime and violence, including gender-based violence.

RESILIENCE BUILDING

All areas of work proposed in UNDP's 2014-2017 Strategic Plan can help build resilience to reduce the harmful impact of drug-related problems. Initiatives that result in higher levels of employment, more equitable access to resources, better protection against economic and environmental shocks, peaceful settlement of disputes,

progress toward democratic governance and comprehensive HIV and health responses that include harm reduction can all mitigate the negative impacts of drug production, drug trafficking and problematic drug use.

Averting major development setbacks and promoting human security in areas and communities strongly affected by violence and other threats caused by illicit drug production and trafficking or by the negative consequences of repressive drug policies, is another aspect of people-centred human development. UNDP has experience and capacity to induce effective recovery from conflict-induced crises in those cases where prevention has fallen short, through early economic recovery and focus on employment and livelihoods stabilisation and creation, reintegration of displaced persons and restoration of basic infrastructure at local level. Additionally, peaceful resolution of disputes and mediation in order to stabilise volatile conditions could be of great help in areas with drug market related conflicts. In these contexts, interventions on illegal economies must be centred on the protection of citizens and the reduction of risks, harms and negative impacts.

UNDP has recognised that in Latin America for example, policies focusing predominantly on repression, increased penalties, and use of force have increased lethal violence and police abuse, fuelled belligerent responses from criminal organisations, and provoked their fracture and geographic dispersion. Successful interdiction efforts, arrest or extradition of drug cartel leaders, and destruction of drug cartels have led to increased levels of violence, as the remaining players compete to control market share.

Figure 2. How drug policy intersects with various aspects of UNDP's work as articulated in the 2014-2017 Strategic Plan

UNDP STRATEGIC PLAN OUTCOMES	EXAMPLES OF DRUG POLICY RELATED ISSUES THAT NEGATIVELY AFFECT ACHIEVEMENT OF UNDP'S STRATEGIC PLAN OUTCOMES
1 Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded	<ul style="list-style-type: none"> 1. Inhibition of legitimate social and economic activity and lack of formal and legal economic alternatives for the poor, youth, women, indigenous populations and other excluded groups, because of illegal market dynamics. 2. Forced eradication campaigns precede development of alternative livelihood options, undermining food security and exacerbating poverty. 3. Greater exposure to risks in poverty environments due to a mix of social determinants such as higher availability of drugs and arms, higher urbanisation levels, higher crime rates, presence of trafficking organisations, repressive law enforcement strategies and presence of violence.
2 Citizen expectations for voice, development, the rule of law and accountability are met by stronger systems of democratic governance	<ul style="list-style-type: none"> 4. Excessive use of criminal justice mechanisms, the disproportionality of penalties for drug offenses, including death penalty and long-term incarceration, abuse of pretrial detention and the enforcement of mandatory sentencing laws contribute to overload the judicial and prison systems, making them even more inefficient and undermining people's confidence in them. 5. Impunity for human right abuses and major crimes due to corruption of and major threats to justice system officials and other decision makers and administrative authorities. 6. Erosion of democratic governance, rule of law and people's adherence to social norms and institutions by illegal actors or by means of the 'normalisation' of illegal activities, political and economic influence or lack of protection from law enforcement and justice.
3 Countries have strengthened institutions to progressively deliver universal access to basic services	<ul style="list-style-type: none"> 7. Laws criminalising drug use/possession of small amounts of drugs for personal use, discrimination and lack of investment in health and social welfare, impede people who use drugs' access to basic services such as housing, education, healthcare, employment, social protection and treatment. 8. Lack of social (re)integration processes along with significant percentages of relapses and readmissions limit the chances of addressing drug dependence and substantially reduce the efficiency of investments in treatment and recovery systems. 9. Absence of comprehensive harm reduction and effective prevention, treatment and care services and policies for people who use drugs contributes to increased prevalence of HIV and other infectious diseases.
4 Faster progress is achieved in reducing gender inequality and promoting women's empowerment	<ul style="list-style-type: none"> 10. Involvement of women in drug trading due to economic and gender-inequality, such as single mothers needing a means by which to support their family. 11. Disproportionate incarceration of women for their participation in the lowest levels of drug production or trafficking. Women feel consequences of criminal punishment differently, often with greater impact on their children and families. Lack of drug-related services for women who use drugs in prison or pretrial detention. 12. Higher prevalence of gender-based violence affecting women who use drugs, with double vulnerability and stigma and the lack of specialised services.
5 Countries are able to reduce the likelihood of conflict, and lower the risk of natural disasters, including from climate change	<ul style="list-style-type: none"> 13. Weak states create environments conducive to illicit activity, thereby allowing armed groups to use illicit drug economies to finance their activities thus threatening citizen security and fuelling conflict. 14. Implementation of repressive drug control policy causes loss of livelihoods, displacement, migration and criminalisation of rural communities, fuelling conflict. 15. Deforestation, land degradation, loss of endemic species and pollution of aquifers from illegal production of drugs or the fumigation, eradication and destruction of drug laboratories.
6 Early recovery and rapid return to sustainable development pathways are achieved in post-conflict and post-disaster settings	<ul style="list-style-type: none"> 16. Violent conflicts cause considerable damage to infrastructure, destroy livestock and farming land, result in the mass displacement of populations, lead to social instability, loss of household members, human rights violations, and undermine human development. Participation in the illicit drugs economy becomes a viable source of income. 17. Loss of income, unemployment and food insecurity resulting from supply control programmes may lead to frustration, antipathy toward authorities, and social instability. Experiencing hardship and with no other options on hand, households often resume cultivation of drug crops and farmers disperse fields more widely or move to more remote locations. 18. Economic turbulence, along with poverty and social inequality, can also exacerbate existing obstacles in access to health, education and social services.
7 Development debates and actions at all levels prioritise poverty, inequality and exclusion, consistent with UNDP's engagement principles	<ul style="list-style-type: none"> 19. Pre-eminence of prohibition and abstinence-based policies fuel exclusion and do not allow for debate on the effects of drugs and drug policy on poor and excluded populations. 20. High sensitivity of drug issues along electoral processes, generating political problems for the promotion and approval of alternative policies and interventions. 21. Metrics and indicators for drug policy success are based in the specific and narrow traditional objectives of drug demand and supply reduction without any other consideration of its impact on human rights, social inclusion or on any other elements of sustainable human development.

The potential impacts of drug control policies on development outcomes have mostly been factored into development planning at the margins and often limited to 'alternative development' in areas where illicit crops are grown. The root causes that sustain the cultivation of illicit crops, their trafficking and use, including poverty, food insecurity, lack of land tenure or access to markets, have not received sufficient attention.

DRUG POLICY AND THE POST-2015 AGENDA

Topics and principles at the core of the post-2015 agenda that should also be considered in relation to drug policy include:

1. Poverty eradication, sustainable consumption and production, and protecting the natural resource base of economic and social development.
2. People centred approaches: just, equitable and inclusive, with inclusive economic growth, social development and environmental protection.
3. Freedom, peace and security, the rule of law, good governance, gender equality, women's empowerment and commitment to just and democratic societies for development.
4. Respect for the Universal Declaration of Human Rights.
5. Importance of international cooperation and of common but differentiated responsibilities.
6. Need for different approaches depending on national or local circumstances and priorities.
7. Need for additional resources for sustainable development.
8. Improvement of the quality, coverage and availability of disaggregated data to ensure that no one is left behind.

Figure 3. A snapshot of how UN Member States, with support from UNDP, could promote development-sensitive policies and programmes on drug policy and control.

RESILIENCE BUILDING	INCLUSIVE AND EFFECTIVE DEMOCRATIC GOVERNANCE	SUSTAINABLE DEVELOPMENT PATHWAYS
Address mass incarceration and disproportionate sentencing, by for instance, increasing access to legal services and alternatives to incarceration	Address abuses that interfere with access to comprehensive harm reduction services, including laws criminalising drug use and possession of small amounts of drugs for personal use and drug paraphernalia laws	Support the provision of viable and sustainable livelihoods for small farmer-producers of illegal drug crops and ensure that alternative development programmes are non-discriminatory and based on economically realistic alternatives
Focus on reducing the power of criminal organisations as well as the violence and insecurity that result from their competition with both one another and the state	Address legal, regulatory and policy barriers to access to narcotic drugs for pain relief (e.g., morphine) and drug treatment (e.g., methadone and buprenorphine for opioid dependence)	Advocate that illicit crop eradication not be undertaken until small-farmer households have been supported to adopt viable and sustainable livelihoods
Promote the meaningful participation of communities including people who use drugs and indigenous communities affected by drug control policies in the development and implementation of policies that affect them	Encourage countries to take advantage of room within the drug conventions on penalisation of possession and use of controlled substances, including decriminalisation of drug use and possession of small amounts of drugs for personal use	Support local development, while considering interactions with factors such as human security, governance, violence, human rights, development and food security

There are contradictions between the targets established in the SDGs and the drug policies emanating from the three drug conventions. The SDGs aim to promote sustainable development, including health and well-being for all. But as described above, global drug policies and their 'unintended consequences' have fuelled and escalated violence; diverted limited funds and political attention from public health to law enforcement; and impeded access to lifesaving harm reduction interventions as well as medications essential to treat pain and drug dependence. Several SDGs aim to end poverty and hunger, protect the environment, and promote sustainable livelihoods, but drug production and trafficking, and related law enforcement activities, degrade the environment, contaminating water and soil and harming protected forests. A number of SDGs aim to promote human rights by combating discrimination, promoting gender equality and strengthening access to justice and government accountability at all levels. However, the illicit drug trade, and efforts to control it, have devastating impacts on indigenous people and on women and girls, have undermined democratic governance and the rule of law, and threatened the human rights of people who live in communities where drugs are produced, through which they are trafficked, and where they are sold. These contradictions need to be clearly presented and debated in the process of defining the new global agenda for sustainable development and, more intensely, during the evaluation of the international drug control system and its implementation at UNGASS 2016.

The post-2015 development agenda provides an opportunity to establish different measures of success for drug policy, with a clear articulation of metrics related to the impact of drug policies on peace, development and human rights.

CONCLUSION

UNDP's sustainable human development mandate affords it the opportunity to develop unique approaches and solutions, including as it relates to the intersection of drug policy and development. UNDP is uniquely positioned within the UN system to leverage its extensive knowledge of the similarities and differences between countries at different stages of development, and to translate that into evidence-based insights for effective, adaptable development solutions, responding effectively to country and local demand. The almost universal reach of UNDP, its 'lead in development thinking,' its operational focus and its relationships of trust with national partners, are strong assets to address complexity, to deliver development results and to become a force for development-sensitive reform.

UNDP's greater involvement in drug policy discussions could also spur constructive engagement of other UN agencies and entities, while deepening strategic thinking and responses by the UN system, developing consistency in results formulation and monitoring, forging closer links between programmes and agencies and strengthening links with non-UN partners. UNDP's focus on country-level coordination and on delivery and development results could strengthen UN Country Team capacity to support Member State's priorities, providing assistance through its technical work and expertise on cross-sectoral issues, and drawing on non-resident agencies with relevant knowledge and skills.

Additionally, UNDP's coordination with the UN Secretariat could contribute to enhancing the achievement of development results, as it relates to development-sensitive drug policy and programming. UNDP's strong engagement with key UN system actors like the Department of Economic and Social Affairs (ECOSOC), the Office for the Coordination of Humanitarian Affairs (OCHA), the Department of Peacekeeping Operations (DPKO) and the Department of Political Affairs (DPA) can support UN system coherence in this and other development issues.

UNDP's commitment to South-South and Triangular cooperation, capacity building and facilitation of lessons learned exchanges, are important assets that could be mobilised toward supporting development-sensitive drug control policy, as for other sustainable human development issues. UNDP could help across a range of settings to disseminate knowledge on what has worked in the development context and what has not, work with partners to support the harmonisation of policies and regulations that allow for better exchanges, mobilise strategic funding and technical cooperation and connect relevant actors to develop effective development solutions, while benefiting from its wide network of development partners.

Finally, UNDP's additional assets include its capacity to support multi-sectoral approaches to complex development challenges, its ability to influence policy and its mobilisation capacity to tackle important issues or specific crises and its long-standing role as a trusted partner working across sectors and with multiple stakeholders, even on sensitive issues. Adding UNDP's engagement to multilateral support to governments addressing drug-related challenges would almost certainly make a difference in ensuring drug policy and control are more fully coherent with development policies and goals.

In 2014, WHO's technical guidance on HIV prevention, diagnosis, treatment and care for key populations recommended decriminalising drug use because that measure would serve as a 'critical enabler' to create conditions conducive to providing health and social services, and preventing HIV, among people who use drugs.

NEW METRICS TO EVALUATE DRUG CONTROL POLICIES

Success in drug control efforts has mainly been measured by supply and demand reduction: hectares of illicit crops eradicated, volumes of drugs seized and numbers of people arrested, convicted and incarcerated for drug law violations. These are process measures that reflect the scale of enforcement efforts but tell us very little about the impact of drug use or policies on people's lives. Measuring success by arrests and seizures creates perverse incentives for law enforcement, and may encourage law enforcement to engage in violence or other abuse to achieve these goals. It also encourages police to seek out small offenders, such as people who use drugs or commit minor drug-related offenses, as they are easy targets for arrest.

Metrics and indicators for drug policy success are based in the specific and narrow traditional objectives of drug demand and supply reduction without any other consideration of its impact on human rights, social inclusion or on any other elements of sustainable human development.

The development of a comprehensive set of metrics to measure the full spectrum of drug-related health issues, as well as the broader impact of drug control policies on human rights, security and development would be an important contribution. UNDP's experience with Human Development indices, its mandate to promote human development and its role within the UN system make it well suited to play a role in the development of such metrics. ■

Possible metrics to consider include:

1. Goals that address root causes that contribute to supply and demand for drugs including poverty, food insecurity, lack of access to markets, health and education, lack of land tenure, lack of security, presence of armed conflict;
2. Targets that address progress toward ensuring the 'health and welfare of mankind,' including a decrease in the number of overdose deaths and infection rates for HIV, hepatitis B and C and other communicable diseases among people who use drugs; an increase in access to harm reduction, treatment demand and treatment access; an increase in investments in health and social welfare benefits, and in the number of people receiving such assistance; a reduction in excessive and disproportionate punishments;
3. Indicators that measure access to health care information and services in consultation with and participation of affected communities; harms to individuals and communities, such as the number of victims of drug-related violence; levels of social and economic development in communities where drug production, consumption, or sale is concentrated; and underlying conditions of poverty, inequality, and insecurity that sustain cultivation of drug crops and exacerbate vulnerability to trafficking and organised crime.

