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practices and reflections**

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Integrated development with coca in the Plurinational State of Bolivia: shifting the focus from eradication to poverty alleviation

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ABSTRACT

The innovative “coca yes, cocaine no” policy of the Plurinational State of Bolivia, in place since 2006, provides valuable insight into the benefits of a sustainable livelihood approach to supply-side drug crop control without prior forced eradication. While the policy has inevitable limitations, its focus on the social welfare, human rights and economic stability of coca-farming families has proven effective and sustainable in diversifying the economy and fostering political and economic stability. The direct participation of communities and grass-roots organizations, such as the coca grower unions, in finding more effective and sustainable approaches to drug control have been crucial elements in its success. The elements of the policy’s key programme also correspond with the Sustainable Development Goals, adopted by the United Nations in 2015.

Keywords: forced eradication, alternative development, community coca control, Plurinational State of Bolivia, drugs control.

Introduction

For over 20 years, the foundation of the strategy of the Plurinational State of Bolivia¹ to counter drugs consisted of a conditioned crop-substitution programme of the United States Agency for International Development (USAID) and forced coca eradication.² Beginning in 2004, the Plurinational State of Bolivia broke with that model and, with the help of the European

¹Since 31 March 2009, “Plurinational State of Bolivia” has replaced “Bolivia” as the short name used in the United Nations.

²Crop “substitution” and “alternative development” were terms often used to mask forced eradication and make it more palatable.

Union, shifted its policy priorities from forced eradication of coca crops by the police and military to an alternative livelihood strategy based on community involvement in coca control.

That policy, known as “coca yes, cocaine no”, draws on the distinction of coca growers between coca, a plant consumed by Andeans for millenniums, and cocaine, a substance manufactured from coca leaf. Building on an agreement reached in 2004, registered farmers in areas previously slated for crop eradication can now grow a limited amount of coca, covering an area of land known as a *cato*,³ in order to ensure basic subsistence income.

Farmer unions work as partners alongside government agencies to verify that individual farmers are respecting the agreement. The initiative prioritizes full social inclusion and citizenship of coca growers as a long-term strategy to diversify family economies and reduce diversion of coca to the illicit market. The policy has been most thoroughly implemented in the Chapare region east of Cochabamba, where forced eradication began in the mid-1990s, accompanied by alternative development programmes funded by the United States of America.

Limited and monitored coca cultivation, combined with participatory and technologically sophisticated oversight, economic development programmes and minimal coercion, better equip farmers to diversify their production and reduce reliance on an illicit harvest. The experience of the Plurinational State of Bolivia provides elements for a road map for crop control and development policy that can, in turn, contribute to achieving the Sustainable Development Goals.

Ethnographic fieldwork and interview data from the period 2000-2015 support the hypothesis that that programmatic emphasis produces better results than the previous policy. Collectively, over five decades of field research in the Chapare coca-growing region—including hundreds of interviews with coca growers, union leaders and government officials, as well as policymakers and non-governmental organization staff from the Plurinational State of Bolivia, the United States and the European Union—have provided crucial insights for the present article.

Coca in the Plurinational State of Bolivia

The hardy coca bush (*Erythroxylum coca*) has grown in the Andes for at least 4,000 years. An estimated 237,000 peasant families rely on this low-

³A *cato* is 1600 square meters in the Chapare and 2500 square meters in the Yungas de La Paz, the two principal coca-growing regions in the Plurinational State of Bolivia.

input/high-yield crop for cash income.⁴ While coca has myriad traditional uses in indigenous Andean culture,⁵ it is also the raw material used to manufacture cocaine.

In late 2004, in an effort to end violent conflict and human rights violations in coca-growing regions, President Carlos Mesa acquiesced to a long-standing coca-grower demand, permitting one subsistence plot of coca leaf (known as a *cato*) per family in the Chapare [2].⁶ Conflict in the region, which had been the principal coca-growing region of the Plurinational State of Bolivia since the mid-1980s, abated almost immediately [4, 5].⁷

When Evo Morales became President in 2006, he continued the *cato* policy as the centerpiece of his innovative supply-side, harm-reduction coca-control initiative [6].⁸ That approach simultaneously fulfils the international commitments of the Plurinational State of Bolivia to restrict coca cultivation and control drug trafficking, positing that that country can attempt to contain drug production, but will never destroy it entirely, since it is driven by external demand [8].

The United States, the world's largest cocaine-consuming country [9, p. 7], launched a source-country policy directed at the Plurinational State of Bolivia in the 1980s, predominantly focusing on security force operations, but also incorporating economic-assistance programmes administered by USAID [10, pp. 1-22]. In 1988, the Plurinational State of Bolivia adopted its Law No. 1008, a piece of anti-drug legislation, which allows 12,000 hectares (ha) of coca to be legally cultivated in "traditional growing zones"⁹ to supply the licit domestic market. The law slated coca cultivation in all other regions for eventual eradication [11].

The priority given to the use of police and military force failed to reduce the flow of cocaine northward. That policy generated social conflict, including protests and road blocks, and led to recurring violations of human rights.

⁴There are an estimated 75,000 coca farmers in the Plurinational State of Bolivia, up to 121,000 in Peru and a further 67,000 in Colombia [1].

⁵Coca's mild stimulant qualities dull hunger and fatigue, aid digestion, reduce altitude sickness, and provide protein, vitamins and minerals. It is present in every Andean ritual from birth to death.

