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Policy analysis

Supply-side harm reduction strategies: Bolivia's experiment with social controlth Linda Farthing^a, Benjamin Kohl^b,*

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ABSTRACT

Harm reduction approaches to drug control have almost exclusively focussed on consumers in northern countries. This article supports recent analysis that indicates that such policies also hold relevance for producer countries by drawing on recent policy innovations in Bolivia. When Evo Morales, the president of the national coca grower confederation, was elected the country's first indigenous president in 2005, he promised to fundamentally change 25 years of the U.S.-funded "drug war" that had generated repeated human rights violations. The new policy, which implicitly incorporates harm reduction principles combined with respect for human rights, recognizes coca leaf's traditional use and cultural importance and relies on vigorous local organizations to implement a community-based programme called social control. Results to date indicate that Bolivia's social control experience has reduced violence in coca growing communities, ensured small farmers a subsistence income from coca and increased sovereignty, while making a modest contribution to containing expansion of coca cultivation. The programme has registered 50,000 farmers who are allowed to cultivate limited quantities of coca to supply traditional users and helped them gain secure title to their land. This registration is combined with satellite surveillance to guarantee that farmers do not exceed limits established by law. To date, the programme's reach is incomplete and coca is still diverted to the drug trade. Nonetheless, the approach may offer lessons for other drug producer countries, particularly where strong socio-political organizations are found in combination with closeknit communities holding shared cultural values.

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Over the past 20 years, diminishing the social and economic problems associated with the consumption of illegal drugs through harm reduction has become an accepted part of drug policy discourse in international as well as national programmes, particularly in Europe, although defining the exact parameters of the concept has been complicated (Ball, 2007, pp. 684–685; Cook, Bridge, & Stimson, 2010, p. 43; EMCDDA, 2010; Greenfield & Paoli, 2012; Lenton & Single, 1998; Marlatt & Witkiewitz, 2010). In general terms, harm reduction's evidence-based and pragmatic orientation shifts the conceptual focus of drug policy away from criminalization and measuring quantities of drugs confiscated and the numbers of people arrested to a comprehensive perspective on the impacts of drug-related activities and policies on societies as a whole. It places the harms from drug use and drug control policies within a wider context that considers a broad range of social, cultural, and

economic factors that includes a more complete conception of the social and geographic distribution of harm.

A recurring challenge facing the harm reduction approach has been the choice of measurement indicators. The fundamental normative nature of approximating drug- and drug policy-related harms and benefits, and how these are balanced in policy decisions, makes it unlikely that agreement on these issues will be reached any time soon. As harms and benefits vary across societies, comparing them either quantitatively or qualitatively faces problems of incommensurability, causality, and subjectivity that result from inherently political rather than empirical issues (Greenfield & Paoli, 2012; Weatherburn, 2009). The general emphasis on scientific results-driven evidence has tended to obscure harm reduction's normative, value-driven underpinnings, which Fry, Treloar, and Maher (2005) argue undercuts its capacity to successfully engage its critics.

Recently discussion has surfaced proposing uncoupling harm reduction principles from related concrete programmes—such as needle exchange and HIV testing for users—in order to apply the approach to the supply-side of drug policy (Greenfield & Paoli, 2012; Jelsma, 2012), although Barrett (2012, p. 18) cautions against broadening the focus so wide that it dilutes harm reduction's prioritization of human-rights. With this caveat, we characterize harm reduction, adapting Harm Reduction Coalition's definition (nd), as

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policies, programmes, and practices that aim primarily to reduce the adverse health, social, and economic consequences of the use and production of legal and illegal psychoactive drugs.

Bolivia, one of the western hemisphere's economically poorest countries, ranks third in world coca leaf and cocaine production. In 2009, it implemented a peasant-centred coca control programme based on harm reduction principles. The new approach reverses decades of U.S.-financed policies focussed almost exclusively on military/police suppression and eradication that resulted in well-documented human rights violations and harassment of the peasant farmers who grow coca leaf, a central component of Andean indigenous culture (Ledebur, 2005). The "coca yes, cocaine no" policy instituted by President Evo Morales, who led resistance to repressive policies for 15 years, is headed by growers themselves and is shaped by the leaf's centrality in indigenous cultures, as well as rooted in respect for human rights. It prioritizes reducing police and military-driven violence, ensuring a subsistence income for growers, maintaining a high price for coca leaf, and reasserting Bolivian sovereignty. Secondarily, as Kathryn Ledebur pointed out in a 2012 interview, it seeks to respect Bolivia's international commitments to limit coca cultivation, indirectly reducing the amount of coca that ends up as cocaine. The policy incorporates economic development initiatives and joint military-police action to curb drug trafficking and an innovative community-led scheme known as "social control" which, since 2009, has assisted local organizations to limit coca cultivation.