NOTES

- 1 'Editor's note: This contribution has been shortened from its original version: R. Schleifer, J. Sagredo, T. Avafia, 'Addressing the Development Dimensions of Drug Policy' (New York: United Nations Development Programme, June 2015), <http://www.undp.org/content/dam/undp/library/HIV-AIDS/Discussion-Paper--Addressing-the-Development-Dimensions-of-Drug-Policy.pdf>. This article should thus be seen as a summary of the official UNDP discussion paper on drug policy. Where specific sections of the original document have been dealt with in greater depth by other contributions in this report, parsimony has mandated they be heavily shortened or removed. Their absence should not be viewed as oversight of the authors.
- 2 See other contributions to this report.
- 3 See David Mansfield's contribution to this report.
- 4 UNODC, 'Drug Policy Provisions from the International Drug Control Convention', 2014, http://www.unodc.org/documents/hlr/Drug_policy_provisions_from_the_international_drug_control_Conventions.pdf; UNODC, 'UNODC and the Promotion and Protection of Human Rights: Position Paper', 2012, http://www.unodc.org/documents/justice-and-prison-reform/UNODC_Human_rights_position_paper_2012.pdf.
- 5 UNODC, 'Contribution of the Executive Director of the United Nations Office on Drugs and Crime to the High-Level Review of the Implementation of the Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem, to Be Conducted by the Commission on Narcotic Drugs in 2014', 2013, <http://www.unodc.org/documents/hlr/V1388514e.pdf>.
- 6 A lengthier version of this paper first appeared as: UNDP, 'Addressing the Development Dimensions of Drug Policy', 2015, <http://www.undp.org/content/dam/undp/library/HIV-AIDS/Discussion-Paper--Addressing-the-Development-Dimensions-of-Drug-Policy.pdf>.
- 7 See, e.g., UN General Assembly, *UN General Assembly Resolution 68/197. International Cooperation against the World Drug Problem*, 2014.
- 8 See, e.g., P. Keefer and N. Loayza, 'Innocent Bystanders: Developing Countries and the War on Drugs' (World Bank Publications, 2010); World Bank,
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Measuring the Impacts of Repressive Drug Policies on Women

Kasia Malinowska-Sempruch and Olga Rychkova

SUMMARY

- Punitive drug laws and policies pose a heavy burden on women and, in turn, on the children for whom women are often the principal caregivers.
- In Latin America, between 2006 and 2011, the female prison population increased from 40,000 to more than 74,000, some facing sentences as high as 30 years, largely because of drug convictions.
- Punitive drug laws result in children being taken from their mothers, a reduced access to essential health and treatment services and stigmatise vulnerable populations placing them at a much higher risk of HIV and HCV infection and other health-related issues.
- Women who inject drugs have a far higher HIV prevalence than men; as well as face a higher risk of violence, incarceration and a host of other human rights issues.
- Where drug-related health services exist, they are rarely tailored to the needs of women. Moreover, despite being critically needed, anti-violence services remain largely unavailable to women who use drugs.
- Less punitive laws for minor and non-violent drug infractions are the best single means of reducing incarceration of women and thus incarceration-related abuse. The authors suggest a comprehensive set of new policies, targets, metrics and indicators to reverse or at least mitigate these impacts.

In the public mind, the ‘war on drugs’ usually conjures up a male image. In most countries, official statistics would show that men, indeed, are the majority of people who use drugs recreationally, who have problematic use and who sell drugs. But punitive drug laws and policies pose a heavy burden on women and, in turn, on the children for whom women are often the principal caregivers.

Men and boys are indeed put at risk of HIV and hepatitis C by prohibitionist policies that impede access to and use of prevention and care services, but women and girls virtually always face a higher risk of transmission of these infections. Men suffer from unjust incarceration for minor drug offences, but in some places women are more likely than men to face harsh sentences for minor infractions.

Treatment for drug dependence is of poor quality in many places, but women are at an especially high risk of undergoing inappropriate treatment or not receiving any treatment at all. All people who use drugs face stigma and discrimination, but women are often more likely than men to be severely vilified as unfit parents and ‘fallen’ members of society.

As other papers in this report highlight, criminalisation and stigmatisation of those at greatest risk of HIV infection fuels the epidemic. People who inject drugs experience all of this and, consequently, they account for 30% of new HIV infections outside of sub-Saharan Africa.¹ In China, Malaysia, the Russian Federation, Ukraine and Vietnam, they account for 67% of all HIV cases.²

This paper elaborates on the gender dimension of drug policy and law with attention to the burdens that ill-conceived policies and inadequate services place on women and girls.

WHAT THE UN AND OTHER INTERNATIONAL BODIES SAY

In a resolution in 2005, the UN Commission on Narcotic Drugs (CND) formally recognised the ‘adverse impact of drug use on women’s health, including the effects of fetal exposure’ and urged member states to implement ‘broad-based prevention and treatment programmes for young girls and women’ and to ‘consider giving priority to the provision of treatment for pregnant women who use illicit drugs’.³ It also asked the UNODC to include more gender-disaggregated information in its drug reports. A 2012 CND resolution noted that ‘women with substance abuse problems are oft deprived of or limited in their access to effective treatment that takes into account their specific needs and circumstances.’ It urged member states to ‘integrate essential female-specific services in the overall design, implementation, monitoring and evaluation of policies and programmes addressing drug abuse and dependence,’ including the integration of ‘childcare and parental education’ in treatment services. It further encouraged members states to ‘take into account the needs of women who have experienced sexual and other violent trauma related to drug abuse’ in their programmes.⁴

The UN Special Rapporteur on Violence Against Women, Rashida Manjoo, reported to the General Assembly in 2013 that drug laws and policies 'are a leading cause of rising rates of incarceration of women around the world' and expressed concern that in some countries 'women who commit relatively low-level drug crimes' are more likely to be handed long prison sentences than men who commit major trafficking offences. She highlighted that '[w]omen who commit relatively low-level drug crimes find themselves serving prison time while more serious offenders often escape imprisonment by entering into plea-bargaining deals'.¹⁵

In its 2014 report on Brazil, the Committee on the Elimination of Discrimination Against Women (CEDAW) highlighted the large increase in the number of women in prison and pretrial detention in the country, 'a large proportion of them... imprisoned for committing drug trafficking-related offences, in particular for having transported drugs (mules) at the request of their partners.' CEDAW urged Brazil to help women avoid drug-related activities and incarceration and also to improve the conditions of those incarcerated, including ensuring housing in facilities separate from men and providing appropriate services for pregnant women.⁶ In a 2014 policy briefing UN Women emphasised that 'women's involvement in drug use and the drug trade reflects the decreased economic opportunities and lower political status that women face in everyday life'.¹⁰ The agency stresses that women who participate in the drug trade, usually in low-level positions, often do so because they 'lack education [and] economic opportunity or have been victims of abuse'.¹¹ UN Women also cites gross inequality in access to health services for women who use drugs. Meanwhile, in 2015, the UNDP noted that the 'corruption, violence and instability' fuelled by the war on drugs generates 'large-scale human rights abuses' and 'discrimination and marginalisation of people who use drugs, indigenous peoples, women and youth.' It also highlights the high rate of drug-related incarceration of women and its impact on children and families as a problem of human development.¹²

ISSUES RELEVANT TO WOMEN

WOMEN AND DRUG-RELATED CRIMINAL JUSTICE

Avoid and reduce drug-related incarceration for women:

In the supply chain of illicit drugs, women and girls are usually minor links, but they suffer a disproportionate burden in application of criminal law. Globally, women are incarcerated more for drug offences, mostly non-violent, than for any other crime.¹³

In Latin America, between 2006 and 2011, the female prison population increased from 40,000 to more than 74,000, some facing sentences as high as 30 years, largely because of drug convictions.¹⁴ As shown in Figure 1 (below), from 1977 to 2013 in the US, the incarceration of women rose nine-fold, due in great part to harsh drug laws. The burden of this mass incarceration fell on women of colour, though they did not have higher rates of drug use than white women.¹⁵

In many countries, a higher percentage of women than men are imprisoned for drug-related offences (though the number of women is smaller).¹⁶ Among the national figures cited by the UN Special Rapporteur on violence against women are the following: about 50% of women in state custody in Spain and Estonia were convicted of drug offences, almost 70% in Tajikistan, 68% in Latvia, about 40% in Georgia and Kyrgyzstan and 37% in Italy. In Ecuador, 77% of the women in state custody were convicted of drug offences, compared to 35% of the male prison population.¹⁷

Reduce the disproportionate impact of mandatory minimum sentences on women:

The Special Rapporteur on violence against women noted that the relative harshness of drug sentences handed down to women is likely because they often do not have the insider information that enables accused men to plea-bargain or make deals with prosecutors in exchange for lighter sentences.¹⁸ In some countries, conspiracy laws, which may have been designed to ensnare collaborators of traffickers and organised crime networks, are often applied to women who had no role in major trafficking but lived with or drove the car of someone involved with

petty drug sales.¹⁹ Mandatory minimum sentences exacerbate the vulnerable position of women, particularly when they have no leverage in plea-bargaining.²⁰ Women are at the lowest rung of the trafficking hierarchy, and imprisoning them has little impact on the larger drug trade; as long as there are poor and vulnerable women, there will be couriers.

There is some progress being made on this front in Latin America, specifically Bolivia, Costa Rica and Ecuador, which have passed laws that take into consideration the precarious and often low-level position of women involved in the drug trade.²¹

Understand the socioeconomic drivers of engagement with the drug trade:

Prosecution of women for drug-related offences also rarely takes into account the reasons why women may be involved with drugs in the first place, which may include pressure from a sexual partner, histories of domestic violence or other abuse, lack of mainstream livelihood opportunities, and lack of accessible treatment programmes and related social support.²² Prison sentences are likely to exacerbate most of these factors.

In many countries, women who are convicted for drug offences tend to be socio-economically marginalised and are often single parents.²⁴ They often share a similar socioeconomic profile; poor, low levels of education and frequently belong to ethnic minorities, and 'many of them have been deceived, threatened or intimidated into transporting drugs'.²⁵ A recent report by The Research Consortium on Drugs and the Law (CEDD) underscores the fact that drug law implementation is selective and 'generally it is those who are the poorest and weakest who are punished, and women in situations of social exclusion and/or vulnerability are disproportionately affected'.²⁶

Quantify, understand and reduce the impact on the children of incarcerated women:

The impact on children of the mass incarceration of women is profound. Large-scale incarceration of women in the US in recent decades, for example, is responsible for a sharp increase in placement of low-income children in foster care in many US states as extended family members are unable to cope.²⁷ Children may be impeded from visiting their mothers in prison because

women's penal institutions are few and far between in many countries. Policies differ from jurisdiction to jurisdiction as to whether women who give birth in prison are permitted to keep their infants with them,²⁸ but it is likely that women judged to be unfit mothers because of past involvement with drugs will have difficulties making the case to keep their infants. Women incarcerated for drug offences are often single mothers and heads of household, with responsibility for caring for children and other family members, so 'their incarceration has a bigger impact on the destruction of family ties and greater implications for children's best interests'²⁹ than the incarceration of men.

Provide effective treatment and complementary social services to women with drug dependence:

Women who need suitable treatment for drug dependence rarely have access to it in prison or pretrial detention (see next section). Incarcerated women, especially marginalised and socioeconomically disadvantaged women, are highly vulnerable to violence and sexual abuse in detention, as has been documented in many places, but incarcerated women who are drug-dependent (and unable to obtain treatment) may be more likely to face violent extortion and abuse than other imprisoned women.³⁰

Improve community reintegration post-incarceration, including employment opportunities:

After release, the ex-convict status of women may limit their opportunities for employment and social engagement and in some cases their families' access to social or economic support programmes. For example, a number of US states require drug testing of people as a condition of receiving housing or welfare benefits, a policy that has been considered in other countries and has been criticised (and in some cases opposed in US courts) for stigmatising the poor, not identifying people with problematic drug use, unjustifiably invading privacy, and exacerbating discrimination based on race and ethnicity.³¹ Women may also have difficulty regaining custody of their children if they have been placed in foster care, particularly if women also face barriers to employment.

WOMEN, DRUG DEPENDENCE AND DRUG TREATMENT

Remove barriers to treatment - particularly the fear of losing custody of children:

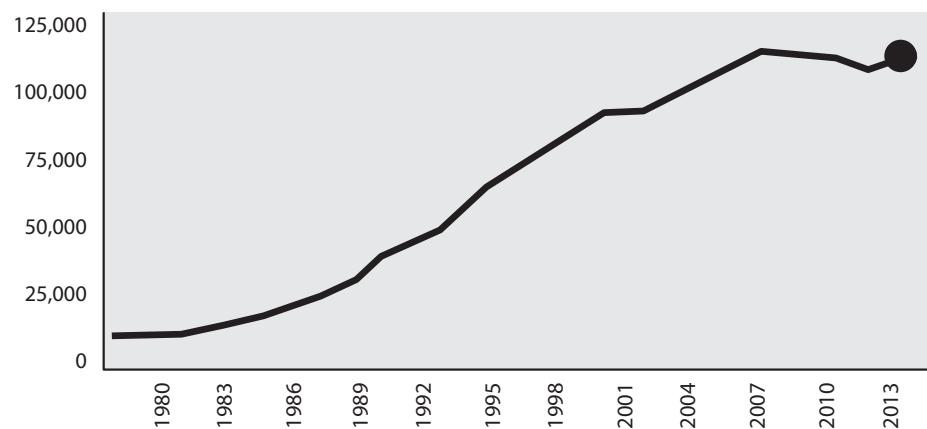
When women do figure into drug policy decision-making, it is often around

policymakers' stated concern about drug use in pregnancy and its impact on the new-born. Some countries give pregnant women priority in treatment services for drug dependence, as recommended by UNODC.³² Unfortunately, as UNODC also notes, women, including pregnant women, in much of the world 'encounter significant systemic, structural, social, cultural and personal barriers' to obtaining good-quality drug treatment, including 'lack of childcare [in treatment programmes] and punitive attitude toward parenting and pregnant women, which makes them fear losing custody of their children and prevents them from seeking treatment early enough'.³³

In a number of countries in Eastern Europe and Central Asia, for example, being in treatment for a drug problem means being registered as a drug user, which in turn may be automatic grounds for losing custody of a child.³⁴ In Russia, pregnant women registered as or otherwise judged to be drug users reported having their children taken away from them in the maternity ward soon after birth.³⁵ UNODC notes that in a number of countries, drug use during pregnancy can result in automatic criminal charges and incarceration for the duration of the pregnancy and sometimes beyond.³⁶

Figure 1. Number of Women in US State and Federal Prisons, 1977-2013²³

In Latin America, between 2006 and 2011, the female prison population increased from 40,000 to more than 74,000, some facing sentences as high as 30 years, largely because of drug convictions.



Recognise that poverty, social exclusion, malnutrition, and violence frequently have much greater impacts on prenatal and neonatal health than maternal drug consumption patterns:

Unfortunately, concern for pregnant women with respect to drugs is often based on ill-informed ideas about drug dependence and pregnancy. The notion of babies 'born addicted' has been popularised in mass media with no grounding in science. It has been known for over 20 years, for example, that the extensive portrayal in the US of a generation of 'crack babies' who would be mentally handicapped for life was a vilifying construction by media and political leaders with no basis in reality.³⁷ A large body of research indicates that the effects of cocaine exposure in utero are not associated with long-term intellectual or behavioural deficits.³⁸ Rather, it is the circumstances of poverty, social exclusion, malnutrition, and violence in which many drug using women are trapped, partly as a result of the 'war on drugs,' that affect their children's opportunity to have access to health and education services on par with other children.³⁹ Still, erroneous ideas about neonatal 'addiction' circulate and gain a foothold in the popular mind, even to the point of calling into question decades of research and WHO endorsement of the effectiveness of opiate substitution therapy in pregnancy.⁴⁰ These ideas also reinforce stigma and the demonisation of women who use drugs.

Strive toward providing destigmatised, affordable, scientifically sound, gender-appropriate treatment for drug dependence:

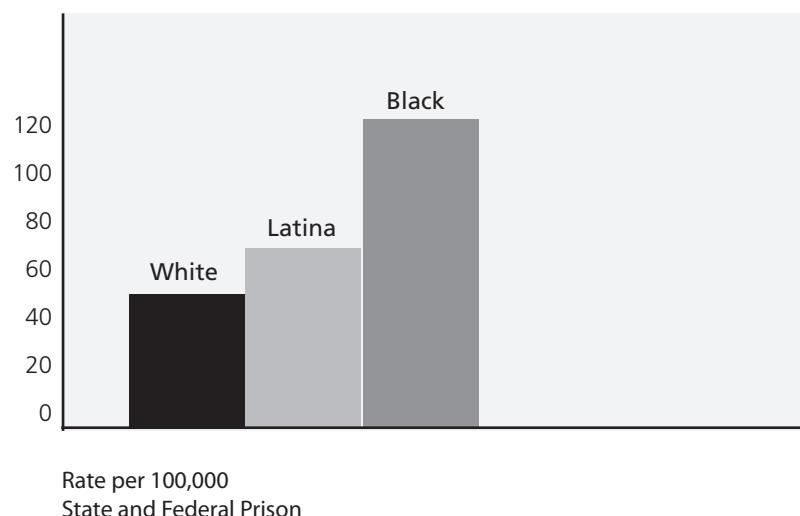
Even if women have the courage to seek treatment, in many countries affordable, scientifically sound, gender-appropriate treatment for drug dependence is a distant dream. Treatment services are rarely designed specifically for women, even though women differ greatly from men in their more rapid progression to dependence, their responses to treatment and the physical and psychological comorbidities they experience.⁴¹ An international review of literature—though research unfortunately remains sparse from many parts of the world—found that compared to men, women who seek drug treatment are younger and less educated and are more likely to be unemployed, have dependent children, and/or suffering from anxiety, depression and suicidal thoughts.⁴² Programmes that seek to instil guilt about drug use are ill-suited for women already burdened with guilt and shame. For women, a treatment facility that lacks child care or does not allow them to bring their children may be a serious barrier to seeking or staying in treatment. Women may also be less likely than men to have the disposable income for costly treatment services or for transportation to far-away services.

