

# ROADMAPS TO REGULATION: COCA, COCAINE, AND DERIVATIVES

A report commissioned by the Beckley Foundation's *Global Initiative for Drug Policy Reform*

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The illicit cocaine trade is a major destabilising force in many parts of the world, particularly Latin America, the Caribbean, and West Africa. The cocaine trade and efforts to suppress it under the current prohibitionist regime are responsible for deaths, violence and corruption, economic damage, and environmental destruction, among many other harms to individuals and society. **It is difficult, if not impossible, to envisage an end to these problems without addressing the issues surrounding both the illicit cocaine market and the prohibitionist approach to controlling it.** However, since the discussion of alternatives to prohibition is taboo, remarkably little work exists that opens up a space for genuine, detailed debate on the issue.

**The Beckley Foundation**, founded by **Amanda Feilding** in 1998, is a UK-based think-tank and UN-accredited NGO focused on creating a scientific evidence-base on which to build balanced drug policies. Through the Foundation's *Global Initiative for Drug Policy Reform*, Amanda influences drug policy worldwide, with the aim of introducing reform so that policies are based on public health, harm reduction, cost-effectiveness, and the respect of human rights.

Amanda proposed the idea for a report on regulating coca, cocaine, and its derivatives at a meeting with the Guatemalan President and his cabinet, who welcomed it with enthusiasm. Following this endorsement, Amanda approached leading experts on the topic, inviting them to participate in the project. She succeeded in bringing together the most prominent thinkers in the field, and formed an interdisciplinary team of global specialists to contribute to this comprehensive report. **The aim of the report**, commissioned under the *Global Initiative for Drug Policy Reform*, is to open up and advance the discourse on alternatives to prohibition of coca/cocaine, in the same way the BF *Global Cannabis Commission's* 2008 report *Cannabis Policy: Moving Beyond Stalemate* did for cannabis.

## RESEARCH QUESTION & AIMS

**The overarching question is:** What might be the most appropriate regulatory models for policy experimentation that would reduce the harms related to coca, cocaine, and its derivatives at each stage of the chain, from cultivation, through transit, to use?

The aim is to legitimise debate and policy experimentation with a view to reducing the devastating violence, corruption, and suffering in producer and transit countries. This includes:

- Reducing harms to both consumers and non-consumers;
- Minimising the drug-related income of illegal actors;
- Increasing drug-related income of the state and other legal actors, and reducing enforcement cost;
- Removing subsistence farmers and their families from the illicit economy and providing livelihoods within the mainstream economy.

## RESEARCH METHODS

- A review of the literature on cocaine-related harms, examining evidence from diverse fields including health, economics, politics, law, security, and sociology;
- Field research with a focus on areas such as cultivation, production, traffic, end users, US/Latin American relations, arms dealing, security, development, human rights, and money-laundering;
- A review of evidence from alternative approaches to drug control that have been tried around the world (although little or no evidence exists for cocaine regulation itself);
- Development of ideas for new regulatory models, and evaluation of impacts such new models might have on health-related, economic, judicial, and socio-political outcomes.

## SUMMARY OF THE REPORT

### Part I: Context & History

Section Coordinator: Paul Gootenberg

Part I gives a historical overview describing the development of the use of coca leaf, cocaine, and crack cocaine. For each substance, the authors describe ethnography and use patterns, the harms and benefits associated with use, and the shifting societal and governmental attitudes towards the substance and those who use it. The section goes on to describe the history and effects of control mechanisms under the UN Drug Conventions, as well as their inflexibility and the consequent lack of experimentation with alternative policies. Finally, it explains the growing disenchantment with prohibition and the rising role of Latin America in the movement against this regime, along with philosophical, human rights, and economic impacts of the current policies and envisioned changes with the adoption of new policy options.