Fry et al.'s (2005) argument that effective harm reduction must be grounded in communal rather than individual rights, resonates with the values underpinning Bolivia's social control programme and clearly positions the policy within the harm reduction mould. Although not stated as such, the new policies recognize the critical cultural and economic role coca plays locally while intrinsically accepting that a low-income country like Bolivia with a historically weak state may be able to limit, but not completely abolish, cocaine production, a perspective that parallels harm reduction advocates acknowledgement that illicit drug use will never be completely eliminated. Social control prioritizes the well-being of coca growing communities and the protection of the most vulnerable, mirroring harm reduction's emphasis on the quality of life for drug users and those who live in communities disproportionately affected by drug use. Social control strives to be non-judgemental and builds on coca grower experience, participation, and perspectives in policy design and execution, similar to the way harm reduction programmes incorporate users and their communities into planning. Coca growers, like drug users, are recognized as active agents not passive victims. Bolivia's social control recognizes that illicit coca cultivation, just as consumption-side harm reduction does, is rooted in problems of social inequality, poverty, gender, and ethnic discrim-

This article explores the design, implementation, and results of Bolivia's social control harm reduction programme, using data from reports, evaluations, and interviews conducted during ongoing research between 2003 and 2012. First it considers past policies to control coca cultivation before turning to the concept of social control generally in Andean indigenous societies, and how this is linked to the control of coca cultivation in Bolivia. A description of the new policy and an evaluation of its impacts follow. The article concludes by exploring the possibility of applying this approach elsewhere.

Coca growers and coca policy to 2006

Coca leaf has been important to South American life for over 4000 years and was one of the first trade goods on the eastern slopes of the Andes (Rivera Cusicanqui, 2003). Coca dulls hunger

and fatigue, aids in digestion, provides vitamins and minerals lacking in local staples, is widely used in medicine (Sikkink, 2010), and is offered at all indigenous rituals (Allen, 1988). Sharing the leaf with others is essential to social interactions and negotiations, as it is seen to encourage wisdom, reflection, and introspection (Nicolas, Fernández, & Flores, 2007, pp. 280–281).

Bolivia's two main cultivation regions are the Yungas, east of the capital city of La Paz, where coca has been grown on steep hillsides for several thousand years, and the Chapare, a semi-tropical lowland area about the size of Wales or New Hampshire, settled by migrants escaping highland overcrowding beginning in the 1960s. In both areas, most families use manual, labour-intensive methods and cultivate less than 3 ha of a combination of coca, rice, bananas, and citrus fruits in addition to raising a few cattle and chickens, with coffee as an additional cash crop in the Yungas (Farthing & Kohl, 2005). Coca production skyrocketed in the 1980s with the surge in demand for cocaine in northern countries, particularly the United States, at a time of political and economic crisis in Bolivia. Hyperinflation, severe drought, and neoliberal structural adjustment combined to create a dire situation for thousands of the country's poorest people. With little understanding of cocaine and its effects, peasants and displaced miners flocked to the Chapare and, to a lesser extent, the remote reaches of the Yungas to grow the increasingly valuable leaf. The coca-cocaine economy became critical to Bolivia's ability to weather the worst impacts of structural adjustment: at its peak during the late 1980s and early 1990s, coca production was estimated to equal Bolivia's legal export economy (Painter, 1994, p. 48).

Between the mid-1980s and 2004, drug control policy was dominated by the U.S. and primarily aimed at the Chapare under the direction of special U.S.-trained police and military units. Despite Bolivian apprehension, given the country's history of repeated military coups d'état, the United States threatened to pull badly needed aid if the country's presidents refused U.S. and domestic military participation. This pressure was applied with little regard for the legally required Bolivian congressional approval, the country's sovereignty, or political stability (Ledebur, 2005).