⁶Carlos Mesa, a journalist and historian, came to power in 2003 after he refused to sanction police and military violence against country-wide protestors, including coca growers. The 2004 agreement with growers vowed that coca reduction would be conducted peacefully [3].

⁷The present article focuses on the Chapare region rather than the Yungas de La Paz, the traditional coca-growing region of the Plurinational State of Bolivia, as the dynamics are significantly different there.

⁸Harm-reduction policies endeavour to minimize the adverse health, social and economic consequences of licit and illicit psychoactive drugs [7, p. 15].

⁹Law No. 1008 identifies the Yungas de La Paz, as well as the smaller Yungas de Vandiola in the Trópico de Cochabamba, as traditional zones.

The security forces responsible for the eradication missions were denounced for rape, theft, beatings, arbitrary detentions and extrajudicial killings [12]. A total of 57 coca farmers were killed between 1997 and 2003, and over 500 others were seriously wounded by the security forces. Those uses of force prompted reprisals that left scores of police dead and injured [12].

Forced eradication centred in the Chapare, where about 45,000 families migrated beginning in the mid-1960s as part of a government colonization policy. Their numbers swelled after severe drought in the 1980s combined with a neoliberal structural-adjustment programme that devastated small-scale highland agriculture and closed down State-owned mines, causing mass unemployment. Some farmers also worked sporadically in rudimentary operations to manufacture cocaine paste—the first step in refining pure cocaine—when traffickers from Colombia appeared in the late 1980s seeking raw material [13, pp. 164-166].

The farmers belong to over 1,000 tightly knit unions, with parallel women's organizations. State presence was historically weak in tropical colonization zones, including the Chapare. Coca-grower unions filled that vacuum, as self-governing entities to settle disputes, control land tenure and coordinate community public works, including the construction of roads or schools [14]. Those participatory grass-roots organizations employ indigenous decision-making practices mixed with union traditions inherited from the ex-miners. Although women exercise substantial influence, leadership tends to be concentrated in the hands of men [15].

Coca provides small farmers several comparative advantages. It grows like a weed on steep slopes, it reaches maturity after a year and it can be harvested once every three to four months. Coca offers a high value-to-weight ratio, which is particularly important for farmers who are far from the nearest road and must carry the leaves over long distances. While coca prices fluctuate considerably, the leaf consistently has a guaranteed internal market [16, pp. 47-51]. Coca complements subsistence farming and provides largely impoverished farmers with a steady cash income [17].

The central role of coca in the peasant economy led farmers' unions to resist crop eradication efforts. They skilfully linked coca eradication to national sovereignty and indigenous rights, thereby becoming the primary opposition to the Government of the Plurinational State of Bolivia during the late 1990s [18].

Development conditioned on eradication in the Plurinational State of Bolivia

We planted peppers, banana, and palm hearts, but they rotted, because there are no bridges or roads. That's why we plant coca, to support our families and

children; it's better than dying. For us the "new" development has meant bullets and death.

—*Martín Clemente* [19]

Alternative development has been promoted as the “carrot” in a supply reduction strategy since the 1980s. The focus of such programmes has shifted from an initial emphasis on direct crop substitution to broader integrated rural development, which came to be known as alternative development. While frameworks have changed, the stated aim of those programmes is essentially the same: to provide farmers with economic alternatives to the cultivation of illicit crops [1, pp. 77-118], [20].

Buxton [21] argues that the major limitation with alternative development is that while programmes now have an increased emphasis on human development goals, they still tend to emphasize achieving externally set drug control objectives—for example, targets for reductions of illicit drug crop cultivation—rather than the welfare of farmers. That imbalance can, for example, be seen in past programmes led by the United States in the Plurinational State of Bolivia. The Clinton administration channelled alternative development funding and decision-making through the Bureau of International Narcotics and Law Enforcement Affairs, and gave the Bureau oversight over USAID. The shift led to acute inter-agency conflict [22, 12-28]; [23], and forced eradication quotas were given priority over viable development initiatives. For example, a 2005 report for the Congress of the United States stated that “USAID ... maintains that alternative development is essential because it can foster political support for eradication programmes and provide incentives that, coupled with the eradication disincentive, ensure the permanent eradication of illicit crops” [24, p. 21].

In the Plurinational State of Bolivia, the United States unilaterally set development goals and assigned project implementation to predetermined private contractors who were often based in the United States, in violation of the international guidelines for development assistance as defined in the Paris Declaration on Aid Effectiveness¹⁰ of 2005 and the Accra Agenda for Action of 2008 [25]. The Government Accounting Office of the United States [26, p. 6] estimates that USAID disbursed \$229 million (€202 million) on alternative development in the Plurinational State of Bolivia from the late 1980s to 2001, and all programmes terminated in 2009. The most significant contribution USAID programmes made was to improve local road infrastructure [27].

¹⁰The Plurinational State of Bolivia was the first country in South America to ratify the Paris Declaration on Aid Effectiveness: Ownership, Alignment, Harmonization, Results and Mutual Accountability.

Between 1983 and 1992, the Chapare Regional Development Project spent over half of its budget, with little success, on curbing migration from the high Cochabamba valleys [28]. Beginning in 1994, the programme shifted almost entirely to promoting five “star crops”: bananas, pineapple, passion fruit, palm hearts and black pepper.