While research indicates that pregnancy can be a powerful motivator to seek drug treatment, in places where drug use is criminalised or where drug use can lead to loss of child custody, as noted above, pregnancy perversely can be an impediment to seeking care.⁴³ Perhaps most importantly, services designed for women need to address the profound stigma and demonisation faced by women who use drugs, since they are often quickly branded by society as immoral and unfit mothers.

WOMEN, HEPATITIS C AND HARM REDUCTION

Harm Reduction, endorsed by the WHO, UNODC, and UNAIDS, effectively reduces HIV transmission among people who inject drugs and provides other measurable benefits to their health and communities. Though an increasing number of countries are including harm reduction in their national policies and strategic plans, there remains a significant gap between what we know works and what is actually being done.⁴⁴ For example, in 2012, of the 158 countries with documented injecting drug use, only 86 had implemented needle and syringe exchange programmes. And of these, only a handful were distributing the recommended 200 needles/syringes per drug user per year.⁴⁵ The reasons that HIV is

Figure 2. US Female Incarceration Rates by Race and Ethnicity. 31 December 2013⁷⁷



CEDAW urged Brazil to help women avoid drug-related activities and incarceration and also to improve the conditions of those incarcerated, including ensuring housing in facilities separate from men and providing appropriate services for pregnant women.

so prevalent among injecting drug users, according to UNAIDS, are criminalisation and punitive laws, absent or inadequate prevention services, widespread societal stigma and lack of investment.⁴⁶

In many countries, there is a higher incidence and prevalence of HIV among female injecting drug users (IDUs) than male. Studies in nine European Union countries showed that the average HIV prevalence was more than 50% higher among women IDUs than their male counterparts.⁴⁷ In Yunnan Province, China, HIV prevalence was significantly higher among women IDUs than among male IDUs,⁴⁸ and in Mombasa, Kenya, the prevalence of HIV infection was 50% among all IDUs, but 85% among women IDUs.⁴⁹

Many countries do not report HIV prevalence for women who inject drugs, but in UNAIDS' 2014 compilation of available data, the pooled HIV prevalence among women who inject drugs was 13% compared to 9% among men from the same countries.⁵⁰ Some of the highest HIV prevalence rates are among women sex workers who inject drugs.⁵¹ The lack of investment in harm reduction services in many parts of the world affects both women and men, but women face HIV risks and barriers to seeking and using services that are specific to them.

The time of initiation to injection is the highest-risk period for transmission of HIV and hepatitis B and C.⁵² Evidence from some parts of the world indicates that when women are new to injecting drugs, they may rely on a sexual partner or other person to prepare the drug and actually inject them. This scenario may mean that women are more likely to be injected by used and potentially contaminated equipment or with contaminated solutions.⁵³

In Russia, pregnant women registered as or otherwise judged to be drug users reported having their children taken away from them in the maternity ward soon after birth.

Where violence or trauma is also part of the picture, the risk may be even greater. Research from some countries suggests that women who use drugs are at very high risk of sexual and physical violence, especially from sexual partners, and particularly when they require assistance from partners in injecting or obtaining drugs.⁵⁴ In general, the intertwining of drug-related and sex-related HIV risk is frequently prominent in the lives of women who inject drugs but infrequently addressed in programmes.

As suggested by UNAIDS' figures, women who use drugs and engage in sex work are at very high risk for HIV contraction, as well as magnified stigma and criminalisation, which are powerful barriers to seeking and using health services. There is significant overlap between sex work and drug use in many countries. Recognising that stigma makes data on this subject somewhat incomplete, the UN Reference Group on HIV and Drug Use cites estimates that 15%–66% of women who inject drugs in the US have engaged in sex work at some time, 20%–50% in Eastern Europe, 49%–94% in Russia, Kyrgyzstan, Georgia and Azerbaijan and 21%–57% in China.⁵⁵ The Reference Group, which reviewed a large number of studies, suggests that the risk from sex, particularly where sex workers are unable to demand condom use, and injection use together make for very high rates of risk of HIV contraction that is further, and too often, compounded by violence, including sexual violence (see also next section).⁵⁶ It is also the case that women who use drugs may not identify themselves as sex workers even if they trade sex for drugs or money when they need to.

Underinvestment in proven harm reduction services is a central challenge in national and global responses to HIV and hepatitis C. Where services exist, they are rarely tailored to the needs of women who use drugs. For example, they rarely take into account child care and other demands on women's time, do not take measures to address violence that women might face at home, from police or other men using the services or help women to overcome deep stigma and social vilification.⁵⁷ A study in Ukraine,

Russia and Georgia found that women who injected drugs frequently relied on their boyfriends or spouses to go to the needle exchange, largely because women's drug use is so deeply stigmatised and needs to be kept secret, thus depriving women of the counselling and support they could have received.⁵⁸ The study also demonstrated that when harm reduction services helped women with child-care, supplies, advice, and made sure that welcoming women counsellors were present, women used the services more.⁵⁹

Whatever the accessibility and quality of harm reduction (and drug treatment) services that may be available to women, these services are rarely integrated with reproductive health services. Women who use drugs may be in particular need of reproductive health information and care. UNODC notes that cocaine and many opiates may interfere with the menstrual cycle such that women may be at risk of unplanned pregnancy or may be unaware of being pregnant and thus may delay seeking prenatal care or drug-related health services.⁶⁰ Integrated reproductive and drug-related services—or easy referral between the two by health professionals aware of the links—are needed but are often lacking.

Given the high rate of arrest and detention of women for drug-related offences in many places, it is especially important that harm reduction services be available to women who are in state custody, which is always a high-risk environment for HIV. A WHO review of data from numerous countries found that women in prison had consistently higher prevalence of both HIV and hepatitis C than incarcerated men.⁶¹ From needle exchange and opiate substitution to peer-led information and support programmes for people who use or used drugs, harm reduction programmes are less available in women's than in men's detention facilities.⁶² In Kyrgyzstan, for example, where methadone and sterile injection equipment are both available in some men's prisons and in Georgia, where methadone is available to male prisoners, these services are not available to incarcerated women.⁶³

Policy Goals: Empowering Women in Harm Reduction Services:

- Programmes that offer low-threshold access to services such as centres that are only for women or that have women-only hours. Operational hours should be set at times that suit the needs of their clients who may be working or responsible for childcare. Centres located in areas/neighbourhoods that are convenient to women as well as to particular minorities and migrants.
- Programmes that are welcoming to mothers by offering safe, clean, age-appropriate spaces where children can stay while their mothers receive care. Women do not want their children to know they are drug users so they require programmes that provide services that do not interfere with their family responsibilities.
- Centres that support rather than interfere with their client's other commitments will increase their chance of success. To that end, mobile dosing services and take-home dosing are important features of such treatment and should be made widely available.⁶⁴ Also, creating services and policies that allow women flexibility in the frequency of their visits, such as increasing the number of needles/syringes that can be exchanged per visit.
- Integrated services that incorporate sexual and reproductive health education and services and that network with women's shelters, domestic violence and rape prevention, and drug treatment.⁶⁵
- Programmes that address the unique needs of specific sub-populations such as drug-using sex workers, women in prison, transgender women, and women who have sex with women.

Overall, efficient and effectively delivered services depend on the availability and analysis of gender and age disaggregated data specifically on addiction, drug use, and service access among women and girls. They also depend on drug laws that facilitate rather than deter provision of and access to services for women. Institutionalised stigma and discrimination must be addressed. Legal literacy and services can be offered that empower people who inject drugs and law enforcement and healthcare personnel can be sensitised to challenge discrimination and abuse. People who inject drugs know better than any of us their experience and we can empower them to support their peers and be active in the HIV response in their communities.⁶⁶

VIOLENCE AND ABUSE

Studies show that women who use drugs are more likely than men to have experienced physical and/or sexual abuse.⁶⁷ In a recent survey in Kyrgyzstan, 81% of women in harm reduction programmes reported surviving sexual, physical or other injurious violence at the hands of their partner, family or police.⁶⁸ In the US, surveys have reported that 25%–57% of women in drug treatment programmes experienced intimate partner violence in the previous year compared to 1.5%–16% in the general population.⁶⁹ Exposure to gender-based violence has a profound effect on women's health: it intensifies the risk of HIV by limiting women's ability to negotiate safer sex and injection practices, and women's attempts to seek and use drug treatment, HIV prevention programmes or other services are often sabotaged or discouraged when they are in abusive relationships. Despite the critical need, anti-violence services remain largely unavailable to women who use drugs. Providers at services responding to the needs of people who use drugs or sex workers often lack necessary knowledge and skills to address gender-based violence, while anti-violence shelters often explicitly ban women with criminal records, resulting in a service gap. In her 2011 report, the UN Special Rapporteur on violence against women asserted that unpreparedness of domestic violence shelters to serve women who use drugs constitutes a human rights violation.⁷⁰

Women who use drugs are also deterred from seeking help due to their criminalised status. Criminalisation of women who use drugs — whether by law or just by treating

women who use drugs as criminals without formal legal grounding — makes it extremely difficult for women to report violence to police and to seek safety, justice and essential health services. Some 60% of women who participated in the study in Kyrgyzstan had sustained injuries as a result of abuse but did not seek medical care out of fear of arrest and even greater violence.⁷¹ In some countries, such as Georgia, in order to be placed in a shelter, women are required to report violence to police and thus face the risk of arrest for drug use. In Russia and the US, being identified as a drug user might trigger child protection agencies to remove children from their parents, which further discourages women from seeking help in situations of violence. The existing service gap in combination with repressive drug policies leaves women entrenched in situations of abuse, without access to healthcare, safety or justice.

Criminal networks controlling drug markets may effectively be more powerful than police and may engage in abuse of women and girls with impunity. In Colombia, for example, the leader of the Urabeños, a criminal network judged to be the largest drug trafficking organisation in the country, has been reported to capture young girls into sexual slavery, often luring girls from impoverished communities with luxury items.⁷² High-level drug traffickers in Mexico, including the notorious Zeta cartel, have been implicated in kidnapping of women and girls and using them as sex slaves, as well as engaging in international sex trafficking.⁷³

WOMEN AND CROP ERADICATION

Eradication of drug crops — poppy, coca leaf and cannabis — is pursued as a central element of drug control in a number of countries. Aerial spraying of coca fields in the Andes usually with the herbicide glyphosate, although recently halted in Colombia, has been widely condemned as ineffective in reducing overall production of coca and toxic to the environment and the people in it.⁷⁴ There is some evidence that exposure to glyphosate — which is unavoidable for communities subjected to aerial spraying — is associated with miscarriage or premature delivery

among pregnant women.⁷⁵ The insecurity associated with displacement caused by crop eradication as well as the presence of military and paramilitary eradication teams in communities is likely to affect women disproportionately.

CONCLUSIONS AND RECOMMENDATIONS FOR METRICS

The widespread recognition of the failure of the war on drugs has come at an enormous cost to women. By compounding and perpetuating women's existing vulnerabilities and the discrimination they face, punitive drug policy regimes function as a tool of further oppression. For all the terrible impact that criminalisation and incarceration of women involved with drugs has had on their lives and their families, there is no evidence that it has deterred drug use or marketing.

But the story does not need to end there. In drug policy reform debates and movements happening around the world, the rights of women should be a central concern. As noted by UNODC, The International Network of People who Use Drugs (INPUD), UN Women, and the WHO, drug policy reform must recognise that the vast majority of women arrested and incarcerated for drug offences have not committed a violent crime or are first-time offenders, and harsh punishments in these cases are disproportionate and unjust, both to them and to their families.⁷⁶ Less punitive laws for minor and non-violent drug infractions are the best single means of reducing incarceration of women and thus incarceration-related abuse. Such measures will also reduce stigma and enable women to have better access to services in the community.

In addition to law and policy reform along these lines, policies and programmes should incorporate and pursue the following goals and practices:

- Collect and use gender-disaggregated data on drug use and drug-related health and social services, but without invading women's privacy or contributing to stigma.
- Ensure access to affordable, gender-appropriate and non-judgmental drug dependence treatment, harm reduction and other drug-related

healthcare for women, and integrate these services with reproductive healthcare, and other services sought by women to maximise convenience, accessibility, and coherence of care. Services should be accessible to women caring for children and should incorporate supportive child-care services and counselling as much as possible.

- Ensure availability and accessibility of appropriate, good quality, non-discriminatory anti-violence services for all women in need, regardless of their drug use status and without involving the police or other criminal justice system actors.
- Ensure that treatment for drug dependence and harm reduction services are available to women in the custody of the state (prison or pretrial) on a level equal to those offered to men and women in the community and that services are non-stigmatising and independently monitored.
- Ensure integration of respectful and good quality harm reduction, drug treatment, and reproductive health services — or ready referral mechanisms among the three — to enable pregnant women with opiate dependence to have easy access to opiate substitution therapy, for example, and women living with HIV or HCV to prevent vertical transmission of these infections.
- Institute measures to reduce violence and abuse against incarcerated women, including functioning mechanisms of complaint and redress.
- Train police on supportive and non-judgmental approaches to dealing with women involved with drugs, including referral to appropriate services, and establish means of police oversight and complaint and redress mechanisms for persons claiming police abuse.
- Develop humane policies for protecting families against arbitrary removal of children from the custody of their mother (or father), with meaningful participation of women who use drugs, respecting the fact that drug use alone is not evidence of child neglect or harm.
- Ensure meaningful participation of women who use drugs in policy and programme planning, implementation and evaluation. ■

UN agencies have produced numerous technical documents on women and drugs, particularly on improving health services, including HIV prevention, for women who use drugs and women in prison settings.⁷⁷ Together they suggest specific metrics, indicators and targets, including:

1. Reducing incarceration.
 - a. Women in prison suffer a higher prevalence of HIV; are vulnerable to gender-based sexual violence; may engage in risky practices such as tattooing and injecting drug use.
 - b. Women in prison tend to be young and many are mothers, with children living with them in prison or in care outside.
 - c. Many women in prison are pregnant and give birth in prison with minimal access to reproductive care or post-natal services. Meanwhile, an absence of HIV treatment services increases mother-to-child transmission.⁸
2. Reducing legal barriers to accessing services, including the criminalisation of people who use drugs.
3. Making all services gender-sensitive and integrating close evaluation with service user input.
4. Improving data collection and programme planning, implementation and evaluation in line with international best practices.
5. Focusing on expanding comprehensive health and HIV services to ensure they reach all women who need them, with a particular focus on those who are incarcerated and women who use drugs.
 - a. For example: UNAIDS 2014 Guidance Note suggests targets of:
 - i. 'more than 60% of people who inject drugs regularly reached by NSPs [or greater than 200 syringes distributed per person per year].'
 - ii. more than 40% of people who inject opiates reached by OST
 - iii. more than 75% of people who inject drugs who do not know their status and who are HIV positive having received an HIV test in the past 12 months and know their results.'⁹

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Public Health Research in a Time of Changing Drug Policy: Possibilities for Recovery?