### Part II. Stages in the Chain

Section Coordinator: Ricardo Vargas Meza

Part II gives an overview of the global illicit coca/cocaine market, highlighting socio-political issues (including the harms engendered, in large part, by prohibition) at every stage of the process: cultivation, processing, trafficking, supply, and consumption. Each chapter summarises and analyses the issues of a specific region, and describes options to reduce harms.

**Cultivation and producer countries.** These chapters contextualise the dilemmas faced by the three main countries where coca / cocaine are produced: Bolivia, Colombia, and Peru. The authors open the discussion on social inequality, conflict, and governance issues, and describe how prohibitionist measures deployed in the Andean countries have magnified pre-existing challenges and compounded them with additional difficulties. The chapters draw a vivid and comprehensive picture of the costs of prohibition in producing countries, and open discussion on the need and potential for change.

**Trafficking and transit countries.** The constellation of 'transit countries' evolves as a response to changes in the cocaine market, responding swiftly to factors such as governance issues, presence of insurgency groups, state of the economy, increased repression/interdiction in other regions, changes in demand, and cultural links. These chapters explore the current trafficking routes, including Central America, Mexico, Venezuela, West Africa, and the Caribbean, and explain how networks of corruption and criminality in transit countries impact governments, economies, social cohesion, and security.

**User and consumer countries.** These chapters introduce the multifaceted challenges for countries with high cocaine use, reiterating the problems introduced by prohibition and drawing a comprehensive picture of the harms of problematic use patterns. As efforts to curb the harms of crack / cocaine seem to have stagnated, the chapters also explore options for regulation that could be used to manage problem use and its potential harms.

### Part III. Proposal of a Regulatory Model

Section Coordinator: Hugo Cabieses

Section III deals directly with the overarching research question, providing a summary of potential regulatory models to reduce harms at every level. The chapters identify some of the principal strengths, weaknesses, opportunities, and threats associated with different regulatory models, and they draw on the experiences of countries that have experimented with depenalisation or decriminalisation. The authors develop proposals for regulatory best practices and estimate the potential impacts of implementing them, while pointing out the challenges which may arise during the development of novel regulatory methods for coca, cocaine, and derivatives.

FOREWORD & INTRODUCTION		
Introduction to the Report	Amanda Feilding <i>Director, Beckley Foundation, UK.</i>	The convener of the report introduces the topic with a damning critique of the War on Drugs and an affirmation of the importance of continuing to build the scientific evidence base on which new policy options, based on decriminalisation and regulation, can be built.

PART I Chapter	Author(s)	Summary
Introduction to Part I: “Clarifying Cocaine”	Paul Gootenberg <i>Distinguished Professor, Stony Brook University, New York, USA.</i>	The introduction gives an overview of the sections to follow, touching on each contributor’s main points and their contribution to the debate.
<b>History and Overview of Use</b>		
“The Botanical Science and Cultural Value of Coca Leaf in South America”	Carol Conzelman <i>Associate Director, Global Studies Program, University of Colorado Boulder, USA.</i>  Dawson White <i>University of Illinois at Chicago, Field Museum of Natural History, Chicago, USA.</i>	This chapter summarises the botany, ethnobotany, and ethnography of coca and its traditional consumers, in particular Andean indigenous cultures. The authors describe the botanical diversity of coca and current cultivation patterns, and lay out the current scientific understanding of the chemistry and pharmacology of the coca leaf, with a focus on nutritive and medicinal properties. They then use data from Bolivia, Peru, and Colombia to characterise the ancient and modern cultures of coca cultivation/use, agrarian community politics, economic factors of licit vs. illicit markets, and the shifting public image of the leaf over the centuries.
“Cocaine’s Malleable Past”	Paul Gootenberg <i>Distinguished Professor, Stony Brook University, New York, USA.</i>	This chapter shows, from a global perspective, how malleable cocaine’s profile has been across the drug’s history. It explores how changes have registered in distinctive legal regimes, as well as in shifts in prestige and legitimacy, forms and paths of illicit use, severity of social harms, and impacts of prohibition on consumption, production, and trafficking. The author argues that cocaine’s variable past suggests flexible ways of thinking about and dealing with the drug.
“Crack: Global epidemiology, key characteristics and consequences of use, and current interventions”	Benedikt Fischer <i>Professor &amp; Senior Scientist, Univ of Toronto, Centre for Addiction &amp; Mental Health, Toronto, CAN; Centre for Applied Research in Mental Health &amp; Addiction, Simon Fraser University, Vancouver, CAN.</i>  Co-authors: Sharan Kuganesan, Chantal Burnett, Andrea Gallassi, Dan Werb	This chapter sketches out the global epidemiology of crack use, and provides an overview of the characteristics and outcomes that distinguish crack from other street drugs (e.g., socio-economic marginalisation of users, principal vs. poly-drug use, health harms). The authors discuss crack users’ unique exposure to victimization, violence, and other key health risks, as well as the volatility of crack markets and the stigma and social marginalization that present barriers to services. They conclude by presenting challenges posed by the limited availability of targeted prevention and treatment efforts.