Policy hinged on anti-drug legislation (Bolivian Law 1008), written in 1988 under U.S. guidance, that designated the Yungas' higher altitudes a "traditional" area where 12,000 ha of "legal" coca were sanctioned for domestic consumption, which consequently have never been subject to any production controls. The Chapare and frontier, lower elevation Yungas areas were deemed either "illegal" or "surplus" production zones, where coca was slated to be destroyed or substituted. Twenty years on, the law has had the greatest impact on coca-growing families and those on the cocaine trade's lower rungs who have faced arbitrary arrest and lengthy incarceration while doing little to limit trafficking and the quantity of cocaine manufactured (Ledebur, 2005). Until 2004, eradication forces were repeatedly charged with well-documented human rights abuses and harassment in the Chapare (AIN, 1993; Human Rights Watch, 1996; Ledebur, 2005).

Chapare growers suffered the most between 1997 and 2001, during the presidency of former dictator Hugo Banzer. Under U.S. embassy pressure, Banzer adopted *Plan Dignidad* (Dignity Plan), which initiated forced eradication by the military and militarized police, provoking a severe economic crisis among growers. Security forces killed 33 Chapare coca growers and injured 570, leading to retaliatory attacks that resulted in 27 military and police deaths (Farthing & Ledebur, 2004). In the Yungas in 2001, Banzer's government launched the only militarized eradication programme the region had ever experienced, which was met with such fierce organized resistance by thousands of coca growers that the government abandoned the plan (Huanca, 2001).

In both the Yungas and the Chapare, growers are grouped into peasant unions that have historically filled the role of local governments (Conzelman, 2007a; Farthing & Kohl, 2005). These highly participatory associations have a centralized male leadership (although women exert considerable informal influence), and a structure that mirrors indigenous community organization. The unions assign land for settlement, resolve disputes, direct community projects such as building schools or roads, and discipline anti-social behaviour (PACS, 2009a, 2009b). These broad responsibilities have forged powerful organizations with strong bonds to indigenous culture, the land, and national worker and peasant confederations. Chapare unions grew steadily beginning in the 1980s to represent approximately 44,000 families, principally from Quechua-speaking highland and valleys, who preserve a mixture of indigenous cultural forms within a largely market economy. There is also a smaller but significant contingent of ex-miners who migrated after thousands of workers were fired from the stateowned mines in 1985 (PACS, 2009d, p. 81; Spedding Pallet, 2004).

The six Yungas agrarian federations, also steadily expanded to almost 30,000 mostly Aymara-speaking families, historically linked to clientilist traditional political parties. They have always been far less unified than their Chapare counterparts, with fierce rivalries often erupting within and between the Yungas federations and their affiliated coca marketing associations (PACS, 2009a, p. 37, 2009d). Cleavages also proliferate between producers from the Yungas "traditional" coca-growing zone, who seek to protect their productive niche under Law 1008, and the much larger group who have steadily migrated to more productive lowland frontier areas subject to eradication.¹

During the 1990s, two initiatives broke the U.S. policy stranglehold and laid the foundations for the social control initiative. The 1994 Law of Popular Participation (LPP) transferred 20 percent of national tax revenues to municipal governments, in the process developing community oversight mechanisms (a form of social control) based on the first-ever official recognition of over 15,000 grassroots organizations, including cocalero unions (Ayo, 2004). The other change started in 1998, when the European Union (EU) funded a programme to strengthen Chapare municipalities. In contrast to the United States, and consistent with harm reduction values, the EU has usually interpreted illegal coca cultivation as a result of poverty, as do the coca growers' unions and the Morales administration.

Despite these innovations, emphasis on police-military repression continued until 2004, when President Carlos Mesa responded to sustained coca grower pressure under then-Congressman Evo Morales' leadership and permitted the cultivation of a *cato*² of coca in Chapare zones where cultivation was already established, setting the foundations for subsequent policy. Protest and violence abated almost immediately. To be eligible for the cato, growers had to title, and then measure and register their coca fields, a process that was completed in the Chapare by 2008, which allowed the legal cultivation of 7000 ha. The new conflict-free climate transformed Chapare towns into places vibrant with small businesses. In the Yungas which was untouched by the 2004 cato accord, subsequent registration was slower, but concluded in the non-traditional zones in 2011. Registration there has been less successful than in the Chapare as the process has exacerbated tensions between growers in the traditional and the expansion zones. By 2006, two thirds of Bolivia's coca was grown in the Yungas, both due to the late 1990s forced eradication in the Chapare that caused cultivation to plummet as well as the absence of controls such as the cato accord in the Yungas.