Until 2004, USAID projects refused to work with the coca grower unions, or with the municipalities that had been run by the coca farmer representatives since 1995. Instead they set up parallel organizations starting in 1998, requiring farmers to cut their ties with the coca unions, join one of the USAID-backed producer associations, and commit to eradicating all their coca before receiving development assistance.¹¹

The USAID approach led to uneven development processes, rewarding compliant communities with basic infrastructure projects, such as bridges, water towers, public toilets or health posts, while marginalizing others [29]. The practice provoked division and conflict within and among communities of coca growers. With the union at the centre of their lives and representing their interests, few were willing to abandon their organizations. Without viable alternative income sources, farmers saw little choice but to replant coca [30, 31, 32]. Union leader Rimer Ágreda explained in 2002 that the minister of the Plurinational State of Bolivia “speaks of 12,000 people who are in the USAID alternative development association. I’m sure that I’m on that list, but I have coca ... Up to now, the market for alternative development crops hasn’t materialized ...” [19].

The USAID approach first attempted to compensate farmers for eradicating coca, but payments ranging from \$1,500 to \$2,500 (€1,320–€2,205) per hectare proved insufficient to replace steady income from coca. Grower Aniceto Zurita noted that growers “received compensation, but that money hasn’t produced anything. We planted oranges but, because of the canchrosis disease, they made us burn our fields ... I wonder if that is alternative development? Necessity forces us to plant coca ...” [19]. USAID acknowledged that poor coordination of eradication efforts and its alternative development programme between 1998 and 1999 “created assistance gaps in Bolivia—the eradication outpaced the assistance, leaving peasant farmers with bare fields and no immediate source of income” [26, p. 6].

Alternative crops promoted by USAID were unsuitable: bananas, for example, require considerable initial investment, fertilizers and large expanses of land to be profitable, and depend on highly competitive export markets. According to a 1990 testimony to the United States House of

¹¹The USAID strategy mirrored attempts by the Government of the Plurinational State of Bolivia to control peasant organizations between the 1950s and 1970s [12, p. 175].

Representatives Agriculture Committee: “Although AID and others have identified a number of crops that can be grown in the Chapare, they have not figured out which of these can be profitably grown and exported, and where. Moreover it will probably take several years or longer to develop alternative crops in the Chapare for production and export” [33, pp. 7 and 8]. Nevertheless, some wealthier families, selected as “model farmers”, and with larger extensions of land along major roads, did reap some benefits from those programmes [17, pp. 221-262]; [24, pp. 20-23].

The absence of market research and development hindered implementation. The domestic market for citrus fruit and other tropical crops was saturated, and the international market is inaccessible to small-scale producers without considerable support [17]. USAID encouraged farmers to borrow for new crops, and when markets failed to materialize, many were driven further into debt. Farmers either replanted coca or went hungry [29, 30].

Bertho Bautista one of the earliest participants in USAID programmes explained: “In 1988, I invested the compensation of \$2,500 (€2,205) in macadamia from Costa Rica, pepper, and palm-heart. It made me even poorer ... I almost lost my house and I was almost separated from my family. I continue to have macadamia, and coconut as well, but I continue to plant coca in the middle of my crops. As someone who promoted alternative development, I feel that I deceived many of my neighbors” [19]. According to a USAID evaluation, 65 per cent of the communities participating in voluntary eradication programmes in the Chapare broke their agreements and “were disqualified from receiving assistance” [26, p. 6].

An assessment from 2003 of USAID programmes in the Plurinational State of Bolivia acknowledges systematic flaws in its development model including: “marketing problems, lack of development of off-farm income opportunities, lack of participation and attention to the effects of the social and institutional issues” [34, p. iii]. The same report questions conditioning development assistance on prior eradication of coca and notes that subsidizing unprofitable crops is unsustainable [34, p. 6].

Finally, it is important to note that USAID development programmes were inextricably linked to forced eradication. Such a conflictive context made development programmes impossible: peasant families did not differentiate between law enforcement actions and development programmes, both funded by the United States, either at the individual or community level. There was very little trust in the State or non-governmental organizations operating in the region.

Given the failures and the widespread perception that USAID aimed to undermine their unions, grower organizations announced in June 2008 that

they would not sign new agreements with USAID, forcing its development programmes to end within six months [31]. The unions allowed the USAID-funded human rights office to continue functioning; however, the United States cut its funding in 2010.

Rethinking coca policy

Two initiatives diminished the influence of United States policy and presaged the changes of the 2000s. The 1994 Law of Popular Participation transferred 20 per cent of national tax revenues to newly established municipal governments and legally acknowledged over 15,000 local grass-roots organizations nationwide [35]. Coca union candidates swept the 1995 municipal elections in the Chapare, where they implemented their own forms of decision-making practices in local government and invested a significant percentage of budgets in impoverished rural areas, both strengthening the municipalities and making them more accountable [15, 36].

In 1998, the development support programme known as PRAEDAC, funded by the European Union, was established. The approach followed the recommendations made at an international conference in January 2002 by hundreds of development experts, namely to include local stakeholders in the design and implementation of development strategies [37]. According to Nicolaus Hansmann, former attaché to the cooperation section of the European Union in the Plurinational State of Bolivia, it was not until 2010 that UNODC explicitly recognized the shortcomings of conditioned crop substitution, marking an important convergence in alternative development frameworks [38, p. 239].

The initiative of the European Union functioned on the premise that poverty reduction (through the provision of basic services), engaging coca grower organizations, land titling and strengthening local governments can contribute to breaking farmer reliance on coca [30, p. 191]. Karl Hoffman, former Director of Municipal Programming for PRAEDAC, described the strategy: “Our vision is to help farmers improve their lives first, so that then they will abandon drug-producing crops. Our philosophy supports popular participation through the municipalities, which the government has made very clear is the principal planning unit in the country. USAID carries out projects that the municipality doesn’t know anything about, which makes a genuine planning process absolutely impossible.” [30, p. 192].