Joanne Csete

SUMMARY

- Aggressive policing and incarceration results in higher HIV, hepatitis C and tuberculosis risks.
- Repressive drug policies have distorted and limited public health science and undermined the use of public health research and practice as tools to address drug problems.
- There is a remarkable lack of consensus in the medical community about the causes and manifestations of drug dependence, and the most effective ways to address and prevent it.
- The ‘brain disease’ model reinforces a construction of drug use as pathology. This pathologising of drug use reinforces prohibitionist drug policy by selling aggressive drug supply interdiction and policing as the most effective means of protecting young people’s vulnerable brains from the addiction disease.
- There has been a shift in broader public health spheres toward using social determinants as a ‘central approach to understanding disparities in public health outcomes.’ However, this has been lacking in drug policy because of the ideological focus on abstinence.
- Drug education should aim to help young people know how to reduce the harms of drug use or how to prevent problematic use, rather than pursuing the elusive goal of preventing all drug use
- There is a need for greater scepticism about the supposed effectiveness of drug courts, given lack of rigorous evaluation and many concerns about implementation.
- Ultimately, UN agencies and treaty bodies, ‘which should promote evidence-based best practices in research and programs, have too often been silent or complicit with questionable research (and program) directions.’

Some of the ways in which the pursuit of drug prohibition has undermined the health of individuals have been well researched and reported in the academic literature. For example, it is well documented that there is a more pronounced risk of HIV linked to drug injection where aggressive policing of people who use drugs impedes access to HIV services, and where incarceration for minor drug offenses puts large numbers of people at high-risk of HIV, hepatitis C and tuberculosis. Documentation of the negative health impacts in the pursuit of drug prohibition may be one small factor behind the shift of drug policy in somewhat less repressive directions in recent years. In some cases, fast-growing injection-linked HIV epidemics opened a space for public health officials to attend the drug policy round table in ways that may not have happened otherwise.

The purpose of this paper is to look beyond the impact of drug policy on the health of the individual to discuss ways in which drug policy and drug policy thinking have distorted and limited public health science and undermining the use of public health research and practice as tools to address drug problems.

Public health as a progressive policy discipline has long had a focus on equity, especially equity in access to health services. In recent years, energised by the work of Sir Michael Marmot with the World Health Organization (WHO),¹ social determinants of health has become a more codified and central approach to thinking about disparities in public health services and outcomes. Research on the social determinants of health outcomes is very pertinent to drug problems and the social and policy responses to these. It will be argued here, however, that some period of recovery and rehabilitation – to borrow terms from addiction medicine – is likely to be in order to overcome the misdirection and undermining of public health research that is the result, at least in part, of ideologically driven drug policies.

PUBLIC HEALTH AND PREVENTION OF DRUG DEPENDENCE AND PROBLEMATIC USE

PREVENTING WHAT? CONSTRUCTION OF THE NATURE OF DRUG DEPENDENCE

Prevention of health problems is the essence of public health. Public health efforts to prevent drug dependence and other problematic drug use, often through education programmes aimed at young people, are inevitably shaped by dominant understandings of the etiology and nature of drug dependence. Considering that drug dependence is not a new problem in human history, there is a remarkable lack of consensus in the medical community about the causes and manifestations of drug dependence and the most effective ways to address and prevent it. A 2015 exchange amongst prominent experts in the field in a special issue of *Lancet Psychiatry* illustrated some of the continuing debates on the physiological and psychological basis for assessing the presence and degree of drug dependence in an individual.² In particular,

Treatment of addiction can run the gamut from quackery to practices that include beating, unjustified involuntary detention, humiliation and torture.

this exchange centered on the question of the scientific justification for understanding drug dependence as a 'brain disease'.

The question is pertinent partly because the 'brain disease' model is so heavily espoused by officials of the US government and especially the leadership of the US National Institute on Drug Abuse (NIDA), which is the dominant funder of drug-related health research in the world.³ Since the 1990s NIDA, an agency of the US National Institutes for Health, has strongly promoted this model, citing neuroimaging data indicating changes in brain structure and function linked to persistent drug use, as well as more recent evidence from genetic research.⁴ In principle, the idea that people's drug use is driven by a clinical brain disease should reduce the tendency to stigmatise and demonise 'addicts' as deviant and morally weak. In addition, as NIDA has emphasised in public statements, the model should lead to breakthroughs in effective treatment and prevention of drug dependence.

The extensive scientific critiques of this model⁵ are beyond the scope of this paper; in brief, neither the stigma reduction nor the many new therapies promised by the model have materialised.⁶ The 'brain disease' model reinforces a construction of drug use as pathology. Courtwright, amongst others, argues that this pathologising of drug use is consistent with and explicitly reinforces prohibitionist drug policy, through facilitating selling aggressive drug supply interdiction and policing to the public as the most effective means of protecting young people's vulnerable brains from the addiction disease.⁷ Satel and Lilienfeld note that the US Congress has readily latched on to the 'brain disease' idea, a help in generating funding for drug control and research. They conclude that in this sense the idea has been a tactical victory but a scientific regression.⁸

PREVENTION PROGRAMMES: EXTENDING THE LOGIC OF THE PATHOLOGY OF DRUG USE

It is a virtually universal public policy and public health goal to prevent initiation of use of psychoactive drugs, especially amongst young people. Drug dependence as 'brain disease' has helped to energise classroom education programmes and mass media campaigns that depict all drug use as deleterious to cognition and brain function. In the US, the story of drug education programmes meant to prevent initiation of drug use amongst young people is one of clinging to the non-science that envelops the pursuit of a 'drug-free' world to the tune of billions of taxpayer dollars. It is also a tale of misdirection of drug education and prevention programmes and related research from which recovery is difficult.

The academic literature on drug prevention programmes is dominated by evaluations from the US, in part the result of a 2002 federal law requiring drug prevention programmes to be demonstrably 'evidence-based' as a condition of receiving financial support from the government.⁹ This policy resulted from the government's heavy investment in a school-based drug prevention programme called DARE (Drug Abuse Resistance Education) that turned out to be anything but evidence-based.

DARE was developed in 1983 at the initiative of the Los Angeles Police Department to be taught in schools by police officers to pre-teen students.¹⁰ Its abstinence-oriented curriculum was centered on teaching children to 'say no' to drugs with lessons on the harms of drugs, the model of 'good students' who refuse drugs and assertiveness training for sticking to 'saying no' in the face of various pressures. It had a strong focus on marijuana and also included lessons on the harms of alcohol and tobacco use. DARE was generally very well received by parents, politicians and the public, and by the late 1990s, the programme was implemented in about 75% of public school districts in the US.¹¹ It was backed by hundreds of millions of federal dollars and was imitated in other countries.¹²

A 1994 evaluation of DARE by the US Department of Justice found no discernable effect on students' decision-making on marijuana or alcohol and only a modest short-term effect on initiation of tobacco use.¹³ Over time, more than 30 published evaluations of DARE found similarly null

impacts on initiation of drug use.¹⁴ Some studies, in fact, found that the programme raised the curiosity of children about drugs and may have motivated them to experiment with drugs or that exaggerated messages about the dangers of drugs, compared to the observed experience of children, undermined the credibility of the programme.¹⁵

Adoption of the policy that federal funds would support only 'evidence-based' prevention programmes for young people should have generated a body of excellent evaluations. But many public health experts have criticised the quality of the evaluations undertaken in response to this policy and thus to the funding of programmes that were not rigorously 'evidence-based'.¹⁶ Amongst the criticisms were the following:

- Some of the programmes accepted as evidence-based were evaluated only once or very few times, alternatively positive results were 'cherry-picked' and negative results were not presented in the evaluations or with no peer review;
- Some programmes had inherent conflicts of interest where, for example, evaluations were conducted by the creators of the programme, including cases where the programme creators stood to profit financially from positive evaluations; and,
- Perhaps most importantly, programmes were chosen more because they accorded with the abstinence-only orientation of US policy than because of their effectiveness.

Top-rated academic journals such as *Addiction* have hosted frank discussions on how to deal with a US-centered prevention literature plagued by 'pseudoscience' and flawed, ideologically driven research.¹⁷ This is all in addition to the obvious criticism that drug education should aim to help young people know how to reduce the harms of drug use or how to prevent problematic use, rather than pursuing the elusive goal of preventing all drug use.¹⁸ As Skager noted, the complete abstinence goal may be unrealistic since young people are likely to try drugs at some point, but 'debate about whether this is a realistic goal is off the table' in the political environment of the US,¹⁹ and research on that question is equally off the table.

UN bodies should help to counter the influence of politics with guidance based on the best science from around the world. In the case of drug prevention, the UNODC came relatively late onto the scene with international drug prevention guidelines published in 2013.²⁰ The guidelines reflect some consideration of DARE-type experiences, suggesting, amongst other things, that 'fear arousal' about the dangers of drugs is unlikely to be effective as a central strategy of prevention and that having the police deliver drug education may not be the best idea. UNODC stresses that many 'powerful risk factors' for initiating drug use – biological processes, mental health disorders, family neglect and abuse, poor attachment to school and community, for example – are 'largely out of the control of the individual' so that no amount of preaching about behaviour change without addressing risk factors is likely to be successful to prevent drug use.²¹ Thus, formative research to understand the reality of young people's lives and their motivations and perceptions about drugs is needed to inform the design of prevention programmes. Public health experts would ideally be situated to conduct such research, but funding for research to inform reality-based rather than abstinence-based programmes is scarce.

DRUG COURTS AS A RESPONSE TO PROBLEMATIC DRUG USE

While there may have been quantum leaps in the neuro-science of addiction, in recent years, as van der Stal notes, 'evidence-based guidelines [for treatment] derived from the results of clinical trials are still very limited'.²² He concludes, like some critics of the 'brain disease' model, that addiction medicine may be too focused on biological aspects of dependence and too little on social, cultural and juridical factors.²³ Moreover, in his view, practices reflecting the best evidence are not frequently implemented in most places. In the worst cases, as noted by human rights observers, treatment of addiction can run the gamut from quackery to practices that include beating, unjustified involuntary detention, humiliation and torture.²⁴

DRUG TREATMENT COURTS

An approach to treatment of drug dependence that has political support in many countries is the drug treatment court (or just 'drug court'). This approach was pioneered in the US in the late 1980s as incarcerations of minor drug offenders were increasing dramatically.

Drug courts offer court-supervised treatment of drug dependence as an alternative to incarceration to persons accused of certain non-violent drug infractions where drug dependence may be at the root of the offence. Drug courts have become prominent in international drug policy debates because the US, the Organization of American States (OAS) and UNODC portray them as an important option for diverting some drug offenders from custodial sentences without decriminalisation of those offenses.²⁵ Drug courts are portrayed by US officials as key to approaching drug dependence as a public health problem rather than as a crime.

About 3,000 drug courts are found in the US,²⁶ and they exist in nine Latin American countries,²⁷ at least four European countries, in addition to Canada, Australia and New Zealand.²⁸ In over 90% of the drug courts in the US, accused persons are required to plead guilty to the charge before them as a condition of participation in the court-supervised treatment,²⁹ raising obvious due process questions as well as a barrier to the right to health services.

The US government subsidises the operations of many county-level drug courts and has also funded numerous evaluations of drug courts, usually focusing on the courts' impact on recidivism. The largest was a 2011 evaluation covering 23 courts in six

Academic researchers have identified fundamental problems with the claims of the success of the drug courts, including the following:

- As suggested by the CRS review, drug courts have 'cherry-picked' the participants most likely to complete treatment programmes successfully so they can show good results, and qualify for federal support.³³ One study found that about one third of the 'patients' in one drug court jurisdiction did not meet clinical criteria for drug dependence.³⁴
- The courts in some jurisdictions punish people who 'fail' treatment by putting them in jail or sending them back to the normal adversarial court with a guilty plea on their record, which may mean a longer sentence than if they had been able to argue their case with an attorney. A 2013 meta-analysis of 19 studies in the US showed that long sentences imposed on people who 'failed' treatment offset the reduction in prison time represented by the 'successful' participants.³⁵ Noteworthy is that the WHO underscores that treatment of drug dependence often needs to be offered more than once; relapse is a common outcome.³⁶
- In the US, many drug courts simply forbid medication-assisted therapy (MAT) using methadone or buprenorphine for opioid dependence as an option for court-supervised treatment, often because of a judge's belief that all treatment must be abstinence-based.³⁷ As one treatment provider noted, this prejudice essentially forces people to go to the streets for heroin or diverted prescription opioids at a time when use of both is on the rise in the US.³⁸ A number of cases have been reported of deaths from overdose amongst people denied MAT by drug courts.³⁹ In 2015, US federal authorities said that they would not allocate funds to drug courts that refuse to offer MAT at least with buprenorphine.⁴⁰ It remains to be seen whether this leverage will be effective.

More than 30 published evaluations of DARE found similarly null impacts on initiation of drug use. Some studies, in fact, found that the programme raised the curiosity of children about drugs and may have motivated them to experiment with drugs or that exaggerated messages about the dangers of drugs compared to the observed experience of children undermined the credibility of the programme.

sites, which reported significantly lower self-reported crime rates in the drug court group (24-month follow-up) vs. a comparison group and lower official rearrest rates, though the latter was not statistically significant.³⁰ Many smaller studies by sub-national authorities also reported some degree of reduction in recidivism.

In 2011, the non-partisan US Government Accountability Office (GAO) reviewed 260 drug court evaluations, including the government's multi-site evaluation, in its oversight of drug court spending. Of the 260 studies, GAO found that less than 20% used sound social science principles.³¹ A particular deficiency was the lack of appropriate comparison groups. The Congressional Research Service (CRS), a non-partisan research body of the Library of Congress, in its review of drug court evaluations noted that a much smaller number of people were coming through drug courts than the number who could benefit in theory, suggesting some kind of unstated selection process.³²

A drug treatment court model could probably be devised that would be worthy of being called a public health intervention. Public health research could have helped to illuminate good practices and would have been beneficial before the rapid expansion of these courts around the world. But, as with prevention programmes in the US, there was no major effort to ensure that independent public health research or expertise was informing decision-making.

SOCIAL SERVICES AS PART OF RESPONDING TO DRUG DEPENDENCE

While there is ready recognition, even from proponents of the 'brain disease' model, that both biological and social factors

are important in the etiology of drug dependence, it is striking that there is not a larger and more robust body of research to guide action on addressing social factors in drug treatment activities. WHO has offered guidance for psychological and social support only with respect to the best researched drug dependence treatment – that is, MAT for opioid dependence – noting that there is some evidence that 'assistance with social needs such as housing, employment, education welfare and legal problems' are useful adjuncts to treatment programmes, but also notes that the research base for this recommendation is thin.⁴¹

The work of Rhodes on conceptualising a multi-level 'risk environment' for drug use⁴² is a breakthrough that should guide the kind of research WHO calls for in its guidelines. Building on Rhodes' work, public health researchers have begun to pull together elements of a social epidemiology of drug use and drug dependence.⁴³ This conceptual work explicitly highlights the limitations of over-reliance on reductionist medical approaches to drug dependence. Some studies have demonstrated statistical relationships between social or community-level factors and drug use and dependence outcomes,⁴⁴ but, as suggested by van der Slat, these do not seem to have added up to practical frameworks to guide health and social services as part of responses to drug dependence.