Social control as a harm reduction strategy

Social control refers to the types and sources of societal pressure that compel people to conform to established and generally accepted norms. All human social organizations develop a variety of overlapping control mechanisms that include internal restraint, which is often motivated by shame or guilt; informal or indirect control, which involves persuasion, rewards, and rights to group membership; and direct, formal control, which entails punishment and sanctions (Aguirre, 2002, p. 69; Meier, 1982; Ross, 1896). Social institutions, including those based in law, values, religion, education, and other cultural norms serve to uphold social control (Deflem, 2007).

The general notion of social control, which was first introduced broadly through the LPP in 1994, was enshrined in Bolivia's 2009 constitution. Mentioned 19 times, it aims to generalize the participation of civil society in all aspects of public policy and development planning as well as in state institutions and private companies with public contracts (República de Bolivia, 2009). The concept draws on a largely essentialized understanding of indigenous community structures intertwined with a socialist discourse that reflects the current importance of both rural and urban unions and the past primacy of the Bolivian Workers' Central (*Central Obrera Boliviana*—COB) as well as deeply-held cultural values legitimizing democratic union and community participation. With a particular emphasis on controlling endemic corruption, the concept has been mandated in activities that range from ensuring health programme quality to limiting coca cultivation.

Historically, throughout indigenous communities, social control has been implemented through voluntary adherence to cultural norms with sanctions imposed only as a last resort, although significant variations in application exist between communities, even those within the same geographic area and linguistic group (Arnold, 2009; Flores Gonzalez, 2007). Whereas western systems tend to emphasize punishment, indigenous social control has historically given greater weight to reconciliation, restitution, and rehabilitation (Nicolas et al., 2007, p. 265), values that are consistent with harm reduction's non-punitive orientation towards reducing the stigmatization of drug users, involving them in community-based solutions, while minimizing the damage they cause to self and community (Marlatt, 1996).

Systems of community justice based on indigenous social control traditions and their orientation towards reducing harm remain strong in both the Yungas and the Chapare, especially given the historic absence of an effective state. For example, in the Yungas, a 2009 study found that community members routinely called on union representatives and not the police for assistance in resolving disputes. Conflicts on a larger scale, between communities or regions, in a similar fashion, are resolved through union centrals, comprised of multiple local unions, or union federations rather than by government institutions (PACS, 2009c, p. 56).

Morales government policies

When Morales assumed the presidency in 2006 the government introduced a participatory programme embraced by growers and originally proposed by Morales when he was a Chapare leader. It has become, as Karl Hoffmann, International Technical Assistant for the EU/Bolivian Government Social Control Programme, explained in a

¹ In spite of their competing interests, both factions endorse programmes that incorporate coca into development plans and the industrialization of the leaf (Conzelman, 2007b).

 $^{^2}$ Given differential yields, a cato is $1600\,\mathrm{m}^2$ in the Chapare and, in the less productive soils of the Yungas, $2500\,\mathrm{m}^2$.

2012 interview,³ the cornerstone of government policy, privileging collective over individual rights, and encouraging growers and their unions to exercise informal and internal controls to limit cultivation rather relying on state-applied sanctions.

After considerable delays, in early 2009 a government agency run by coca growers and largely funded by the EU, Support for Social Control (*Programa de Apoyo al Control Social de la Producción de la Hoja de Coca*—PACS) went into operation. It was founded, as Marcelo Terrazas, its first Director explained in June 2009 on the concept that "social control is about self-control. . . . We want to develop a deep level of social conscience among coca producers by strengthening community organizations so they can be more effective in optimizing social control. Social control cannot be imposed; it has to come from the growers themselves."

In contrast to indigenous and peasant union social controls that usually operate unambiguously for the benefit of the community as a whole, social control over coca collides directly with coca grower economic self-interest, requiring them to sacrifice income in favour of national priorities (PACS, 2011, p. 20). Such an approach requires not only that peasant farmers fully grasp the government's argument for coca reduction but also that considerable trust and cooperation exist within and between union centrals and federations. Linking government and growers' interests is realized by PACS staff both through references to growers' deep-seated loyalty to Morales—particularly in the Chapare—their sense of ownership of the original social control proposal, respect for their unions, and fear of a return to repression. These motivations are closely entwined with their needs for subsistence income from coca and the profound indigenous respect for the "sacred" coca leaf.