The municipal strengthening plan, funded by the European Union, directed \$5.86 million (€5.17 m)—equal, on average, to 30 per cent of municipal funds—to the municipalities in the Chapare, without requiring prior coca eradication [30, p. 191]. Those local governments initially

contracted PRAEDAC to execute projects from their municipal development plans—most commonly the construction of a school, health post or town hall. At the same time, PRAEDAC trained the municipalities and the Chapare *Mancomunidad* (regional grouping of municipalities) in public administration, including consolidating community-based oversight committees. By 2004, PRAEDAC determined that Chapare municipalities could execute infrastructure projects independently [30]. Felipe Cáceres, former Villa Tunari mayor, said in 2004: “In eight years, with one fourth of the money, the municipalities have achieved ten times what USAID has accomplished in twenty [years]” [30, p. 193].

His successor, Feliciano Mamani, explained: “Before, alternative development was conditioned on coca eradication. In contrast, PRAEDAC has supported the municipalities unconditionally and has been open to participation and [community] control. This means that PRAEDAC respects the population and our local leaders” [39]. PRAEDAC’s concrete achievements include building 107 schools, reforesting 1,500 ha, providing 892 soft loans, granting land titles to 11,607 families, and providing 3,783 people with national identity cards [39].

According to Hansmann, PRAEDAC changed the image of alternative development in the Plurinational State of Bolivia, built trust in government and legitimated the State in the Chapare, creating a credible foundation for what was to come, namely community coca control.¹² An independent evaluation found that European Union cooperation in the Chapare “... has enabled government institutions to shift the dynamics of their relation with civil society organizations” [40, p. 5].

Hansmann further notes: “The experience of alternative development programs (USAID and UNODC) in Bolivia significantly influenced the evolution of the conception of alternative development at the European and international levels.” Hansmann explains that the Plurinational State of Bolivia challenged very early on the underlying political precept of alternative development, namely the criminalization of coca growers [38, p. 245].

Coca yes, cocaine no

Law No. 1008 set the original licit cultivation limit at 12,000 ha, based on a rough estimate of local traditional demand for coca leaf. In 2006, President Morales raised that limit to 20,000 ha nationally, in order to guarantee subsistence income for farmers in regions overlooked by the previous legislation [41, p. 76]. The Government arrived at the 20,000 ha figure by taking the

¹²Email communication Nicolaus Hansmann, European Union, 11 November 2014.

coca production already permitted under Law No. 1008 and adding both the *catos* of the growers in the Chapare and an additional amount for registered growers in the expansion zones of the Yungas de La Paz (areas that border the Yungas de La Paz “traditional zone”).

The policy required growers to register their coca fields and then title their land, a process completed in the Chapare by 2010, and in parts of the Yungas de La Paz by 2011. The *cato* programme excludes the Yungas de La Paz traditional zone and only covers farmers who are union members cultivating coca in established regions. Coca grown outside those areas and in national parks is considered illegal and is targeted for forced eradication.

Although Law No. 1008 recognized limited coca production for traditional consumption, the 2009 Constitution identifies coca as a social, cultural and natural resource of the Plurinational State of Bolivia for the first time, to be protected and promoted through national regulations [42]. Leonardo Loza, General Secretary of the Six Federations of Chapare coca producers explains the importance of the constitutional recognition of coca: “First we began with the Constitution ... we included our coca leaf so that it is constitutionally respected, so that no neoliberals or political party can reverse it or talk about zero coca in the Cochabamba Tropics or in Bolivia” [43].

In June 2011, the Congress of the Plurinational State of Bolivia voted to withdraw from the Single Convention on Narcotic Drugs of 1961, which prohibits growing coca leaf, except for medical and scientific purposes. It successfully re-acceded in January 2013 with a reservation that legally permits the growing of coca and its licit use within its borders. A study on local coca consumption, funded by the European Union and published in November 2013, found that one third of the population of the Plurinational State of Bolivia habitually consumes coca leaf, which is the equivalent of 14,705 ha directed to traditional and non-narcotic uses [44].

As of March 2017, two laws—one for coca and one for controlled substances—replaced Law No. 1008. The new Penal Code of the Plurinational State of Bolivia, which categorizes criminal sentencing, including for drug-related crimes, is awaiting approval. The new coca law established a national limit of 22,000 ha, 14,300 for the Yungas de La Paz and 7,700 for the Chapare.¹³

¹³A privileged and entitled group of growers from the designated Yungas de La Paz traditional zone resisted efforts to limit or regulate the amount of coca they cultivate. The formation of that group of growers was a direct, if unintended, consequence of Law No. 1008, which exempted them from production limits.