A body of evidence that begins to inform practical interventions has to do with so-called 'housing first' approaches to drug dependence and mental illness in North America. While many government programmes in the past have recognised that homelessness or unstable housing is often part of the risk environment of drug use, proof of abstinence from drug use has often been required as a condition of receiving public housing assistance.⁴⁵ The premise of 'housing first' is that stable housing may be a pre-condition to enabling drug-dependent persons to engage with treatment programmes and may thus improve health outcomes and reduce health service costs.⁴⁶ 'Housing first' received a major boost in 2012 when the US Department of Veteran Affairs adopted it in responding to homelessness amongst military veterans and initiated a three-year study of its impact.⁴⁷

The literature on housing first approaches is thin and fraught with fundamental disagreements about methods. The paucity of randomised designs is one criticism;⁴⁸ some studies have had very small sample

sizes;⁴⁹ others have been criticised for making conclusions about drug treatment adherence when the studies were not designed only to evaluate outcomes related to homelessness;⁵⁰ and some of the research may have been compromised by the lack of availability of readily accessible treatment options, even if stable housing contributed to the readiness to seek treatment.⁵¹

Adequately researching housing assistance and other possible social support services to accompany drug treatment is likely to require considerable funding for independent, multi-sectoral, large-sample, multi-year studies. It also requires an openness to what is essentially a harm reduction approach – not insisting on proof of abstinence or proof of adherence to treatment programmes, in the US in any case, is a break from both the abstinence ideal that underpins drug policy and from the spirit of long-standing laws and policies that deny social benefits to people who use drugs or who are convicted of even minor drug offenses.⁵² Although the Department of Veteran Affairs is funding a major study of 'housing first' that will include looking at the outcomes of drug treatment, it is unlikely that this kind of research will be encouraged by NIDA, the government's drug research funding body.

DISTORTING AND DISMISSING PUBLIC HEALTH: REDUCTIONISM AND ESCHEWING HARM REDUCTION

Harm reduction is a central idea of much of the pursuit of public health as it relates to risky or potentially risky behaviours and exposures. For example, driving motor vehicles is a potentially lethal undertaking, but rather than banning it, measures are instituted to reduce harm. The link between obesity and sugary carbonated drinks and the particular harms of this link in low-income populations has spawned a body of public health research on possible harm reduction measures such as taxation, limiting portion sizes at the point of sale and disallowing soda from food assistance vouchers.⁵³

But health research on harm reduction related to drug production, sale, consumption, prevention and care has been limited with the exception of research on MAT for opioid dependence and on HIV and drug injection, though at times both of those have also been caught up in drug politics. It is not correct to lay barriers to harm reduction-oriented

research only at the feet of US policies, but the strident anti-harm reduction bent of US drug policy and drug-related health research funding is influential to some degree and not only in the US. The US objection to drug-related harm reduction in arenas such as school-based prevention programmes and allowing drug court prejudices to favor abstinence-based treatment in defiance of clinical indication is not always clearly explained by policy-makers. Gil Kerlikowske, the US 'drug czar' from 2009 to 2014, said that the term 'harm reduction' is not used by the government because it is associated with the legalisation of drugs.⁵⁴

It is also not correct to attribute all trends in health-related drug policy research to the priorities of NIDA, but, again, those priorities undoubtedly have had an influence. NIDA has funded some research, including on MAT and more recently on effective pain management, which has helped move some drug-related health programmes in a useful direction. But its public statements about priorities for health research at this time of shifting drug policy debates generally reflect a limited and medicalised view of the field. NIDA's priorities, as stated in the budget request to the US Congress for fiscal year 2015, highlighted the agency's pride in being at the center of the 'explosion in genetic knowledge,' 'the advent of precise technologies to probe neuronal circuits' and other knowledge 'that can be used to reduce drug use'.⁵⁵ Similarly, for FY 2016, NIDA proposed spending about half its billion-dollar budget on neurological and genetic/epigenetic foundations of drug 'abuse' that 'will revolutionise our ability to mitigate or even reverse the deleterious effects of addiction'.⁵⁶ To its credit, NIDA is funding work on the long neglected area of medication-assisted therapies for stimulant dependence. It also proposes to look at the effect of programmes authorised by the 2010 Affordable Care Act (known informally as 'Obamacare'), on access to drug dependence treatment, on which there is very little research.⁵⁷

NIDA's priorities for FY2015 and FY2016 related to changing state-level marijuana policy in the US include longitudinal studies to follow the impact of marijuana use on the 'developing brain' of adolescents and intensification of information programmes on the harms of marijuana to counter the 'dangerous and growing misperception that marijuana use is harmless'.⁵⁸ Though the states that have legalised cannabis may fund policy-relevant research with their newly generated tax revenues, it seems unlikely

from these statements that NIDA will be keen to respond to long-standing calls for more funding – and more access to research supplies of cannabis – to study, for example, medical uses of cannabis,⁵⁹ or the interesting research suggesting that access to medical cannabis may be associated with less use of prescription opiates.⁶⁰ As Pardo notes, the current policy environment begs for research to elucidate lessons of decriminalisation and partial decriminalisation experiences of Europe with respect to both cannabis and other drugs.⁶¹ But, he concludes, 'so far, with a few exceptions, the literature comparing the details of actual and theoretical regulatory models is scarce'.⁶² As jurisdictions seek to weigh health measures, taxation and pricing, regulation of commercialisation and many other factors in this changing environment, sustained funding for policy research, including in the health sector, would be welcome.

Drug courts
have become prominent in international drug policy debates because the US, the Organization of American States (OAS) and UNODC portray them as an important option for diverting some drug offenders from custodial sentences without decriminalisation of those offenses.

CONCLUSIONS

A remarkable body of drug-related health research has been generated around policy and programme change in the Canadian city of Vancouver, largely by researchers at the University of British Columbia (UBC). This research includes the most important body of peer-reviewed reports about supervised injection sites in the world, as well as longitudinal studies of housing, employment, access to psychological services and other social determinants of patterns of problematic drug use.⁶³ Some of this work was funded by NIDA, particularly in the early years of the HIV epidemic in Vancouver. This body of public health research has figured prominently in Canadian (and to some degree international) drug policy discussions and importantly informed judicial decisions that protected the supervised injection site from closure by the Conservative-led government.⁶⁴

It is a badge of honour – though very troubling – for the UBC research group that they have been attacked in many ways, including the impugning of their professional credentials, by proponents of drug prohibition. After trying and failing to force a retraction of a *Lancet* article on supervised injection by these researchers, a group of organisations espousing a 'drug-free' society created an online publication with the trappings of an academic journal of which the *raison d'être* seemed to be to discredit the UBC researchers.⁶⁵ These organisations went on to lodge a formal complaint to UBC alleging academic misconduct by some of these researchers, charges that were investigated and dismissed.⁶⁶

At this time of shifting drug policy debates and, one hopes, a continued shift to less repressive drug policy, public health research should ideally be informing new directions in drug control policy and programmes. As noted above, in an ideal world, building on strides made in research methods to study social determinants of health, public health research would inform a new generation of prevention activities based on the reality of risk environments for problematic drug use. It would explore ways in which young people can be armed with information to protect themselves from the harms of drug use without lies or exaggerations. There could be rigorous studies of varied modes of community-based care and socioeconomic support for people who use drugs and are accused of minor drug offences as policies evolve away from incarceration in these cases.

But it may take the courage of the UBC researchers and access to large amounts of ideologically untied funding for truly independent policy-relevant investigations to get drug-related public health research out of its hunkered-down state. Drug policy researchers in public health, if they are not fending off ideologically motivated attacks, have found themselves struggling for funding to investigate hugely expensive government programmes that are supported by large, shoddy and blatantly politicised bodies of research. UN agencies, which should promote evidence-based best practices in research and programmes, have too often been silent or complicit with questionable research (and programme) directions. New directions in drug policy thinking, whether or not they are reflected in upcoming UN debates in 2016, should mean a new platform, new openness, and new funding for cutting-edge drug policy-relevant public health research not designed to serve a prohibitionist agenda.

METRICS

Some of the published discussions on metrics for a new drug policy⁶⁶ seem a bit overly optimistic about the possibilities of getting governments to turn toward a new set of indicators for judging drug policy. There is no question that governments have too often represented their drug policy successes by indicators such as arrests, tonnes seized and hectares of drug crops eradicated, but it may be too much to presume that numerical targets with respect to those indicators are what drives drug policy decision-making. If that were the case, governments would have long ago abandoned their efforts and gone back to the drawing board because very few could have shown sustained progress through these measures. It seems unlikely that these governments will be easily inspired to adopt indicators of public health and welfare, for example, to 'drive' the fundamental directions of their drug policies. Indeed, the value of some of the preferred indicators in policing-heavy drug policies is that the numbers are easy to cook. The value of 'metrics' is probably in many cases more based on projecting a certain image than on any rigorous reflection of reality.

Muggah and colleagues report that Colombia, for example, is interested in new metrics as it is currently rethinking their drug policies.⁶⁷ Colombia, with high-level political leadership and in the aftermath of a war of insurgency with enormous implications for drug policy, has undergone more reflection on national drug policy than most countries. It will be interesting to see how much of such reflection was inspired by concern about whether or not the government had employed the wrong indicators to measure the impact of policy.

With respect to metrics, a first step might be to engage in some harm reduction. Overall, drug policy may not be driven by the rise and fall in arrest figures, but if at a human resource management level the performance of police is rigorously judged by the number of drug arrests, that practice should be stopped, even if larger drug policy directions will take time to change. There is good evidence from a number of countries that arrest quotas or targets for the individual police officer, especially when linked to salaries or bonuses, will result in an unduly large number of arrests of low-level offenders: as those individuals are often the easiest to catch. Resolving bad practices such as this should not have to wait for a major upheaval of the philosophy of metrics on which drug policy is based.

Another area in which both governments and international agencies and experts can do better with regard to metrics is so-called alternative development or alternative livelihood programmes that UNODC and many international donors have supported. Development programmes that are meant to help people cultivating drug crops to find other sources of livelihood have been notoriously free of evaluation in the way that other development programmes have come to be judged. There have been very few independent evaluations of UNODC-supported alternative development programmes, for example.⁶⁸ The impact of these programmes on the health and well-being of poor rural households has not been evaluated with anything like the standards that have come to be routinely brought to bear in most development programmes. It would not require a major overhauling of drug policy to have an approach to alternative development programmes for drug crop producers that embodies some of the standards of participatory development and monitoring and evaluation built in from the beginning that have become more common in socioeconomic development work. ■

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(Mis)understanding the Intersection Between Development Policies and Data Collection: Case Study, Afghanistan¹

David Mansfield

SUMMARY

- Development organisations are often ill at ease when engaging with the challenges of illicit drug production in the global south. Even in countries like Afghanistan, Colombia and Burma.
- As a dual edged sword, generating both benefits and costs for producer countries, illicit drug production has typically left the development community unaware of how best to respond.
- 'Alternative development' has long been considered problematic by many development organisations: with a host of examples where it has been focused to provide largesse and political favour to elites, so that they will in turn coerce the rural population to abandon or reduce opium poppy cultivation.
- The kind of pro-poor development outcomes that donors like DFID or the World Bank might support are lost or merely an externality of a programme primarily designed to leverage reductions in levels of opium poppy cultivation, much of which is only short lived.
- Many of the statistics used as both descriptors of illicit drug crop production and metrics for assessing the performance of drug control measures are conceptually and methodologically weak.
- Too often, policy makers are guilty of drugs fetishism - viewing the world solely through the prism of drug production and drug control measures. Their statistics give little or no consideration to the wider socioeconomic, political and environmental context inhabited by those individuals and communities that cultivate opium poppy and coca.

Development organisations are often ill at ease when engaging with the challenges of illicit drug production in the global south. Even in countries like Afghanistan, Colombia and Burma where the illicit drugs economy dominates large parts of the rural landscape and has a significant impact on both the political economy and macro-economic indicators, development donors have been reluctant to integrate an analysis of the causes and effects of illicit drug production into their programmes and country level assessments.

Their discomfort has multiple causes. For one, for those development donors tied to the 'Washington consensus' and its emphasis on 'market based solutions,' it is perhaps counterintuitive to intervene and actively seek to undermine one of the few value chains that appears to work in the kind of conflict affected environments that illegal drug crops are concentrated. Rather, donors like the United States Agency for International Development (USAID) and the Department for International Development (DFID) look to work with markets, intervening in order to make them 'work for the poor.' They do not look to destroy a market entirely as is the intent of the current international control system and would no doubt question whether such an aim is achievable.

A second cause of discomfort has been the problem of identifying an appropriate development response to illicit drugs production, particularly given the benefits opium and coca cultivation have delivered to the rural households and communities that produce them. For example, in Afghanistan illegal opium is the largest export; it has created an estimated 400,000 direct jobs (Full Time Equivalent);² boosted the legal economy, providing livelihoods for farmers and those providing agricultural inputs and consumer goods; and helped bring 265,000 hectares of former desert land under agriculture.³ Policy makers and practitioners are hard pressed to offer examples of development assistance that has delivered such dramatic outcomes.

Yet at the same time, in Afghanistan the illicit opium economy has led to growing levels of corruption; offered a revenue stream for private state actors and insurgent groups who seek to undermine the legitimacy of the central state; and 'crowded out' licit economic enterprise, a trend that is likely to increase in the wake of dwindling levels of aid. Furthermore, the concentration of opium poppy cultivation in the former desert areas of southern and south western Afghanistan has led to the intensification of agricultural production, including the use of harmful pesticides, increased salination and ultimately leading to the collapse of rural livelihoods for the land-poor and increasing rates of outmigration.

As a dual edged sword, generating both benefits and costs for producer countries, illicit drug production has typically left the development community unaware of how to best respond. While in the past there was some sympathy for the argument that a possible development response to illicit drug production in a country like Afghanistan was to legalise or regulate drug crop production, there is now a recognition that this option leads to its own development challenges.⁴ Not least the fact that the comparative advantage of a major drug producing country like Afghanistan lies with illicit, not licit, drug crop production and therefore many of the economic benefits that opium production has brought would be lost to more efficient producers in the global north, such as Australia, France

Area based rural development programmes with the primary objective of reducing illicit drug crop production - so called 'Alternative Development' - have long been considered problematic by many development organisations. Limited in geographic scope and often perceived as little more than crop-substitution, alternative development finds little financial support from the main development donors within the OECD.

and Spain. These countries have not only made the necessary advances in agricultural inputs and techniques but also have the large farms necessary for the economies of scale required to sell opiates competitively on the international market, along with the institutional capacity and security regimes required for effective regulation. In the absence of the option of shifting to legal or regulated production, for both practical and legal reasons, many development organisations have been left not knowing which way to turn.

Those advocating for drug control, such as organisations like UNODC, have offered a limited menu of responses for development donors, many of which run contrary to donors' current thinking and practice. For example, area based rural development programmes with the primary objective of reducing illicit drug crop production - so called 'Alternative Development' - have long been considered problematic by many development organisations.⁵ Limited in geographic scope and often perceived as little more than crop-substitution, alternative development finds little financial support from the main development donors within the OECD.⁶ In Afghanistan, there has been the added challenge that this kind of area based programme tasked with delivering a wide range of services, including physical and social infrastructure within a contained geographic territory, has been out of line with a development architecture and funding that is more sectoral-based and tied to national programmes.

The change model that underpins alternative development is also far from clear with many development donors perceiving it intimately tied to coercive measures such as eradication and efforts to make development assistance contingent on reductions in drug crop cultivation, so called 'conditionality.' There are many examples of alternative development, particularly in Afghanistan, where the strategic focus of the programme has been to provide largesse and political favour to elites so that they will in turn coerce the rural population to abandon or reduce opium poppy cultivation. The kind of pro-poor development outcomes that donors like DFID or the World Bank might support are lost or merely an externality of a programme primarily designed to leverage reductions in levels of opium poppy cultivation, much of which is only short lived.

In the absence of a change model aligned with current development theory and practice, the most common response of the development community has been to ignore the illicit economy altogether and to carry on with its conventional development programmes. In Afghanistan it has not been unusual to hear the argument that any support to legal on-farm, off-farm and non-farm income will lead to a contraction of the illegal economy or at least provide an increased portfolio of legal options that farmers can pursue.