From the perspective of EU Development Cooperation attaché, Nicolás Hansmann, project viability also stems from the successful implementation of four critical technical elements: a biometric registration of growers (50,000 to date), titling of land (some 600,000 ha), satellite surveillance of coca plots, and registration of parcels with grower federations (email communication, May 8, 2012). However Karl Hoffman argues that more attention must be given to instituting clear demarcations of where coca can and cannot be grown, extending plot registration to traditional Yungas zones, and establishing a more precise figure of the quantity of coca necessary for legal local consumption.

Long term success also depends on economic development that includes expanding licit coca markets, diversifying agricultural production, and improving rural infrastructure, particularly roads. Reynaldo Molina, now director of PACS, complained in a 2012 interview, that "Rivalries between Vice-Ministries and a resistance to making program participation contingent on coca reduction as was done in the past have meant that development projects are funded in expansion areas where the cato accord is not successfully enforced."

The government seeks to absorb more coca through the sales of alternative coca leaf products such as teas, flours, and toothpaste, according to Felipe Cáceres, former coca grower and current Vice-Minister of Social Defence in a 2009 interview.⁴ But, more significantly, government policy raised the ceiling of permitted coca in 2007 from the 12,000 ha allowed by the 1988 Law 1008 to 20,000 ha, which Cáceres is convinced is a more realistic figure, and certainly proves more manageable in terms of government policy.⁵

To support union social control efforts, PACS coordinates closely with coca grower federations, holding community meetings to encourage strict adherence to the cato agreement. Compliance is monitored by the government's coca grower-run Economic and Social Development Unit for of the Tropics (Chapare Unidad por el Desarrollo Económico y Social del Trópico—UDESTRO) and by the Economic and Social Development Unit for the Yungas (Unidad de Desarrollo Económico y Social de los Yungas—UDESY). Federations in both regions have social control offices that conduct routine visits to farms, and, if they find more than a cato of coca, notify the drug police (UMOPAR), who are then charged with destroying the plot. As well, if voluntary compliance is insufficient and excess coca is discovered, UDESTRO's director Delfin Olivera explained in 2009, "we will take the whole local union's cato rights away for one year. So the social pressure to conform is great." The new rules also allow the government to seize the land of those who repeatedly refuse to respect the cato limits.

The complicated social and political divisions within the Yungas, have combined with the area's fractured topography and historic avoidance of sanctions to frustrate any straightforward application of the policy. "Unfortunately, the program has not seen the same success in the Yungas as in the Chapare," reveals the EU's Nicolás Hansmann, "particularly in the traditional zone due to the complexity of the situation and the resistance of powerful coca marketing associations." (email communication, May 9, 2012). However social control efforts in the Yungas began to accelerate in late 2011. The 15,000 member, grower-controlled Asociación Departamental de Productores de Coca (Departmental Association of Coca Producers—ADEPCOCA) marketing organization agreed in January 2012 to reformulating a 2008 agreement that permitted a hectare of coca in expansion zone La Asunta to a cato (Calizava, 2012).6 In April 2012, two new social control offices were inaugurated in traditional zones of the southern Yungas (ABI, 2012)

Programme outcomes to date

In both June 2009 interviews and a 2011 PACS survey of 453 growers, growers positively contrasted the government's current programme to previous ones in which they suffered destruction of their livelihoods. During a June 2009 union assembly in Shinahota, five growers reiterated that the social control programme is "theirs," proudly underscoring that it is run by the coca growers, and not forced on them by the U.S. government, demonstrating the importance of target group ownership. They perceived social control as more cost-effective and efficient than prior U.S. programmes and praised the new policy's respect for the coca leaf. Three growers also applauded the programme's role in improving Bolivia's international image as a responsible partner rather than a drug producer. Additional factors favour the programme: the current climate of peace and respect for human rights, solid and fluid relationships between the grower-run programme and the unions, as well as the increasing coordination and administrative capacity within PACS (2010). Where unions are strong, cohesive, and committed to Morales' government, social control has shown considerable success. Grover Vallejos, a member of Evo Morales' federation was adamant in 2009 that in his area coca leaf sales are carefully controlled and growers sell only to licensed buyers.