Community coca control

Based on the achievements of PRAEDAC in the Chapare, including municipal strengthening, conflict reduction and successful public works projects, the current programme integrates development into a similar and more efficient, overarching community-controlled approach [45]. Its central pillars are:

- Development assistance without coca eradication as a prerequisite
- Investment first in public works and social services, and then in economic/agricultural development
- Development initiatives designed with active local participation in order to address unique regional needs, incorporating local knowledge, and gender and generational awareness
- Institutional strengthening
- Coordination with representative local organizations
- Environmental sustainability fostered through increasing organic coca and coffee production, forest species diversification and reforestation

The Programme to Support Community Coca Leaf Control (PACS), funded by the European Union, began in January 2009 with five years funding of \$13 million (€9.5 million) and reached approximately 40 per cent of Chapare unions. PACS employed local coca growers to work closely with the Chapare federations, holding hundreds of community meetings to educate farmers as to why they should respect the *cato* agreement [40, pp. 23 and 24]. Specific programming included [46]:

- Land titling for coca-growing families with *catos*, totalling 175,000 ha in the Chapare
- Biometric registry of authorized coca growers, including fingerprinting and photographs
- Registration and periodic remeasurement of each *cato* by the State monitoring organization, namely the economic and social development unit (UDESTRO) in the Chapare
- The SYSCOCA database, which assists in monitoring cultivation, transport and sales
- Integrated development projects to complement coca income
- Community self-policing to ensure the one *cato* limit is respected, including training for union representatives on database use, monitoring and ways to restrict coca planting
- Industrialization of coca leaf-based products, including coca flour, tea bags, shampoo, Christmas cakes, liquor and skin creams

UDESTRO measures registered *catos* using Global Positioning System (GPS) technology and electronically uploads the data for State and UNODC access. The SYSCOCA satellite monitoring system, in operation since 2012, synchronizes data from the biometric registry, the joint land-use management and monitoring system of UNODC and the Government of the Plurinational State of Bolivia (BOLF57), and land-titling registry (INRA) of that country. The result is a sophisticated cross-referenced coca monitoring system, providing multiple years of coca-planting data, including unauthorized coca grown by individual producers. The database identifies the diversion of coca to the illicit market [47].

The database provides a valuable resource for DIGCOIN, the agency that licenses over 5,000 coca-leaf merchants. Those merchants sell three quarters of all licit coca (with growers able to legally sell the remainder directly to consumers). While the ability of DIGCOIN to track coca has improved, planned Internet connections at all DIGCOIN checkpoints are not yet installed. The 2017 coca law mandates the biometric registry of coca merchants, increases State-supervised checkpoints and regulates the quantity of coca leaf circulated from production centres to authorized markets [48, p. 7].

Coca control encompasses the whole community. Every base level union organizes regular examinations of coca fields through commissions comprising local members and often including neighbouring communities. If excess coca is found, the community eradicates the entire crop and forbids the farmer to replant for a year. When one takes into account the maturation time, that effectively results in two years without coca income. For more than one violation, the union levies a lifetime ban on growing coca. The union's efforts are backed by a government monitoring body—UDESTRO in the Chapare and UDESYS in the Yungas de La Paz—that is staffed by the growers themselves. By July 2014 more than 800 Chapare growers had lost their *cato* for violating the agreement [49].

A 35 per cent net reduction in coca cultivation has contributed to a 92 per cent increase in coca prices between 2009 and 2015 [16], and of the three coca-producing countries, coca from the Plurinational State of Bolivia is the most expensive (for comparison, see [50, 51]). Many registered farmers believe that, despite limiting the size of their coca plots, the *cato* generates reliable subsistence income. As one farmer put it: “We work less, but make more money.” They recognize that if they cannot make the strategy work, they risk a return to forced eradication. As a result, farmers take the *cato* accord very seriously and repeatedly express that the new system is more onerous than the previous “zero coca” policy financed by the United States [52]. In the words of one farmer: “Before, when we planted the coca and they (security forces) ripped it up, we would replant and they would rip it up

again.” However, he said that today it is really harsh: “... everyone knows how much coca you have and they will denounce anyone who plants more than a *cato*” [53, p. 11].

Inevitably, difficulties arise. Some farmers respond to the constraints by increasing fertilizer and pesticide use to increase production yields—with negative environmental consequences.¹⁴ Others have illegally obtained more than one *cato* by subdividing existing plots, often among family members, or by registering newly purchased land under another name. Those farmers have earned substantially more than their neighbours, contributing to increasing levels of inequality. The unions have made concerted attempts over the past five years to eliminate those “ghost *catos*”. In 2016, the Government of the Plurinational State of Bolivia completed a thorough audit to identify and eliminate such plots, before issuing long-term biometric registry cards to growers.¹⁵

A small minority of farmers refuse to comply with the policy. In such cases, UDESTRO workers first negotiate with community leaders and, if that fails, they arrange for the coca to be forcibly eradicated. In contrast to the past, eradication is no longer accompanied by violent resistance. One middle-aged female grower said: “These days we don’t rebel when the coca cutters enter our plots; we just show them where the coca is and let them get on with their work.” Others pointed out that the security forces no longer see them as enemies but as colleagues, partly because UDESTRO is staffed by representatives of the coca union [53, p. 12]. Law enforcement authorities support that hypothesis. Gonzalo Quezada, commander of the FELCN anti-drug police from 2010-2013, affirmed: “The growers themselves have assumed a degree of responsibility to prevent trafficking. They will denounce traffickers, something they never did before. We appreciate working with community control because it provides important support from the population.” The former commander of the UMOPAR anti-drug police in the Chapare, Colonel Rene Salazar Ballesteros, also highlighted the practical benefits of improved community relations: “People don’t want their community to be implicated in drug trafficking, so social control is contributing to better counterdrug efforts ... they never prevent us from going into areas where coca maceration pits are detected” [55, p. 2].