In practice, both illicit drug crop cultivation and the legal economy can grow in parallel and it is not uncommon for investments in physical infrastructure such as irrigation and agricultural inputs such as fertilisers, are used to increase the amount of land under opium poppy and its yields.⁷ Other interventions, some of them ostensibly designed to deliver development outcomes, such as the increased production of staples or high-value horticulture, have marginalised the land-poor, leading to changes in land tenure arrangements, the migration of vulnerable groups and the concentration of drug production in more remote and insecure regions.

In this situation, development donors have often argued that it is the responsibility of law enforcement to respond to the diversion of development investments into illicit drugs production or the relocation of cultivation and that these kind of unintended consequences should not interfere with the business of delivering development assistance. The high price of opium poppy, and the alleged insurmountable profit of opium production, is cited as justification for abrogating responsibility to eradication and interdiction teams even if ill-considered development interventions may have played a role in making matters worse. The relatively high income of those farming opium poppies is also used to justify targeting development assistance in areas where drug crops are not grown; on the basis that those growing illicit drug crops are not the 'poorest of the poor,' and therefore not part of the mandate of the development donors.

It is the contention of this paper that this fundamental misalignment between a development community focused on improving the welfare of the Afghan population and the challenges of addressing widespread illicit drug crop production is in large part a function of the way that opium poppy and the illicit economy is currently perceived and understood - not just by policy makers and practitioners but also by scholars. Much of the problem lies with the various statistics used to describe and quantify opium production in Afghanistan, many of them produced by UNODC and cited repeatedly in media coverage and the academic literature. These statistics shape how we have come to understand the scale and nature of the drugs problem and thereby have informed policy responses.

The rest of this paper focuses on a number of drug-related statistics, including levels of opium poppy cultivation, the number of farmers involved in opium poppy cultivation, the reasons why farmers grow opium and the economic returns to opium poppy cultivation. While it is recognised that collecting data on illicit drug crop cultivation is fraught with problems, it is critical that policy makers and scholars fully understand the veracity of this data —its methodological and conceptual

limitations - before using it as the foundations for development programmes or policy responses. Indeed, this paper argues that many of these statistics have presented a simplified and 'profit maximising' model of the factors influencing farmers' livelihoods choices, which has proven deeply misleading and further alienated the development community from engaging constructively with the challenges of illicit drug production in developing countries.

ESTIMATING OPIUM POPPY CULTIVATION

Levels of opium poppy cultivation are often used as an important metric for judging counternarcotics efforts. However, in Afghanistan the rise and fall in the hectarage of opium poppy has also been used as a benchmark for judging the progress of the wider statebuilding project; and not just at the national level but also tied to the performance of individual donor countries and their development and security investments in specific provinces - most notably the US in Nangarhar, the UK in Helmand and the Canadians in Kandahar.

While there are obvious problems associated with linking the performance of counternarcotics efforts - let alone statebuilding - with annual fluctuations in opium poppy cultivation, there is the added challenge of deciding which figures to use, how to account for significant changes

in methodology over time, as well as the problems associated with the disaggregation of cultivation data, particularly in what is the diverse and dynamic socioeconomic and political terrain of rural Afghanistan.

There are in fact two sources of data on the extent of opium poppy cultivation in Afghanistan, the UNODC and the United States Government (USG). In the past, there were wide discrepancies between the estimates of opium poppy cultivation by UNODC and USG, with a difference of over 80,000 hectares between the two surveys in 2004 (see Figure 1).

Prior to 2002, the UNODC survey was entirely formed on a ground-based 'census' and while pioneering at the time, it had limitations. Based on an assessment of reports of where cultivation was located, surveyors were required to travel to what could be remote and insecure villages and visually estimate the amount of land under opium poppy cultivation. Incomplete information on the whereabouts of opium poppy, insecurity, wide scope for human error, inability to verify data, and the challenges of supervision in the field, were just some of the problems associated with the ground survey at the time.⁸

In the 2001/2002 growing season, UNODC introduced commercial satellite imagery for the major opium producing provinces of the south and east, combining it with a ground-based survey in many of the provinces in the center and north where cultivation was not as extensive. With support from Cranfield

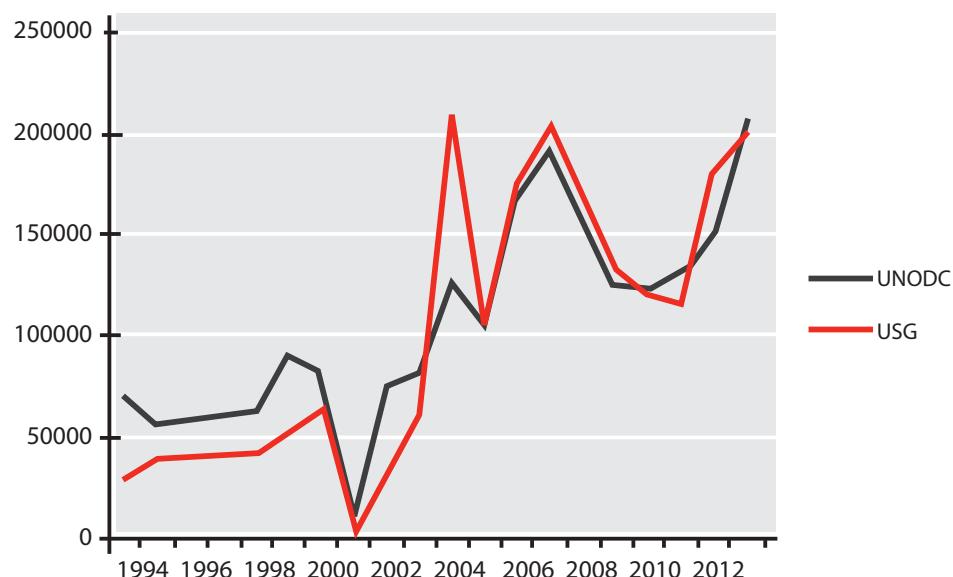
University following the results of the 2004 survey and with closer collaboration with USG, the UNODC and USG figures subsequently aligned more closely. In 2015, further changes in the UNODC methodology were made - making comparisons over time particularly problematic.⁹

While national data had become more aligned between UNODC and USG, there remain discrepancies at the provincial level rendering explanations for shifting levels of cultivation at the regional and provincial level rather challenging. Part of the explanation for these discrepancies is the different methodological approaches adopted by the two surveys and how they calculate the full extent of the agricultural areas - the agricultural 'mask,' how samples are selected and the number of images collected.

These limitations make assessing changes in levels of cultivation at the district level problematic and severely limit the value of using district-level figures for assessing progress against opium poppy cultivation, as in the case of 'conditionality' - where development assistance is made contingent on reductions in opium poppy cultivation.

To properly assess changes in cultivation at the district or community level, it is necessary to conduct a comprehensive review of the area being assessed and establish what crops are being cultivated. While resource intensive, this approach provides detailed data on the different crops cultivated in an area of interest, can support an assessment

Figure 1. A comparison of National data on opium poppy cultivation in Afghanistan, 1994-2013 (hectares)



There are many examples of alternative development, particularly in Afghanistan, where the strategic focus of the programme has been to provide largesse and political favour to elites so that they will in turn coerce the rural population to abandon or reduce opium poppy cultivation. The kind of pro-poor development outcomes that donors like DFID or the World Bank might support are lost or merely an externality of a programme primarily designed to leverage reductions in levels of opium poppy cultivation, much of which is only short lived.

of the uptake of different legal crops (including orchards, wheat and annual horticultural crops) and can thereby offer both an assessment of how resilient any reduction in opium poppy cultivation might be and the impact of efforts to expand the cultivation of high-value horticultural crops. This kind of data, produced by USG and analysed by Alcis Ltd, has been used as part of the assessment of the Helmand Food Zone and has provided invaluable data on changing cropping patterns over a five year period.¹⁰

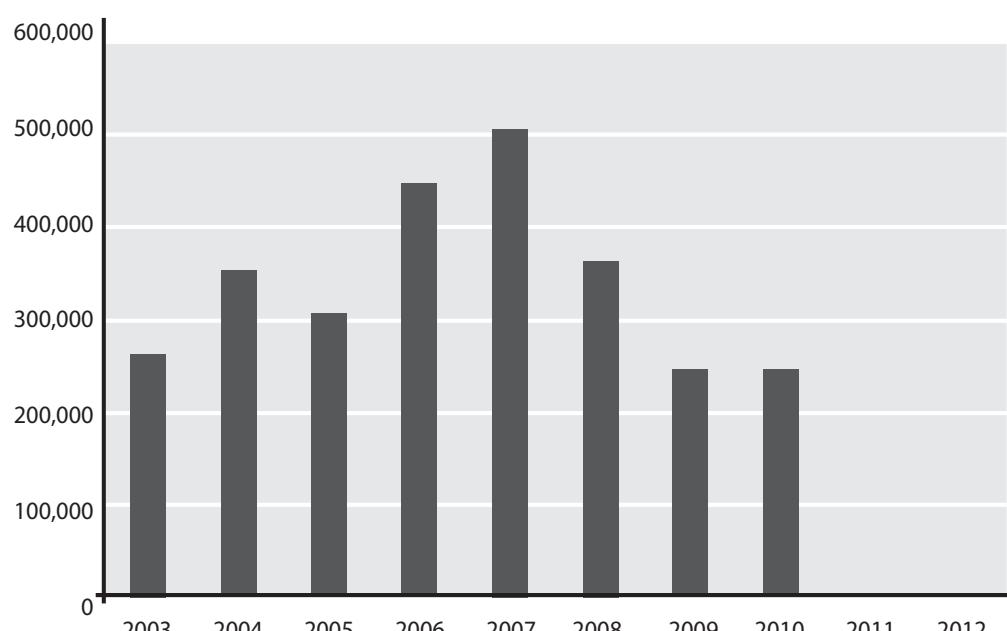
This data, combined with detailed fieldwork examining the changing socioeconomic and political environment and patterns of non-farm income has developed an understanding as to why changes in cultivation have taken place. It has also provided a prognosis as to whether these factors would be sustained, and offered insights into the unintended consequences of drug control and development efforts – not least the likelihood of relocation of production to neighbouring areas. Unfortunately, it is the emphasis on estimates of cultivation at the provincial and district level – many of which are of questionable provenance – that has become the focus of drug control agencies such as UNODC and which has left many policy makers and practitioners within the drugs and development communities speculating over causality and disagreeing over appropriate programmatic responses.¹¹

THE NUMBER OF FARMERS GROWING OPIUM POPPY

A further statistic that became a benchmark for the scale of the drug problem in Afghanistan and was often cited in scholarly and policy papers along with the media, was the number of farmers growing opium poppy in Afghanistan. This data was produced by UNODC between 2003 and 2010, with estimates ranging from a low of 245,000 in 2009 to a high of 509,000 in 2007 (see Figure 2). At the time, this was seen as an important metric by which to assess the importance of opium production to the Afghan economy and how it was changing over time. With an average of between 6.2 to 6.5 people per household, the number of people involved in opium poppy cultivation was reported to be as many as 3.3 million people or 14.3% of the total population, in 2007,¹² falling to 6% in 2010.

There are, however, some major challenges with this particular metric. The most obvious is establishing a meaningful estimate of the number of households involved. Here the most serious issue is whether farmers are actually in a position to answer questions regarding the households in the village and their activities to the degree of integrity required. This problem is

Figure 2: Number of households involved in opium poppy cultivation in Afghanistan reported by UNODC, 2003-2012



compounded when researchers are enquiring about sensitive or illegal subjects, phenomena that change markedly over time or practices that are somehow concealed or which take place in private rather than public spaces.

Evidence over the last few decades suggests that there are significant challenges with regards to the knowledge of village members and the veracity of their responses about the farming practices of other households in the same village. There are further concerns regarding the nature of the questions asked and whether phenomena are adequately defined or understood in the same way by all those interviewed. A critical issue is when asked about '*the number of households involved in opium poppy cultivation in this village*' do all respondents have the same understanding of who should be included? For example, where there is a landowner that cultivates opium poppy but employs a sharecropper to work the land, would this be reported as one household or two? In some cases, particularly in the south and east, even if sharecroppers have worked in the village for many years, they would not be considered as being of 'this village' if they did not own land and hence would not be included in the response.¹³ Further, labourers residing outside the village of enquiry but working there during the opium poppy harvest as itinerant labourers would not be included by those that actually live in the village as being of 'this village.' Nor would these labourers be counted elsewhere if they came from a village that had no history of opium poppy cultivation, since they would not be covered by UNODC's village survey.

Meanwhile, UNODC reports that 1.5 million people were involved in opium poppy cultivation in 2010, a fall of 1.8 million from 2007 when it estimated that 3.3 million people were involved. These figures were calculated on the basis of an assumed average household size of 6.5 people. However, the National Risk and Vulnerability Assessment – which serves as Afghanistan's National Household Survey,¹⁴ suggests a national average of 7.3 persons per household, which would result in a markedly higher number for the estimated total number of people involved in opium poppy cultivation.¹⁵ Other data collected in the rural areas in which opium poppy is grown consistently suggest significantly larger household sizes than the national average. For instance, the NRVA reported an average household size in Helmand province of 9 persons in 2005,¹⁶ while other surveys have consistently reported even higher figures of almost 13 household members.¹⁷

Indeed, there are questions about how representative national data is of the areas in which opium poppy is actually cultivated. The level of insecurity tends to limit access for formal surveys in the parts of the country where opium poppy has become concentrated. There is the added challenge that some of these hard-to-reach areas, such as the former desert areas in the south, have experienced

such a dramatic transformation over the last few years that many official data collection tools have found it hard to keep up. For example, remote sensing imagery shows that between 2003 and 2013 the amount of land under agriculture in the former desert areas of south and south-west Afghanistan increased by as much as 265,000 hectares, much of which was cultivated with opium poppy.¹⁸ Official statistics barely recognise this growth or the estimated population of up to 1.2 million people that resides there. At best, the data on the number of farmers involved in poppy cultivation in Afghanistan was incomplete, while at worst it was highly inaccurate and misleading.

THE REASONS WHY FARMERS GROW OPIUM

Integral to how policy makers and scholars perceive illicit drug crop cultivation and those that grow it is the data produced on why the crop is grown.¹⁹ Each year since 2006, UNODC has asked a sample of farmers the reasons why they cultivate opium poppy.²⁰ The high price of opium has typically been recorded as the most popular response to this question, cited by 41% of respondents in 2006;²¹ 25% in 2007;²² 74% in 2008;²³ 61% in 2009;²⁴ 41% in 2010;²⁵ 59% in 2011;²⁶ 44% in 2012;²⁷ 72% in 2013;²⁸ and 44% of those interviewed in 2014.²⁹ In fact, 'high price' has been the most frequent response every year of the survey with the exception of 2007 and 2008, when 'poverty alleviation' was the most popular response by farmers, cited by 29% and 92% of respondents respectively in those two years.³⁰

In fact, 2008 seems anomalous given the huge proportion of farmers citing 'poverty alleviation' as their reason for cultivating poppy compared with other years, where typically no more than 15 per cent of those interviewed gave this response. On the surface, the high frequency of this response could be a function of negative economic circumstances in 2008. However, closer analysis suggests it could be a methodological issue - 2008 apparently being the only year when UNODC reported against multiple responses for cultivating opium poppy rather than just one. In 2009, the annual opium poppy survey reverted back to reporting only a single response from farmers. From then until 2014, almost none of the other reasons for cultivating opium poppy, mentioned so frequently by respondents in the 2008 survey and recorded in 2007, are cited by more than 15% of those interviewed each year,³¹ and the 'high price of opium' became by far the most frequent response reported each year, irrespective of whether opium prices had in fact risen or fallen.

The difference between what is reported in the 2007 and 2008 surveys and the responses in the

It is quite possible for a land-poor farmer to cultivate opium poppy as a means of accessing both land – and thereby water – as well as credit, to achieve the outcome of food security, while at the same time wishing to produce opium to pay for his son's wedding. 