<b>History of Control Mechanisms</b>		
“Coca and Cocaine: The Evolution of International Control”	David Bewley-Taylor <i>Professor, International Relations &amp; Public Policy; Director, Global Drug Policy Observatory, Swansea University, UK.</i>	Here, the author charts the inclusion and current status of coca and cocaine in the United Nations’ global drug prohibition regime, and explains how the coca leaf came to be included in the strictest drug schedules, outlawing ‘quasi-medical’ and ‘traditional’ uses. He also describes the changing views on coca within Peru and Bolivia following Evo Morales’s radical and historic break with this anti-drugs strategy, representing the first open challenge to the extant system.
<b>Prohibition in Context</b>		
“The Gradually Eroding International Drug Regime and the Rising Role of Latin America”	Juan Gabriel Tokatlian <i>Director, Department of Political Science &amp; International Studies, Universidad di Tella, Buenos Aires, Argentina.</i>	In this chapter, the author argues that the international drug regime is progressively losing legitimacy, and that Latin American countries are leading a paradigm shift through their drug policy experimentation. The chapter presents evidence and arguments which reinforce the movement against drug prohibition and punitive policies. It goes on to analyse the evolution of the international drug regime, particularly via Latin American debates and proposals.
Human Rights	Rodrigo Uprimny <i>Professor, Faculty of Law, Univ Nacional de Colombia, Bogotá; Director, Center for the Study of Law, Justice &amp; Society, Colombia.</i>	This chapter is not yet completed, but will assess the many diverse ways in which the current prohibitionist policies impact on the rights of people in producer, transit, and consumer nations.
“The Economics of Drug Market Regulation in Latin America: Would Regulation Significantly Impact the Supply Chain?”	Daniel M. Rico <i>Public Policy, University of Maryland, USA.</i>	This chapter examines potential positive outcomes of drug regulations on the economic sphere, using the specific cases of Guatemala and Colombia. The author describes the criminal structures and conditions of the drug business, and analyses the economic impacts at each stage of the supply chain. He concludes that regulation would have a marginal economic impact in most of the stages, with the most significant impacts in the midlevel stages of production.

<b>PART II Chapter</b>	<b>Author(s)</b>	<b>Summary</b>
Introduction to Part II: “Stages in the Chain”		The introduction gives an overview of the sections to follow, touching on each contributor’s main points and their contribution to the debate.
<b>Cultivation / Producer Countries</b>		
“From Crisis to Opportunity: An Ethnographic Analysis of Bolivia’s Cooperative Coca Control Strategy”	Thomas Grisaffi <i>Research Fellow, University College London; Andean Information Network, UK.</i>	This chapter describes Bolivian President Morales’ radical break with the US-backed anti-drugs strategy (which focused on the forced eradication of coca leaf and criminalisation of coca growers) and his establishment of a new ‘coca yes, cocaine no’ policy aimed at reducing harms to coca grower communities. The author explains how the new policy has been operationalised, and that it represents a viable, less damaging alternative to the forced eradication of coca crops.