In support of that finding, an evaluation by the European Union of cooperation with the Plurinational State of Bolivia states: “Possibly, the most successful and visible example of productive and efficient work

¹⁴Heavy chemical use, introduced during USAID programmes in the Chapare, has contributed to the spread of the fungus *Fusarium oxysporum* [54].

¹⁵Author interview with the audit supervisor of the Government of the Plurinational State of Bolivia. La Paz, April 27, 2016.

between authorities and grass-roots organizations/civil society, showing political will, joint effective work and achievements beyond expectations, is the social control work related to the problematic of coca leaf production, drug trafficking control and alternative development” [40, p. 60]. The same report suggests that the Plurinational State of Bolivia and the European Union should continue to promote the participation of civil society organizations in the design and implementation of development programmes with coca and the fight against drug trafficking [40, p. 73]. Likewise, the Lancet Commission on Public Health and International Drug Policy, convened by the Lancet and Johns Hopkins University, concludes that the example of the Plurinational State of Bolivia “is a rare case of meaningful participation of drug crop farmers in planning and implementing programmes meant to benefit them” [56, p. 1467].

The relative success of community control does not mean it is uncontested. During extended fieldwork in the region in 2013 and 2014, farmers complained to the authors that they could not support their families solely on income from one *cato* [52, p. 161]. At union meetings, government agents countered that they should not expect to, but need to develop other sources of income through crop diversification [57].

Debates about enforcing the *cato* happen at every local union meeting and can last as long as three hours [53, p. 11]. In some places, union leadership tries to gain an advantage. “It’s not that we never had abuse of power in unions before or their use for personal enrichment, but this new generation of coca grower leadership sometimes uses the historic mistrust of the State to disparage the newly created institutions. At times this can lead to manipulation of social control norms for their own personal benefit,” explains Godofredo Reinicke, director of Puente Investigación y Enlace.¹⁶

Despite the need for constant negotiations, the benefits of community control far outweigh its limitations. An evaluation by the European Union concluded that “support to social control has resulted in a reduction of conflict levels and the stabilization of coca crops and furthermore, an increased pace in the reduction of coca crops” [40, p. 48]. The area under coca cultivation in the Plurinational State of Bolivia has decreased steadily since 2010. In a one-year period during 2013 and 2014, net coca production dropped from 23,000 to 20,400 ha, the lowest level since UNODC began monitoring in 2003 [16].

¹⁶Author interview, Cochabamba, 20 April, 2012.

Integrated development with coca

The “integrated development with coca” policy of the Government of the Plurinational State of Bolivia does not condition development assistance on coca eradication. By stabilizing the security situation in the Chapare, working directly with the coca unions instead of against them and recognizing coca as a critical source of family income, the Government has placed farmers in a better position to experiment with alternative crops.

The revenue from the *cato*—about \$200 (€176) a month, which is a little less than the current minimum wage—ensures a guaranteed income, reducing the risk of experimenting with alternative crops or livestock. Coca farmers interviewed claim that government funding for mechanized tools—including rice-husking machines, temperature-controlled supply chains for dairy produce, and plants for the processing of fruit, honey and fish—has expanded the market for local produce. According to one evaluation: “Alternative agricultural production has increased substantially and a number of promising productive chains have been created” [40, p. 50]. An investment of \$1.8 million in a pineapple production project in the Chapare resulted in 1,006.2 ha of pineapples cultivated for the national market. Another project supported 9,870.9 ha of bananas for the national market, and 6,091.9 ha for export [58].

In 2004, European Union funds revitalized FONADAL, the State alternative development fund. FONADAL has successfully administered €60 million from the European Union, with over €30 million additional local government funding—much larger than that required by the agreements with the European Union [40, p. 50].

The revamped entity, under the Vice Ministry of Coca and Integrated Development, works to diversify income and production, improve living conditions and promote grass-roots and institutional capacity-building for communities and institutions. FONADAL has built 100 new bridges, expanded the electricity grid in the region and increased social services [59]. The 2017 coca law also created a national council on revaluing, producing, marketing and industrializing coca (CONCOCA) in order to elaborate and execute national coca policies [48, p. 9]. CONCOCA is under the leadership of the Ministry of Rural Development and Land, and is composed of the ministers of foreign affairs, productive development, health, tourism and Government, as well as a representative of coca-producing organizations.

Giovanni Terrazas, head of the UDESTRO development office, which works closely with FONADAL, described how his agency has led livestock vaccination campaigns, regular check-ups and provided vitamins and hormones. Terrazas was also enthusiastic about a 2013 fish farming project,

which initially set up 12 model ponds. The ponds were such a success that a year later, over 80 copycat ponds were in operation. One woman explained that her fishpond provided twice the income of a *cato*, and said that she was considering abandoning coca altogether [52, p. 161]. Families can earn up to \$7,250 annually from fish farming [60],¹⁷ which is significant in a country where GDP per capita is just over \$3,000 [61].

Many farmers now describe coca as a savings account or a safety net, rather than their main source of income. Terrazas stressed: “It is incredible to see whole families no longer fearful but happy because they can imagine better days ahead” [32]. Empirical research supports those claims. For example, bananas, citrus fruit and hearts of palm now cover more cultivated land than coca in the Chapare, a result that the United Nations attributes to sustained and integrated development efforts [52, p. 161]. According to European Union evaluations, the volume of bananas, hearts of palm, coffee, cacao, pineapples and honey produced in the Yungas de La Paz increased by 8 per cent in 2014, and in the Chapare by 5 per cent, owing to strategic investments [62, p. 43].