To properly assess changes in cultivation at the district or community level, it is necessary to conduct a comprehensive review of the area being assessed and establish what crops are being cultivated. While resource intensive, this approach provides detailed data on the different crops cultivated in an area of interest, can support an assessment of the uptake of different legal crops (including orchards, wheat and annual horticultural crops), and thereby can offer both an assessment of how resilient any reduction in opium poppy cultivation might be and the impact of efforts to expand the cultivation of high-value horticultural crops

2008 report, highlight the conceptual and methodological weaknesses of an approach that attempts to distil the complex and interconnected factors that inform household decision-making into a single answer.³² At its most basic, recording and reporting only one response denies the multifunctional role that opium poppy plays in rural livelihood strategies. Moreover, none of the responses listed and tabulated by UNODC are actually mutually exclusive. The recording of only one answer, without any contextual background on those responding, also fails to recognise the fact that farmers with different assets may weigh the multiple reasons why they cultivate opium poppy in quite different ways.

For example, it is quite possible for a land-poor farmer to cultivate opium poppy as a means of accessing both land – and thereby water – as well as credit, to achieve the outcome of food security, while at the same time wishing to produce opium to pay for his son's wedding. Such a marriage would achieve a range of other outcomes, which might include fulfilling his son's wishes, securing lineage and possibly establishing familial bonds with a relatively wealthy and influential family in the community. Marriage to a more prosperous family may in turn secure access to other assets in the future, including land, non-interest bearing credit (known as *qarze hasana*) or perhaps to gain the kind of patronage that might support another son getting a job or even ensure the family's protection from an ongoing or potential conflict with a neighbour.

For this individual farmer, the high price of opium is almost irrelevant. He may have sold most of his share of the opium crop in advance the previous year so that he could meet the bride price and secure his son's future wife. He might have also sold what little residual opium he had, in the spring prior to this year's harvest, so that he could

cover his wheat deficit and feed his family. The result of these advance sales might well be that once the crop was finally harvested, he would have little or no opium to actually sell on the open market.

Therefore, for this farmer, the relatively high price of opium at the beginning of the season would only be important in that there might be more land available under sharecropping arrangements that year, particularly from the influential landowners in the village who had established good relations with the local security commander and possibly anti-government elements, as a way of insuring themselves against crop destruction. The farmer's familiarity with how to cultivate opium poppy would mean that he had an increased probability of getting this land and due to the landlord's relationship with local powerbrokers, a greater probability of obtaining a yield than other farmers who had not built these kind of alliances. In this context, 'high price' may have featured as a response by this farmer as shorthand for 'it works,' but its importance was rather minor compared to the other assets that opium ensured access to, some of which the farmer might not have even given to the enumerator during a short discussion, in his desire to avoid disclosing sensitive information on both opium production and the household's financial circumstances.

This points to a further problem beyond the conceptual problems associated with recording and reporting only a single answer to a direct question on the reasons for opium poppy cultivation: the clear challenges of asking farmers direct questions about an illegal activity in the complex political landscape in which opium poppy is grown in Afghanistan. This more direct line of enquiry raises concerns over how security issues and the presence of armed actors (state, insurgents and others) not only impacts on the selection of respondents, but also how it affects

respondents' answers. There is great potential for a bias in favour of more secure, peri-urban areas on the part of those conducting the survey and also the likelihood of social desirability bias by respondents.³³ However, if contextual data is gathered about what shapes the decisions of farmers, it could provide a basis for recasting the conversation to make it less threatening, as well as information to support verification of findings.

In conclusion, both the methods and the findings reported are problematic. Reducing the myriad of factors that inform poppy cultivation to a single response is simplistic and potentially very distortionary. It ignores how the decision to cultivate is shaped by individual, household and community assets, values and behaviour. It overlooks the rules that govern how households access the factors of production and neglects both the complex political environment in which opium poppy cultivation takes place and the multiple and often competing institutional interests at play. Finally, it ignores the multifunctional role that opium poppy plays in rural livelihoods and how these roles vary across different socioeconomic groups and locations.

THE ECONOMIC RETURNS TO OPIUM POPPY

The economic returns to opium are typically presented in the UNODC annual survey and cited by others, as gross returns and compared with the gross returns on wheat. This is calculated by multiplying the price of opium/wheat by the average yield. The focus on gross returns presents a number of problems:

- Both estimates ignore the by-products of each crop;
- There are considerable differences in input costs between opium poppy (an input-intensive crop) and wheat (typically grown using only family labour);
- Opium and wheat are presented as the only alternatives to each other and mutually exclusive, whereas there are a number of other cropping options and opium poppy and wheat are often grown on the same land over time as part of sensible crop rotation practices aimed at achieving food security through a combination of direct and exchange entitlement.

BY-PRODUCTS

Both opium and wheat have by-products that can be either sold or used by the household. Opium has two by-products, poppy straw and seed. Neither are included in UNODC's calculations of gross returns.

Poppy straw is typically used as fuel for households, saving on the purchase or gathering of firewood or alternative fuels. It is estimated that a jerib (1/5 of a hectare) of opium poppy can provide fuel for a household for around six weeks, saving around \$1.00 per day.³⁴ The straw can also be sold on the open market.

Poppy seed can also either be used or sold.³⁵ It can be processed into cooking oil by small household presses, with the resultant waste, known as *khunjara*, fed to livestock. An alternative is to sell to local traders who sell it on to larger traders who transport the seed to Pakistan³⁶ for production into edible oils.³⁷ Given the amount of poppy seed produced each year and the small amount of seeds required for planting, there is a significant amount of seeds available for sale or use. In the south, one hectare of poppy produces an estimated 60 to 75 *man* of seed (the equivalent of 270 to 337.5 kg) which in 2009 sold for 300 PR/*man*. Farmers estimate around 2.5 to 5 *man* (the equivalent of 11.25 kg to 22.5 kg) of seed is required to cultivate one hectare of opium. This leaves 55 to 72.5 *man* per hectare cultivated (the equivalent of 247.5 kg to 326.25 kg). If this is applied to the 209,000 hectares of opium poppy cultivated in 2013 – and assuming the same level of cultivation in 2013/14 – there would be a potential surplus of 51,727 to 68,186 metric tonnes of poppy seed available for sale. As late as 2005, poppy seed was still a legal export and listed in official statistics.

With regard to the by-products of wheat cultivation, Maletta³⁸ stated that 'any attempt to analyze the wheat crop as an activity conducive only to the production of grain would be deeply flawed.' In practice, *wheat straw* plays an important role in the household economy. In particular, it serves as feed for livestock during the winter months, allowing households to retain their animals and sell them in the spring at higher prices than if they had to sell them in the previous fall.

As such, wheat straw is an important input into livestock and its by-products such as *ghee* (clarified butter), *krut* (dried cream) and wool. In turn, livestock manure is used as a fertiliser and mixed with wheat straw for use as household fuel. Wheat straw is also used in the production of mud bricks and in house construction.³⁹ The yield of wheat straw is high and there is the potential for a unit of land to yield up to twice

the weight of wheat straw as of wheat.⁴⁰ The straw can also be sold on the open market. Prices vary depending on availability and season, but in the north during the winter, wheat straw can sell at a price that is commensurate with the value of wheat grain.⁴¹ Consequently, the failure to include the value of wheat straw can result in the gross returns on wheat being significantly undervalued.

INPUTS

UNODC's comparison of economic returns to wheat and opium poppy does not reflect the significant differences in input costs, despite the input-intensive nature of opium production. For opium, farmers incur higher costs for land preparation; use more fertiliser per unit of land; spend money on diesel for a tube well or hire the use of a pump when there is insufficient irrigation water. Furthermore, while all crops are subject to an agricultural tithe payable to the local mullah, opium production incurs additional costs in the form of payments to corrupt government officials to avoid eradication or payments to insurgents.

Most important is the large difference in labour requirements. Opium requires an estimated 360 person-days per hectare,⁴² compared to an average of only 31 person-days days for rain-fed wheat and 64 days for irrigated wheat.⁴³ While wheat can be largely managed by household labour,⁴⁴ opium usually requires costly labour during the harvest season,⁴⁵ with daily wage rates on occasions reaching \$2 per person-day in 2013 in areas such as Bakwa in Farah and Khaniishin in Helmand.⁴⁶

To minimise the need for hired labour, farmers have pursued a number of strategies including staggered planting, cultivating different varieties of opium poppy with different maturation periods, engaging in reciprocal labour arrangements, and maximising the use of household labour, including women and children. Wealthier households have been found to prefer to recruit labour under sharecropping arrangements, as well as offering advance payments on the future opium crop as a way of increasing their returns at the expense of farmers with limited land and capital. As Figure 3 shows, such is the value of the by-products of wheat and the costs of inputs for opium production, that the net returns on wheat can be comparable with those of cultivating opium poppy, for example in 2008.⁴⁷ Prior to 2008, wheat was estimated to have generated higher net returns than opium poppy cultivation in a number of districts in the southern region of Afghanistan in 1994, 1997 and 1999.⁴⁸ However, it should be kept in mind that opium prices in the 1990s were considerably lower than they have been over the past decade and than they are currently.

When asked about 'the number of households involved in opium poppy cultivation in this village,' do all respondents have the same understanding of who should be included? For example, where there is a landowner that cultivates opium poppy but employs a sharecropper to work the land, would this be reported as one household or two?

Table A2. Estimated net returns on opium poppy and wheat in Helmand Province in 2007/2008 growing season (Afs/Jerib)

OPIUM POPPY					WHEAT				
	Amount	Unit	Cost	Total		Amount	Unit	Cost	Total
Inputs									
Seed	4	Kg	0	0	Seed	30	Kg	0	0
Farmpower	2	Hours	500	1,000	Farmpower	1	Hour	500	500
Fertiliser (DAP)	2	Bag (50kg)	1,500	3,000	Fertiliser (DAP)	0.5	Bag (50kg)	1,500	750
Fertiliser (Urea)	2	Bag (50kg)	1,200	2,400	Fertiliser (Urea)	1.5	Bag (50kg)	1,200	1,800
Hired Labour during harvest	% of final yield	2.5 kg	3,150	7,875	Hired Labour	0	Person days	0	0
Food	20	Person days	50	1,000					
			0	0					
Sub Total				15,275					3,050
Other costs									
Payment to mullah	10% of final yield	1 Kg	3,150	3,150	Ushr	10% of final yield	50kg	33.3	1,665
Payment to avoid eradication	1	Payment	6,000	6,000					
Sub Total				9,150					1,665
Outputs									
Opium gum	10	Kg	3,150	31,500	Wheat Grain	500		33.3	16,650
Seed	490	Kg	10	4,900	Wheat Straw	1,000		10	10,000
Fuel (stalks)	42	Days	50	2,100					
Sub Total				38,500					26,650
Net returns (family labour)				28,950					21,935
Net returns (hired labour)				20,075					
Net returns (family labour and bribe)				22,950					
Net returns (hired labour and bribe)				14,075					

SOCIOECONOMIC DIFFERENTIATION

A further issue is the uneven return to different socioeconomic groups involved in opium poppy cultivation. UNODC typically reports gross returns per hectare, derived by multiplying the average yield by the average farm-gate price at harvest time. The costs of production, as reported by farmers, are then subtracted from this gross figure to derive a net return per hectare. It is not clear whether the production costs reported by farmers are actual costs or a percentage of the gross.⁴⁹ In 2013, UNODC reported a gross return of \$4,500 per hectare and a net return of \$3,600 per hectare,⁵⁰ the equivalent of \$900 and \$720 per jerib, respectively.

Net returns will vary depending on both the inputs and the outputs (including the by-products) of the final crop. Data highlighted elsewhere show how much gross returns varied over a relatively short distance in central Helmand during the 2013 growing season, ranging from \$900 to \$1,424 per hectare – a function of the different yields obtained in the former desert areas north of the Boghra canal compared to those in the canal command area itself. Most importantly, these data offer a calculation of the contrasting net returns to different socioeconomic groups. It notes the different land tenure arrangements, how these differ between the canal command area and the former desert areas north of the Boghra and what this means in terms of the net returns on cultivation. It shows how markedly different net returns are, depending on whether farmers own their own land, whether they use family or hired labour, including during the harvest period and according to the different sharecropping arrangements under which farmers gain access to land. At the extreme the net returns in 2013 to a landowner – who used no hired labour at all – varied from \$167 per jerib in the former desert area to \$997 in the canal command area. If hired labour was used during the harvest, both saw a fall in net returns; however, the landowner in the former desert area actually incurred a loss of \$34 for each jerib of opium poppy cultivated.

The losses are even more significant for landowners who met all the costs of production but employed a sharecropper who was given three quarters of the final crop. Under this arrangement, the landowner made a net loss of \$251 per jerib whereas the sharecropper actually made a net gain of \$224 per jerib.

As indicated in another report, not only do estimates of the gross (or even net) returns fail to capture the on-farm income different socioeconomic groups actually derive from its sale, but they also ignore the different functions

opium plays in the wider household economy. For instance, for the sharecropper in a former desert area, opium not only provides an on-farm income with which to purchase food, but it also provides a place to live – something he had lost access to when opium was banned in the canal command area and landowners moved to less labour-intensive crops that they could manage with their own family labour. As the only crop valuable enough to cover the costs of establishing a tube well, as well as the running costs, opium production also cross-subsidises the production of food crops, such as wheat and a small amount of summer vegetable production, as well as providing drinking water for the household and their livestock. None of these in-kind benefits are included in any calculations of the returns on opium poppy, but they can be just as important in determining levels of cultivation as the on-farm income that farmers expect to earn from opium production.

It remains unclear why we are still only presented with a comparison between the gross returns on wheat, a crop grown primarily for consumption, and opium, an input-intensive and labour-intensive cash crop. In addition to being misleading, such comparisons may further distort policy thinking, not least by giving an impression that the primary alternative to opium poppy is wheat, which could not be farther from the truth.

STAPLES VERSUS CASH CROPS

It is also important to recognise the different roles these crops play in the household economy and how this impacts on the allocation of both labour and land. Maletta⁵¹ has outlined how small landholdings, low yields and high population densities in Afghanistan preclude the majority of farmers from achieving (let alone surpassing) self-sufficiency in wheat and deriving any monetary value from its production. The result is that for the vast majority of farmers in Afghanistan, wheat is a staple and not a cash crop and as such, the presentation of the gross returns (or even the net returns) on the two crops is misleading.

For most farmers, an increase in the price of wheat does not result in a shift to commercial wheat production, even if the net returns on wheat production surpass those of opium. Instead, high wheat prices are seen by farmers as bringing about an increase in the cost of food that needs to be managed by the household. This is especially the case where there are concerns over wheat imports from neighbouring countries such as Pakistan and where violence and conflict make it difficult to travel and purchase wheat at the local market.⁵²

For farmers who own sufficient land, an increase in wheat prices may result in an increase in wheat production. However, this will largely be at the margin, where households may forego some of the land that they had cultivated with cash crops the previous year (including opium poppy) to produce extra wheat for family consumption.⁵³ It should be emphasised that this shift to wheat is not driven by the pursuit of profit and commercial production, but rather by the need to hold down financial outlays for a staple food and to secure wheat supply.⁵⁴

Many of the statistics used as both descriptors of illicit drug crop production and metrics for assessing the performance of drug control measures are conceptually and methodologically weak. Guilty of drugs fetishism - viewing the world solely through the prism of drug production and drug control measures - these statistics give little or no consideration to the wider socioeconomic, political and environmental context inhabited by those individuals and communities that cultivate opium poppy and coca.