<p>“Colombia: The Madness behind the ‘Successful’ Campaign against Illegal Drugs”</p>	<p>Ricardo Vargas Meza <i>Sociologist; Research Investigator, Transnational Institute; Director, Acción Andina Colombia.</i></p>	<p>This chapter addresses the motivations behind the US-led campaign against coca production and the cocaine trade in Colombia. The discussion centres on the socio-economic factors that led to the development of these industries in Colombia, and the political and social factors that fuelled the campaign against them. The realities behind the purported motivations are exposed, and the costs of the exercise revealed.</p>
<p>“Peru’s VRAEM: Where the Neoliberal Development Model and the Illegal Economy Converge”</p>	<p>Ricardo Soberón Garrido <i>Lawyer &amp; drug policy analyst; Director, CIDDH (Drugs &amp; Human Rights Research Centre), Peru.</i></p>	<p>The chapter presents the impacts of anti-narcotics policies in the VRAEM region (the main coca-cocaine producing region in Peru), showing how the illegal economy and neoliberal governance co-exist. The author argues that despite the violence and corruption, both can function simultaneously in complete harmony. The chapter also presents key ideas for a regulatory model for coca/cocaine products, including a legal industry, adult use, and medicine.</p>
<p><b>Trafficking / Transit Countries</b></p>		
<p>“Cocaine: the Mexican Link”</p>	<p>Luis Astorga <i>Researcher, Instituto de Investigaciones Sociales, Universidad Nacional Autónoma de México.</i></p>	<p>The author reviews the history of cocaine in Mexico, up to the 1970s, when it became important to Mexican traffickers’ income and alliances with their Colombian counterparts. He showcases the criminal organisations considered to be the main suppliers, how they became powerful, their profit estimates, and internal splits and reconfigurations that have led to high levels of violence. He then describes shifts in the relationship between political and criminal power structures, and outlines a hypothetical scenario of cocaine legalisation and its repercussions.</p>
<p>“Cocaine Trafficking in Central America: the Reason and the Pretext”</p>	<p>Juan Carlos Garzón Vergara <i>Global Fellow, Woodrow Wilson Center, Washington, DC, USA; Research Associate, Ideas for Peace Foundation, Colombia.</i></p>	<p>This chapter describes the role and dimensions of drug trafficking in Central America and how governments and elites have responded, showing how insecurity and instability in this drug trafficking corridor have served to justify the ‘war on drugs’ while also helping governments and local elites evade responsibility. The author concludes that the opportunities and challenges that regulation could open in Central America will be mediated by institutional capacities and local conditions.</p>
<p>“The Effects of Cocaine Prohibition in Latin America: ‘Risk Surplus Value’ and Venezuela’s Transit Role in International Trafficking”</p>	<p>Verónica Zubillaga <i>Associate Professor, Universidad Simón Bolívar, Caracas, Venezuela.</i>  Andrés Antillano <i>Chair, Department of Criminology, Universidad Central de Venezuela, Caracas, Venezuela.</i></p>	<p>The chapter argues that the ‘war on drugs’ in the Americas has not resulted in supply reduction, but instead has led to a redistribution and displacement of the players, routes, and countries involved, as reflected in Venezuela’s growing role in international drug trafficking. The authors use the concept of ‘risk surplus value’ to discuss how cocaine’s illegal status encourages violence, and discuss Venezuela’s own drug policies (which adhere faithfully to the prohibition mandate), institutional order, violence, and criminalisation of disadvantaged sectors of society.</p>
<p>“In the Eyes of the World: West Africa and the Cocaine Connection”</p>	<p>Isidore S. Obot <i>Professor, University of Uyo, Centre for Research &amp; Information on Substance Abuse, Uyo, Nigeria.</i></p>	<p>This chapter describes the features of West Africa that are (directly or indirectly) associated with drug trafficking and use, including widespread poverty, a rising population of youth, growing inequality, and rapid urbanisation, as well as political and administrative factors such</p>