Social control has benefited from sharp increases in coca leaf prices in authorized, legal markets during 2010, a trend which continued into 2011 (ERBOL, 2011; UNODC and Estado Plurinacional de Bolivia, 2011, p. 5). According to PACS' Tomás Inturias Rejas, many Chapare growers are convinced that respecting the cato helps

³ All subsequent references to Hoffman are from an interview in Cochabamba in 2012 unless otherwise noted.

⁴ All references from Felipe Cáceres are from a 2009 interview in La Paz unless otherwise noted.

⁵ However, until the completion of a long-delayed EU funded study that aims to establish the national demand for leaf, the 20,000 ha figure, like the 12,000 ha one set by Law 1008 in 1988, is arbitrary.

 $^{^{6}}$ Hoffmann contends, however, they have made such promises before only to renege on them later.

keep prices high, an incentive that has become central to promoting compliance.

The link between leaf prices and the efficacy of social control, however, is ambiguous. Vice-Minister Cáceres attributes the price increase to spikes in demand by drug traffickers rather than government ability to effectively control supply (Opinión, 2011). But as prices for legal and illegal coca have remained about the same (with illegal leaf receiving only a 9 percent risk premium) growers have little incentive for breaking the law, which suggests that most coca does not enter the illegal market at the grower level (UNODC and Estado Plurinacional de Bolivia, 2011, p. 4). As well, prices in the Yungas are lower than in the Chapare, where eradication of illegal leaf has been much more extensive (GAIA, 2011; UNODC and Estado Plurinacional de Bolivia, 2011, p. 31), lending credence to the notion that social control's even limited success in enforcing the cato in the Chapare is helping to drive price gains for farmers.

Social control programmes face huge challenges: a 2010 PACS evaluation (pp. 26–31, p. 45) reveals the lack of coordination with other coca-related government agencies, an insufficient personnel and equipment to reach all growers, particularly in more remote areas, and a limited grasp of regional differences, with a disproportionate share of resources directed to the Chapare. In the Yungas, particularly in the traditional zones, social control is more often than not seen as a government imposition (PACS, 2009a, p. 124).

PACS staff commonly observed that the programme prioritizes political over educational objectives, which has contributed to the fear among some growers that the principal aims, as others before, are to eradicate all coca. Furthermore, staff judges that more coherent policy regulations must be developed by the government. Hoffmann reiterated this, "Without precise institutional and legal norms, we don't have the backup we need to make the programme work."

In practical terms, Chapare coca growers contend that reporting a neighbour for exceeding the cato is akin to starting a family feud, and people are so often accused of jealousy for reporting violations that many growers prefer to keep quiet (PACS, 2011, p. 45). An ex-UDESTRO employee reports that some growers argue that they should grow as much coca as possible, because once Morales leaves office, they expect the return of repressive policies. He also noted that UDESTRO has such limited staff, that "once a cato has been verified, growers know they won't return for two-and-a-half years so if the union is weak, a grower can produce as much coca as he likes until they show up again." Also weakening grower commitment, as Diego Giacoman pointed out in a 2012 interview, is that on occasion, the coca-eradicating police force (Fuerza de la Tarea Conjunta—FTC), assessed solely on the number of hectares they destroy, has eradicated legally registered catos.

Another obstacle is that social control was conceived within the framework of earlier social configurations, and profound transformations are underway. Former Chapare human rights ombudsman, drug policy researcher Godofredo Reinicke, explains:

We have lots of rural areas in the country where 20 years ago, there was no state presence whatsoever. Now we have a government investing in the countryside, and creating institutions there. The legal base this government inherited is a western one

– based largely on the defense of individual rights. Historically, rural communities have exercised communal social control over whatever they defined as deviance, which covers crimes as we understand them in a western legal sense, but can also include sanctions such as seizing someone's land for committing adultery. The clash between these two worldviews complicates a simple conflation of indigenous social control and one directed by the state.

Although the cato accord provides growers a subsistence income, the economic pressure to expand the area of permitted coca remains intense. "No one can support their families solely on the income from a cato. But we in the government believe growers need to concentrate on varying their production," explained Delfin Olivera Borja, head of UDESTRO in June 2009. With crop diversification facing the same difficulties it always has—a lack of roads, technical assistance, and markets, and, more important, the ongoing reality that almost no other crop can compete with coca in terms of income, ease of cultivation, and transportation—some growers have tried to obtain additional cato rights by dividing their land and "selling" it to a family member (La Prensa, 2008).