The Chapare, and to a lesser extent, spillover zones in the Yungas de La Paz,¹⁸ have been transformed since the 2004 *cato* agreement. The average growth in the Chapare is higher than the national average, and that is, in part, the result of the increased stability. New cars, motorcycles and home improvements can be seen everywhere. Residents report that more jobs exist in non-agricultural work, that government scholarships allow their children to study at university,¹⁹ and that low-interest government loans mean they can start their own businesses. Farmers interviewed attributed the improved economic climate to the demilitarization of the zone and their right to grow a *cato*. The UNODC representative in the Plurinational State of Bolivia argues that the “innovative approach is not only about making money off a crop through substituting an illicit crop for a licit one. It’s about a more comprehensive approach that includes access to essential services like schools, hospitals, and roads in areas that traditionally have been hard to reach” [63].

A State housing programme has replaced many wooden shacks with brick and mortar houses. As a result of government infrastructure programmes that have prioritized female heads of families, basic services are now available to low-income households, except for the most remote ones [64].

¹⁷Production costs account for approximately 20 per cent of this figure.

¹⁸This refers to areas where coca production has extended beyond the traditional zone. Residents of the traditional zone semantically distinguish themselves from such places, which they do not consider to be the Yungas de La Paz.

¹⁹A Government-funded indigenous university opened in the Chapare town of Chimore in 2008, offering careers in forestry, agronomy, fisheries and food industrialization.

People are less likely to migrate: many young people, some of whom had firm job offers in either Spain or the United States, said that they had decided to stay in the Chapare.²⁰

However, those Government-backed development projects have mostly benefited families who live close to a road. Farmers in hilly, isolated regions face particular difficulties, since most cash crops fail because of steep slopes and excessively sandy soil. Roads and bridges are often impeded for weeks, particularly during the rainy season.

The unions regularly discuss industrialization and have encouraged their rank-and-file members to cultivate organic coca for use in licit products for the export market. The Government of the Bolivarian Republic of Venezuela funded the establishment of a coca-processing plant (EBOCOCA) that opened in the Chapare in 2011 to produce coca food products, such as flours and drinks. However, those alternative coca-based products, have struggled because international prohibition of coca exports continues to limit the market [65]. Community control expert Karl Hoffman expressed his concerns: “There just isn’t the local demand for alternate coca products, and without international legalization, there won’t be a big enough market.”²¹

Grass-roots farmers continue to hope to export products made using coca leaf. “Imagine how many people would buy coca tea in China!” exclaimed one leader. In early 2015, the Government announced a project to remove the cocaine alkaloid from coca in an effort to expand legal exports [66]. In 2016, coca plant administrators travelled to China to explore future potential markets for de-cocainized coca. “If we could export legally, coca farmers’ incomes would improve,” explained Ricardo Hegedus, manager of Windsor Tea, the largest tea producer in the Plurinational State of Bolivia. He added: “It wouldn’t eliminate drug trafficking but it would make it harder and more expensive for traffickers to get coca” [67].

The new coca law mandates research on the properties of coca and the industrialization of derived products. The Government recognizes that, based on the 2013 study funded by the European Union, 14,705 ha are needed to meet the local demand for coca consumption. Consequently, the State plans to absorb the remaining 7,000 ha permitted under the 22,000 ha legal limit through industrialization efforts. DIGCOIN, the institution charged with coca industrialization and commercialization projects, plans to expand activities by certifying and supporting both private and public industrialization companies, investing in research and development, and promoting export agreements with other countries [68].

²⁰ Author interview with coca growers November 2013.

²¹ Author interview, 13 May 2016.

Sustainable Development Goals

Drug control policies have had a negative impact on human development, exacerbating the poverty, marginalization and exclusion that fuels drug-crop production in the first place [21]. The United Nations Development Programme (UNDP) and UNODC recognize that contradiction and emphasize that drug policy should advance the Sustainable Development Goals, including eradication of poverty and hunger, and achieving sustained economic growth [69]; [70]; [71, pp. 63-107]. Against that backdrop, the case of the Plurinational State of Bolivia offers several important lessons.

The Chapare has made significant improvements towards achieving the key Sustainable Development Goals. According to UNDP [69, 70], experiences like that of the Plurinational State of Bolivia contribute to meeting the objectives of the Goals. UNDP notes that addressing the root causes that sustain the cultivation of illicit crops is critical to achieving Sustainable Development Goals 1 (no poverty), 2 (zero hunger) and 8 (decent work and economic growth) [70, pp. 11-14].

Extreme poverty in the municipality of Villa Tunari in the Chapare stood at 74 per cent in 2001 but dropped to 44.3 per cent by 2010 [72, p. 164]. Unsatisfied basic needs²² in 2001 impacted 87.2 per cent of the population, but by 2010 had decreased to 65.4 per cent [72, p. 151]. Similar results were registered in other Chapare municipalities, with the gains in each case being higher than the national average [73, p. 39].

Sustainable Development Goal 3 promotes good health and well-being. The percentage of people who have access to tap water increased by 40 per cent between 2001 and 2010. A total of 90 per cent now have access to a bathroom or a latrine [72, pp. 98-100], contributing to a significant decrease in cases of severe diarrhoea in children aged up to 5 years [72, p. 77].