		as socio-political conflicts, lack of strong governance, weak border controls, and widespread (but disregarded) corruption. The author argues that these factors have aided the establishment and maintenance of criminal organisations for trafficking minerals, humans, and drugs.
“Caribbean Trafficking / Transit Countries”	<p><b>Bruce M. Bagley</b> <i>Professor, University of Miami, USA</i></p> <p><b>Anthony P. Maingot</b> <i>Professor Emeritus, Sociology, Florida International Univ., USA.</i></p> <p><b>Marcus Day</b> <i>Director, Caribbean Drug &amp; Alcohol Research Institute, St Lucia.</i></p>	This chapter is not yet completed, but will examine the issues faced by the Caribbean as a major transshipment zone for cocaine. It will discuss the role of the US in Caribbean supply reduction, the unintended consequences on the Caribbean of the War on Drugs (including the introduction of crime and corruption), and current developments in CARICOM drug policy.
<b>User / Consumer Countries</b>		
Overview: “Coca derivatives and consumer countries”	<p><b>Carla Rossi</b> <i>Vice-President, National Council for the Social Sciences, Italy.</i></p> <p>Co-Authors: Luca Di Censi, Francesco Fabi</p>	The overview introduces the prevalence of cocaine use in the world, along with data on the different groups of people involved and examples of ‘epidemic’ behaviour.
“Health Consequences of Cocaine Use”	<p><b>Gabriele Fischer</b> <i>Professor, Psychiatry &amp; Psychotherapy, Centre for Public Health, Medical University Vienna, Austria.</i></p> <p><b>Laura Brandt</b> <i>Clinical Psychologist, Centre for Public Health, Medical University Vienna, Austria.</i></p>	This chapter provides an overview of somatic and psychiatric consequences experienced by a small but significant minority of cocaine / crack-cocaine users, including cardiovascular problems (stroke, myocardial infarction); necrosis of skin, soft tissue, and cartilage; psychotic disorders (delirium, hallucinations); development of cocaine use disorders, where cessation of use leads to mood disturbances, low drive, and increased appetite; and consequences of high-risk behaviours associated with use, such as infectious diseases, violence, or car accidents.
“Social Contexts and the Consumption of Coca Derivatives: The Downfall of Prohibition”	<p><b>Antoni Llorca Suárez</b> <i>Anthropologist, Universitat Rovira i Virgili, Tarragona, Spain.</i></p> <p><b>David Pere Martínez Oró</b> <i>Social Psychologist, Drug Policies Unit, Autonomous University of Barcelona, Catalonia, Spain.</i></p>	This chapter argues that most cocaine consumption is ‘controlled’, and that most problematic use is a result of prohibition itself, as well as of the social conditions of deprivation in which use takes place. The authors describe strategies used by the prohibitionist paradigm to conceal information that contradicts its tenets in order to maintain legitimacy (as demonstrated by the ‘Cocaine Project’). They then compare use of cocaine hydrochloride in Spain to the use of crack and cocaine paste in North America, and suggest that more pragmatic and reasonable strategies, such as harm and risk reduction, should be deployed in response.