Much emphasis is placed on development with coca, but Bolivia's efforts since 2006 to have the leaf legalized internationally have run up against what the Global Commission on Drugs (2011, p. 8) calls "drug control imperialism." Nicolás Hansmann anticipated in a 2009 interview the tremendous obstacles global legalization faces. Morales has avoided weighing in on the current promotion of cocaine legalization by some Latin American presidents, opting instead for a focus on distinguishing coca from cocaine by launching a 2012 campaign to amend the UN 1961 Convention on Narcotic Drugs that makes coca illegal (La Razón, 2012).

Industrialization of the leaf has also lagged. Hoffmann insists "the industrialization of coca is a myth. There just isn't the demand, and without international legalization, there won't be." By the end of 2011, all coca industrialization projects combined absorbed less than a metric ton of leaf of an estimated national production of 54,000 metric tonnes (Cusicanqui, 2011). In an eerie repetition of failures with 1990s US-financed alternative development projects, November 2011 interviews conducted by Palacios (2011) revealed a generalized feeling by Chapare growers that the government is not serious about either industrialization or economic development.

Expectations of improved incomes from such ventures are high, especially in the Yungas, where loyalty to the Morales government has fluctuated considerably (FAO, 2007). When development schemes have shown success, such as the promotion of specialty coffee and tea exports in the Yungas (financed by the U.S. Agency for International Development), which have skyrocketed due to a steep price rise, coca cultivation has proven easier to regulate (Friedman-Rudovsky, 2012). Most new Yungas cultivation is in regions such as La Asunta and Palos Blancos, where investment has been limited, reinforcing how critical successful economic development is to controlling cultivation (UNODC and Estado Plurinacional de Bolivia, 2011; Youngers & Walsh, 2010).

The programme's impact on coca cultivation is equally difficult to measure. The latest UNODC figures reveal that overall coca cultivation between 2009 and 2010 remained steady at 31,000 ha, although it has expanded by a total of 13 percent in the six years since Morales took office (Cabitza, 2011). When current figures are disaggregated, however, a more troubling pattern emerges. In the Yungas, cultivation actually declined 2 percent while in the Chapare, where unions are stronger, the area increased by 4 percent. Arguably these figures reflect mushrooming cultivation in national

Polivia's coca is currently about three times the cost of Peru's (although Peru's generally has a lower coca to cocaine conversion ratio), which has encouraged cross-border leaf smuggling for drugs production, highlighting both the regional nature of the coca-cocaine economy and Bolivia's success in limiting domestic supply (GAIA, 2011). It is also important to recognize that price fluctuations have little to do with prices of either coca paste or refined cocaine as leaf is such an insignificant input to final cost. These have remained stable throughout recent rises in leaf prices (UNODC, 2011, p. 5).

⁸ Even given its limitations, the MAS government has had more success with coca reduction there than any of its predecessors.

parks, mostly located in the Chapare: in Isiboro Sécure and Carrasco production increased by 9 and 6 percent respectively during 2010 (UNODC and Estado Plurinacional de Bolivia, 2011, p. 5). In July 2011, Cáceres admitted that over 50 percent of Chapare growers still grow more than a cato, some as many as 6 ha, and he estimates that between 35 and 40 percent of the country's coca goes to the illegal trade (Rojas, 2011). Hoffmann suggested that as many as 90 percent of growers whose fields are eradicated replant.

Harm reduction and social control

Without doubt, violence and human rights violations in the Chapare have plummeted as only two growers have been killed by state security forces in the past six years. Constant harassment and abuse by police forces (such as theft of household possessions) has stopped, according to Kathryn Ledebur, director of the human rights group, Andean Information Network. Reflecting the new policy focus away from penalizing the poor, the percentage of prisoners held without sentencing on drugs-related charges, most of them impoverished men at the lowest rungs of the drug industry, dropped by 31 percent between 2006 and 2009 during a time when the quantity of semi-processed leaf and cocaine confiscated by the police were at record levels (Giocaman, 2010).