Sustainable Development Goal 4 calls for quality education. In the Chapare, the literacy rate improved by 13.5 per cent and school attendance went up by 14 per cent in the period 2001-2010, compared with a nationwide increase of only 4 per cent [72, pp. 80-87]. Finally, the community control programme of the Plurinational State of Bolivia brought peace, justice and strong institutions to zones in the Chapare that had previously suffered from conflict, in line with Sustainable Development Goal 16 (peace, justice and strong institutions). As union leader Leonardo Loza stated: "We monitor ourselves without deaths, injuries, persecutions, orphans, or widows. Today the *cato* of coca is respected in peace" [43].

²²This measurement refers to housing, education and health indicators.

The experience of the Plurinational State of Bolivia shows that any successful development programme must be rooted in trust and the extension of citizenship rights. The legal recognition of a restricted quantity of coca combined with land titling, can create the framework necessary for positive engagement between citizens and the State, and the defence of citizen rights. Policymakers need to adopt new benchmarks for success, reducing the emphasis on crop eradication figures while putting greater focus on metrics based on human welfare and development.

Conclusion

Data pertaining to coca cultivation demonstrate a decline in coca crops in the Plurinational State of Bolivia from 31,000 ha in 2010 to 20,200 ha in 2015. The Plurinational State of Bolivia achieved that 35 per cent net reduction while showing respect for human rights, extending citizenship to farmers, empowering local communities and promoting economic alternatives [32, 74].

Field research, interviews, and the analysis of census and survey data suggest that the socioeconomic situation in the Trópico de Cochabamba has improved. Many families have risen above the poverty line, there has been an increase in labour opportunities outside of farm work, and access to services—including education, health and water—has expanded.²³ As the German Development Agency (GIZ) states, the Chapare is “now a space of economic opportunities ... and improved living conditions” [73, p. 39].

The socioeconomic gains in the Chapare are not the result of the coca policy alone. And yet, dramatic declines in both inequality and poverty in regions participating in community coca control significantly outpace national improvements as a whole.²⁴

Multilateral organizations have recognized the achievements of the Plurinational State of Bolivia. A report published in 2016 by UNDP described community control as an innovative approach that demonstrated that respecting growers and local organizations, and ensuring their meaningful participation in the design and implementation of coca-control efforts, could contribute to reducing poverty and hunger, and sustaining coca reduction [70, p. 13]. The Organization of American States has also made positive assessments of the coca-control model of the Plurinational State of Bolivia [9, p. 6]; [32, p. 58].

²³Email communication, Nicolaus Hansmann, European Union, 21 February 2014.

²⁴Inequality and poverty reduction in the Plurinational State of Bolivia has been attributed to sustained economic growth, the commodity boom after the year 2000, conditional transfer schemes, remittances, and labour income growth at the bottom end [75].

An evaluation by the European Union states that “abandoning the persecution and punishment approach and favouring social control, in joint work between authorities and grass-roots organizations, a reduction of the surface area for coca leaf production was achieved, which is considerable, much more successful than the achievements made with the previous model (“the drug war”). This fact has been internationally recognized and certified by ... UNODC” [40, p. 60].

Further, Henriette Geiger, Chief of the Unit for Latin America and the Caribbean of the Directorate General for Development and Cooperation of the European Commission, affirmed: “The collaboration we’ve received in these programmes is really exemplary. I’ve travelled to many countries as Latin America/Caribbean Chief and I’ve rarely found such a committed government ... I think there is long-term sustainability” [62, p. 114].

Although the community coca-control strategy is designed to fit the unique social, economic and political conditions in the Plurinational State of Bolivia, adapted versions of that model have potential for other regions. In February 2017, a delegation of coca growers from Colombia visited the Plurinational State of Bolivia in order to exchange experiences with their counterparts in State institutions, social organizations and civil society. Diana Puello of the delegation from Colombia commented: “Forced eradication is all we know. Here we are seeing alternatives, maybe our alternative won’t be exactly like Bolivia’s because we have our own particular conditions, but we can see what we’d like to bring back to our country.”²⁵

Basic programme elements, including grass-roots control, lack of conditionality on assistance and a focus on human development, are building blocks that could be implemented in other contexts. Even in areas where crops are only destined for the illicit market, supporting instead of repressing farmers will place those farmers in a better position to curtail their dependence on an illicit crop.

Strong social organizations provide the backbone for the strategy. Strengthening local groups, particularly in places without strong grass-roots representation, must therefore be the first step, combined with reinforcing the capacity and budgets of local government so that town halls can respond to local demands. The PRAEDAC municipal strengthening programme in the Chapare, an initiative of the European Union, provides lessons on how that might be achieved.

²⁵ Author interview with Diana Puello, member of the coca farmer delegation from Colombia. La Paz: 24 February 2017.

Finally, proper sequencing is essential for sustainable reductions in coca crop cultivation. Front-loading development assistance without calling on farmers to first reduce crops is therefore necessary. However, the Plurinational State of Bolivia goes one step further by permitting subsistence coca as an explicit support to crop diversification over time. As a result, farmers have a guaranteed safety net and are therefore more willing to experiment with new and untested crops [53].

Ultimately, successful diversification of livelihoods and a simultaneous decrease in reliance on illicit crops can only happen if farmer welfare is prioritized over drug control objectives. That includes framing and evaluating policies based on their relationship to the Sustainable Development Goals.

Respect for human rights, social and economic development, and increasing State presence in remote rural areas places the approach of the Plurinational State of Bolivia at the forefront of alternative drug control models. While more quantitative research is needed on the impacts of social control in the Plurinational State of Bolivia, the experience to date demonstrates the value of adapting development models and strategies to lessons learned and local contexts and dynamics.

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