<p>“Analysis of Different Drug Policy Approaches and Consequences”</p>	<p>Carla Rossi <i>Vice-President, National Council for the Social Sciences, Italy.</i></p> <p>Co-Authors: Luca Di Censi, Francesco Fabi</p>	<p>Here, the authors characterise different drug policies and their consequences, citing a recent report by the Global Commission on Drug Policy that calls for an end to the criminalisation of drug users. The authors show that the effectiveness of punitive drug laws is not supported by evidence, and in fact may have unintended and undesirable consequences, including vast profit margins that enrich organised crime and corruption. They conclude by describing how approaches recently developed for cannabis might be adopted to regulate cocaine.</p>
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PART III Chapter	Author(s)	Summary
<p>Introduction to Part III: “Possibilities for Regulation”</p>		<p>The introduction gives an overview of the sections to follow, touching on each contributor’s main points and their contribution to the debate.</p>
<p><b>Principles and Forms of Regulation</b></p>		
<p>“Illicit Crops and their International Demand”</p>	<p>Ibán de Rementería <i>Expert &amp; Consultant on drugs, alternative development, and security for the UN, CEPAL, GTZ, and IICA in Colombia, Peru, Bolivia, Ecuador, and Chile.</i></p>	<p>This chapter describes the global agricultural and socio-economic conditions that set the stage for the current international drugs market, and lists the shortcomings of ‘alternative development’ schemes and possible solutions. The author then describes proposals for the cropping and commercialisation of coca and derivatives, closing with a description of three possible legal markets: 1. The traditional market (chewing coca, infusing leaves, medicinal uses); 2. A legalised market for cocaine and crack built on principles of medical use and harm reduction; and 3. A market for coca-based preparations, such as energy drinks. Together, these would provide viable alternatives to the current illicit market at all levels of the supply chain.</p>
<p>“K’INTUSQA: Regulation of Coca and its Derivatives”</p>	<p>Hugo Cabieses <i>Economist; Board Member, CIDDH; Consultant, TransNational Institute and Open Society Institute; Chief, Cabinet of Advisors to the Regional Government of Cajamarca, Peru.</i></p>	<p>K’intusqa – a word in the Quechua language – traditionally indicates the act of selecting 3 coca leaves for the k’intu ceremony, but also refers to the ‘ceremony’ of re-evaluating and regulating coca/cocaine at 3 points in its trade: cultivation, commercialisation, and consumption. In this context, the author advocates a comprehensive harm reduction strategy that calls for re-evaluation of international treaties and policies, and destigmatisation of consumers and producers. He suggests the following: On the producer end, implementing sustainable rural development strategies (DRIS-C); along the trafficking chain, targeting the true links; and on the consumer end, treating it as a health problem amenable to education, prevention strategies, and rehabilitation through substitution and social integration.</p>
<p>“International Drug Control and Principles of a Regulatory Model”</p>	<p>Ricardo Soberón Garrido <i>Lawyer; Director, CIDDH (Drugs &amp; Human Rights Research Centre), Peru.</i></p>	<p>In this chapter, the author alludes to the UN treaties under which the international drug control regime currently operates, and proposes six guiding principles to help shape new regulatory models. Models following these principles would adhere to international law as well as human rights obligations. They are: 1. Legality (adjusting international law in compliance with the</p>

		current system), 2. Reciprocity (developing international trade terms); 3. Effectiveness (periodic review of policies); 4. Shared Responsibility (observing trade terms); 5. Harm Reduction; and 6. Autonomy (both as an international community and within individual countries).
<b>Potential Outcomes and Challenges</b>		
“Proposals for Drug Policy Reform and Implications for Human Security”	Annette Idler <i>Director of Studies, Changing Character of War Programme, University of Oxford, UK.</i>	The author discusses how a shift from the current international drug control regime to a more flexible regulatory model may enhance human security. She argues that a regulated market will contribute to legal economic opportunities for rural communities in coca growing countries, thus reducing their vulnerabilities vis-à-vis transnational organised criminals and other violent non-state groups. She further discusses how reforms of the judicial framework can help reduce violence and abuse in transit countries, and considers how a new regulatory model could benefit consumer countries in terms of reduced stigma and easier access to medical treatment.

BOXES	Author(s)
“The coca preparation known as ypadú or mambe”	Anthony Henman
“Crack cocaine in contemporary Brazil: A challenge yet to be fully understood and addressed”	Francisco I. Bastos, Neilane Betoni
“The coca leaf a natural heritage for humanity”	Roberto Calzadilla
[UN drug control system]	John Collins
[Cocaine neuropsychopharmacology]	David Nutt