However, for the vast majority of Afghan farmers, small landholdings and the large number of household members mean that they cannot meet their household food requirements even if they allocate all of their land to wheat. For these farmers there will always be a need for cash income to make up any food deficit and to manage the risk of crop failure. Therefore, in response to increasing wheat prices, these farmers will persist with cash crop production and where possible pursue wage labour opportunities so that they can meet the rising cost of wheat flour on the market. For farmers that do not own any land at all and gain access to land through sharecropping or tenancy arrangements, an increase in the wheat price may force them off the land altogether, if landowners look to ensure food security by substituting wheat for opium poppy and no longer require sharecroppers or tenant farmers to manage the land due to the lower labour inputs required for wheat production. Moreover, if sizeable landowners are prevented from opium cultivation (*i.e.* by an effective ban), they will make ends meet cultivating wheat, but will eject sharecroppers who had been on their land cultivating opium poppy and instead engage in wheat cultivation entirely or largely with household labour.

The varying responses to an increase in the price of wheat from farmers with quite different landholdings reflects the inadequacy of the current comparison of the economic returns on opium and wheat. Not only does it portray a far too simplified model of farmers as economic actors having solely income maximising objectives, choosing between two crops grown with quite different functions and inputs, but it also presents an image of farmers as homogenous, landed, shaped by the same aspirations and preferences and in a position to respond to shifts in prices by simply reallocating inputs from one activity to another. This is clearly not the case in rural Afghanistan and it distorts our understanding of those who are engaged in drug crop cultivation and how they respond to efforts to encourage them to abandon it.

Of course, a range of other crops are cultivated in the winter alongside opium poppy and wheat, including onion, spring onion, garlic, clover, spinach and squash, which rarely figure in comparisons with opium poppy. There are also crops that are planted in the spring, such as watermelon, melon, cotton, eggplant, cucumber, tomato, pea, green bean and okra, all of which compete with opium poppy for both household land and labour, but only between February/March and May when opium is harvested and not for the entire winter growing season.

Estimates have shown that the potential net returns on these cash crops have often been favourable. For example, research in Nangarhar in 2006 showed higher net returns for *gandana* (a type of leek), onion, okra, potato, squash and tomato than for opium poppy.⁵⁵ In Badakhshan, Johnson and Polovny⁵⁶ reported higher net returns from tomato, eggplant, onion, cucumber, carrot, turnip, cauliflower and okra than for opium in 2007. Moreover, unlike opium poppy, many of these crops can be intercropped and farmers have been found to have as many as five crops cultivated on the same unit of land at the same time.

Given the multitude of crops that compete with opium poppy for the factors of production in Afghanistan and the fact that many can be grown alongside each other as a way of managing pests, labour inputs and risks of crop failure, it remains unclear why we are still only presented with a comparison between the gross returns on wheat, a crop grown primarily for consumption and opium, an input-intensive and labour-intensive cash crop. In addition to being misleading, such comparisons may further distort policy thinking, not least by giving an impression that the primary alternative to opium poppy is wheat, which could not be farther from the truth.

CONCLUSION

Statistics shape how we view the world, particularly when they describe activities or population groups that few have direct experience of such as is the case with illicit drug crop production. As this paper has shown, many of the statistics used as both descriptors of illicit drug crop production and metrics for assessing the performance of drug control measures are conceptually and methodologically weak. Guilty of drugs fetishism - viewing the world solely through the prism of drug production and drug control measures - these statistics give little or no consideration to the wider socioeconomic, political and environmental context inhabited by those individuals and communities that cultivate opium poppy and coca.

Indicative of this fetishism is the reductionism with which the communities that cultivate drug crops are described. In the case of Afghanistan, drug control agencies such as UNODC depict rural households in binary terms, as either 'poppy farmers' or 'non poppy farmers.' Their livelihood activities are circumscribed by a comparison of the gross returns on opium and wheat⁵⁷ and by statistics which assert that it is simply 'high price' that motivates farmers to cultivate opium poppy: a caricature that is frequently perpetuated in the media and in some of the scholarly literature.⁵⁸

These statistics fail to capture the diversity of drugs cultivating contexts and the varied patterns of opium poppy and coca cultivation within a single source country. They simplistically portray those who cultivate drug crops as homogenous economic actors driven by the desire to maximise income;⁵⁹ either for the purpose of conspicuous consumption - 'the greedy'⁶⁰ - or as a means of escaping poverty - 'the needy.' Risk is largely considered in the context of the state acting to destroy the crop.⁶¹ How different households and communities living under different circumstances and political orders experience and manage the risk of the imposition of a ban or crop destruction is largely neglected, as is the diverse risks and opportunities that households and communities associate with engaging in activities related to 'the legal economy.' As the critique of these statistics has shown, there is much in the current portrayal of drug crop-producing households that, to quote Durrenberger⁶² in his discussion of Chayanov's seminal work on the peasant economy, 'do not match the realities observed.'

This process of abstraction, methodologically by asking specific drug-related questions, and conceptually by producing data describing those that cultivate drug crops, that is distinct from the assets, institutions, organisations, policies and legislation that shapes their livelihoods, offers little of analytical value to those practitioners actively engaged in development in rural areas where opium poppy and coca are grown. Confronted with real examples of households and communities transitioning out of illicit drug crop production through the diversification of on-farm, off-farm and non-farm income and the provision of public goods, development practitioners are confounded by the drug control community's reaction to a rise in aggregate levels of cultivation - even though the increases may have occurred in a more remote and less well endowed part of the province. They are further undermined by explanations of cultivation that are reduced to price, profit and high income and abstinence to the activities of the state and its campaigns of eradication and law enforcement.

Although these explanations for shifting levels of cultivation often have little empirical basis, they have provided development policy makers in western capitals, already nervous about engaging in what is undoubtedly a complex and highly politicised issue, the reason to abrogate responsibility to a drug control community that lacks expertise in rural livelihoods and the political economy of conflict affected states. The result is the kind of simplistic models of rural development that have been so common in Afghanistan and other drug producing countries, where development assistance is a means to leverage reductions in drug crop cultivation from rural elites and power brokers - the oft cited 'carrot and stick' - while development outcomes and how they are distributed go largely unnoticed.

It is clear that development organisations need greater support in developing a better understanding not only of the diverse circumstances and motives that influence drug crop cultivation but also of the different pathways that households follow when they transition out of opium and coca production. Greater academic research in this area will help, supported by a much more discerning review of current drug-related statistics by scholars and development policy makers alike. ■

Explanations for shifting levels of cultivation often have little empirical basis. Yet, they have provided development policy makers in western capitals, already nervous about engaging in what is undoubtedly a complex and highly politicised issue, the reason to abrogate responsibility to a drug control community that lacks expertise in rural livelihoods and the political economy of conflict affected states. The result is the kind of simplistic models of rural development that have been so common in Afghanistan and other drug producing countries, where development assistance is a means to leverage reductions in drug crop cultivation from rural elites and power brokers - the oft cited 'carrot and stick' - while development outcomes and how they are distributed go largely unnoticed. ■

NOTES

- 1 Editors note: this represents a policy overview of extensive statistical data to be found in W. A. Byrd and D. Mansfield, 'Afghanistan's Opium Economy: An Agricultural, Livelihoods, and Governance Perspective', *Prepared for the World Bank Afghanistan Agriculture Sector Review*, Revised Version: 23 June 2014.
- 2 Special Inspector General for Afghanistan Reconstruction, 'Quarterly Report to the United States Congress', 30 July 2014, <https://www.sigar.mil/pdf/quarterlyreports/2014-07-30qr.pdf>, p.82.
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- 4 W. Byrd and D. Mansfield, 'Licensing Afghan Opium for Medicinal Use: Why It Won't Work', *Peacebrief* 179 (Washington, D.C.: USIP, 2014).
- 5 'UNDCP's development projects appear no different from the numerous other small-scale inputs (schools, irrigation, health centres etc) being made by the NGOs and other development orientated UN agencies. The latter agencies at least have experience and some comparative advantage in development. It would not appear to be cost effective to fund UNDCP as an intermediary to build schools etc. when they simply contract out to others to do the work. We are also concerned that excessive UNDCP attention to a myriad of projects distracts attention away from the area of comparative advantage which relate to their mandate as a specialist drugs agency.' From M. Kapila, G. Templar, and E. Winter, 'Review of British Aid to Afghanistan' (Emergency Aid Department/Western Asia Department: Overseas Development Administration, 1995), p.52.
- 6 UNODC report that commitments to alternative development account for 'just 0.2% of overall development assistance' and only '3% of all development assistance in the four main coca-producing and opium-producing countries' between 2009 and 2013. UNODC, 'World Drug Report 2015' (Vienna: UNODC, 2015), https://www.unodc.org/documents/wdr2015/World_Drug_Report_2015.pdf, pp.84,88.
- 7 D. Mansfield, 'Examining the Impact of IDEA-NEW on Opium Production: Nangarhar: A Case Study', 2015, http://pdf.usaid.gov/pdf_docs/PA00KCPT.pdf.
- 8 Between June 1997 and December 2000, David Mansfield managed the UNDCP Afghan Opium Poppy Survey in Afghanistan.
- 9 UNODC, 'Afghanistan Opium Poppy Survey 2014: Cultivation and Production' (Vienna: UNODC, 2015), p.6
- 10 For more detail see D. Mansfield, Alcis Ltd, and OSDR, *Managing Concurrent and Repeated Risks: Explaining the Reductions in Opium Production in Central Helmand between 2008 and 2011* (Kabul: Afghanistan Research and Evaluation Unit, 2011), <http://www.areu.org.af/Uploads/EditionPdfs/1122E%20Managing%20Concurrent%20and%20Repeated%20Risks%202011.pdf>; and Mansfield, 'Examining the Impact of IDEA-NEW on Opium Production'.
- 11 For example see the Ministry of Counter Narcotics assessment of the Helmand Food Zone and its push to replicate the programme in Kandahar, Uruzgan and Badakhshan, at <http://mcn.gov.af/en/page/5138/5141>, as well as Senator Dianne Feinstein's letter to Hillary Clinton calling for the same thing (D. Feinstein, Feinstein: Support Afghan Farmers, Cut Off Taliban's Drug Funding, 7 February 2012, <http://www.feinstein.senate.gov/public/index.cfm/2012/2/feinstein-support-afghan-farmers-cut-off-taliban-s-drug-funding>) and contrast this with J. Havfenstein's critique ('The Helmand Food Zone Fiasco', 26 August 2010, <http://registan.net/2010/08/26/helmand-food-zone-fiasco/>) or that of V. Felbab-Brown ('Afghanistan Trip Report VI: Counternarcotics Policy in Afghanistan: A Good Strategy Poorly Implemented', 10 May 2012, <http://www.brookings.edu/research/opinions/2012/05/10-counternarcotics-felbabrown>).
- 12 UNODC and the Ministry of Counter Narcotics (MCN), *Afghanistan Opium Survey* (Kabul: UNODC/MCN, 2007), p.7.
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- 17 For example, UNHABITAT, UNDP, and the Helmand Planning Group, 'Helmand Initiative Socio-Economic Survey: Prepared by Agency Coordinating Body for Afghan Relief Survey Unit (Peshawar)', 2000, <http://www.scottshelmandvalleyarchives.org/docs/fes-00-04.pdf>, p.1, reported an average household size of 12.7 ; the Swedish Committee for Afghanistan, 'Farming systems of Nad Ali District, Helmand Province', *Afghanistan Agricultural Survey, Fifteenth Report, part VI*, 1992, estimated an average household size of 13 ; and Mansfield's own work in Helmand over an extended period.
- 18 Alcis, 'Where have all the flowers gone? The real reasons for the drop in the poppy crop in Afghanistan in 2015', 10 October 2015, <https://stories.alcis.org/where-have-all-the-flowers-gone-7de7b34e8478#.5w9yl9u2h>.
- 19 UNODC, 'World Drug Report 2015', p.94; UNODC, 'Afghanistan Opium Poppy Survey 2014: Cultivation and Production' (Vienna: UNODC, 2015), pp.7-8.
- 20 The 2005 survey also reported the reasons farmers were cultivating opium poppy that year, but the question was originally one that asked 'the reasons for increasing cultivation of opium poppy' (UNODC and MCN), *United Nations Afghanistan Opium Survey* (Kabul: UNODC/MCN, 2005), p. 62) rather than the reasons for cultivation per se. Since 2006 the question has remained unchanged.
- 21 UNODC and MCN, *Afghanistan Opium Survey* (Kabul: UNODC/MCN, 2006), p.73.
- 22 UNODC and MCN, *Afghanistan Opium Survey*, 2007, p.99.
- 23 UNODC and MCN, *Afghanistan Opium Survey* (Kabul: UNODC/MCN, 2008), p.105.
- 24 UNODC and MCN, *Afghanistan Opium Survey* (Kabul: UNODC/MCN, 2009), p.79.
- 25 UNODC and MCN, *Afghanistan Opium Survey* (Kabul: UNODC/MCN, 2010), p.62.
- 26 UNODC and MCN, *Afghanistan Opium Survey* (Kabul: UNODC/MCN, 2011), p.60.
- 27 UNODC and the Ministry of Counter Narcotics (MCN), *Afghanistan Opium Survey* (Kabul: UNODC/MCN, 2012), p.54.
- 28 UNODC and MCN, *Afghanistan Opium Survey* (Kabul: UNODC/MCN, 2013), p.51.
- 29 UNODC and MCN, *Afghanistan Opium Poppy Survey 2014: Socio Economic Analysis* (Vienna: UNODC, 2015), p.33.
- 30 UNODC and MCN, *United Nations Afghanistan opium Survey*, 2006, p.99; UNODC and MCN, *United Nations Afghanistan Opium Survey*, 2008, p.105.
- 31 With the exception of 'high income for little land' in 2012 and poverty in 2014 which were both cited by 20% of respondents.
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- 38 H. Maletta, 'The Grain and the Chaff: Crop residues and the cost of production of wheat in Afghanistan in a framing system perspective', *Unpublished Paper*, 2004, p.2.
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- 40 D. Mansfield, *Poppy Free Provinces: Measure or a Target? Report for AREU's Applied Thematic Research into Water Management, Livestock and the Opium Economy* (Kabul: AREU, 2009), p.48 ; Maletta, 'The Grain and the Chaff', p.13.
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- 42 D. Mansfield and A. Pain, *Counter Narcotics in Afghanistan: The Failure of Success?* (Kabul: AREU Briefing Paper, 2008), p.16.
- 43 Maletta, 'The Grain and the Chaff', p.24.
- 44 Maletta, 'The Grain and the Chaff'.
- 45 D. Mansfield, 'Coping Strategies, Accumulated Wealth and Shifting Markets: The Story of Opium Poppy Cultivation in Badakhshan 2000-2003', *A Report for the Aga Khan Development Network*, 2004, p.8.
- 46 See 'Diversity and Dilemma: Understanding Rural Livelihoods and Addressing the Causes of Opium Poppy Cultivation in Nangarhar and Laghman, Eastern Afghanistan' (PAL – Internal Document No. 2, December 2005, p.8).
- 47 Mansfield, *Poppy Free Provinces*, p.48.
- 48 See UNDCP, *Afghanistan: Assessment Strategy and Programming Mission to Afghanistan* (Kabul: UNDCP, May-July 1995) ; and UNDCP, *Afghanistan Annual Opium Poppy Survey 1997*, (Islamabad: UNDCP, 1997), p.11, cited in D. Mansfield, 'The Economic Superiority of Illicit Drug Production: Myth and Reality - Opium Poppy Cultivation in Afghanistan', *Paper prepared for the International Conference on Alternative Development in Drug Control and Cooperation*, Feldafing, 7-12 January 2012.
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- 50 UNODC and MCN, *Afghanistan Opium Poppy Survey*, December 2013 (Kabul: UNODC/MCN), p.10.
- 51 Maletta, 'The Grain and the Chaff', p.4.
- 52 Mansfield, *Poppy Free Provinces* ; Mansfield et al., *Managing concurrent and repeated risks*.
- 53 Mansfield et al., *Managing concurrent and repeated risks*.
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- 56 Johnston and Povolny, 'Alternative Development Program for Northeast Afghanistan (ADP/N)'.
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