Calculating harm reduction proves challenging in a diverse and complex society that often espouses non-western norms and values. This is compounded by the illegality of the cocaine industry. However, it is well established that illicit drug production increases violence and rent-seeking, weakens the state and its institutions, and leads to a loss of sovereignty (Greenfield & Paoli, 2012, p.11; Ikelberg, 2003). Yet Bolivia, which has been a significant drug-producing country for 40 years, has exhibited little change in either state capacity or corruption since 2006 (Evia & Pacheco, 2010; Kohl, 2010; Transparency International, 2005, 2012).

Bolivia has reasserted its sovereignty in relation to the United States, but this has come at the cost of an almost complete cut-off in interdiction assistance, leaving the country scrambling to fill the gap, although anti-drug forces have managed to seize more cocaine, precursors, and intermediate products with fewer funds than either Peru or Colombia (FIDES, 2011). The abruptly different coca policy also played a significant role in the breakdown of diplomatic relations with the United States in September 2008, which by June 2012 had not been resumed. Other international donors have more readily accepted that policy initiatives must recognize shared responsibility between drug producing and consuming societies, and that Bolivia is determined to fight drug trafficking on its own terms.

Current policies prioritize reducing the harms suffered by coca growers, an important political constituency for Evo Morales and his party. Changes in cocaine paste production technology, however, plus Bolivia's role as a transit country for Peruvian coca, paste, and cocaine driven in part by the explosive growth of consumer markets in Brazil, Argentina, and Chile, have caused a dispersion of drug production and transport from the remote tropical lowlands to rural villages and urban neighbourhoods. While this diffusion appears to have amplified the industry's economic multiplier effects, it has also increased harms to other areas and populations. These harms, which include increases in delinquency, insecurity, and drug-related violence, still fall disproportionately on the poor (Schipani, 2010).

Conclusions

Bolivia's recent policy innovations in coca control have introduced the first harm reduction approach to the hemisphere's long-standing debates over how to tackle drug production, one that repudiates decades of controversial policies arising from the failed U.S.-driven drug war. Concurrent with a validation of coca's importance to Andean culture and economy are government efforts to turn the leaf's medicinal and nutritional benefits to Bolivia's advantage while aggressively controlling drug trafficking. Within this framework, harm reduction principles promoting nonviolent solutions shape policies that ensure economic subsistence for growers and re-assert sovereignty in a context of respecting international norms.

While a host of problems has limited the progress of the social control programme, three years may not be enough time to judge the effectiveness of a policy of this magnitude. Strong local organizations, especially in the Chapare and highland Yungas provinces, have proven essential to even an admittedly imperfect implementation. The widespread awareness of current constraints points to an administrative and grassroots willingness to strengthen the programme, even though ultimately its success may largely hinge on the ability to develop economic alternatives.

The dispersion and growth of drug trafficking and production, however, due to factors largely beyond government control, have generated harms in other parts of the country and consideration of these must be part of any effort to develop a comprehensive national harm reduction strategy. As well, the failure to achieve any serious discussion about leaf legalization to date points to the difficulties a small country faces in forging an independent path in a global context.

Nonetheless Bolivia's social-control programme could inspire and inform harm reduction models in other source countries. Certainly, the EU ambassador to Bolivia, Kenneth Bell believes so, suggesting that the "innovative" programme "could someday be a prototype for other countries" (FIDES, 2011). Given Bolivia's particularities, adapting social control to other producer countries is far from mechanical, as all drug policies are highly contingent on local settings (Felbab Brown, 2012). The experience to date demonstrates that any effort to mobilize communities to exert effective control over drugs requires concerted work to strengthen and expand local organizations while ensuring that they play an important role in decision-making, an endeavour that has the potential to bring impoverished communities benefits that go beyond drug control while also protecting human rights and reducing harm locally. Such policies require a focus that extends beyond national boundaries, suggesting the adoption of coordinated harm reduction strategies in both producer and consumer countries that recognize the links between harms from drugs and poverty. Clarification of the normative aspects of such policies as well as more sophisticated models for measurement of the costs and benefits of all aspects of drug activities and policies are essential elements to the successful application of harm reduction strategies anywhere.

Social control, however, cannot be seen as a panacea, as its outcomes are in no small measure determined by factors such as international changes in the supply and price of coca leaf, interdiction in other countries, and fluctuations in demand that are beyond either the government's or the union's control. In the longer term, social control should be acknowledged as a stopgap until a more comprehensive solution to drug-related harms can be found.

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