**An Alternative to ‘Alternative Development’? How Bolivia limited coca cultivation by moving away from militarized repression**

Linda Farthing & Thomas Grisaffi

Thirty years of U.S.-funded alternative development proved a poorly designed attempt to justify U.S.-funded military and police actions by putting a friendly face on a repressive policy. Bolivia’s shift to social control and integrated development programs with coca after 2006 offered a different path. These models focused on the root causes that sustain illicit crop cultivation, reduce poverty, and contributed to local and sustained economic growth, while promoting peace, justice, and strong institutions. Bolivia’s success was predicated on farmer trust in state actors, a necessary component of any development program, but particularly one focused on illicit substances, and the extension of citizenship rights. The legal recognition of a restricted quantity of coca, combined with land titling, investment in basic infrastructure and economic development initiatives creates the framework necessary for positive state engagement. Strong social organizations are the critical element. Agricultural unions with members formally incorporated into local drug crop control and development programs create legitimate counterparts. By emphasizing human rights, social and economic development and increasing state presence in remote rural areas, Bolivia’s innovative approach has worked towards rather than against sustainable development.

Keywords: Coca, Cocaine, Eradication, USAID, Alternative Development, Bolivia
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Typically, drug crop producing regions worldwide are socially, economically and politically marginalized (Goodhand, 2021; Gutierrez, 2020). While addressing poverty is critical to mainstream development thinking, when it comes to drug crops, the emphasis shifts to crime and security (Alimi, 2019, p. 39). In the Andes, this approach has led to the forced eradication of the coca leaf, the principal raw material in refined cocaine, destabilising local economies, turning farmers into outlaws, and triggering human rights violations (AIN, 1994; Gootenberg, 2017). These high costs have not led to a reduction in cocaine, rather production has consistently trended upwards (García-Yi, 2014, p. 72; UNODC, 2022).

Bolivia suffered more than thirty years of the US-financed War on Drugs, but after 2004 it emerged as a world leader in formulating a participatory, non-violent model to reduce excess production. The policy, known as ‘coca yes cocaine no,’ permits growers a limited subsistence amount of coca, and empowers growers to self-police to ensure compliance. Here, we argue that limited (and monitored) coca cultivation combined with participatory and technologically sophisticated oversight, economic development, and minimal coercion, better equips farmers to reduce their reliance on illegal harvests. The Bolivian experience provides a potential roadmap for crop control and development policy that in turn, can contribute to achieving more equitable development outcomes elsewhere in the world (see Grisaffi, Farthing, Ledebur, Paredes, & Pastor, 2021).
This article draws on long-term ethnographic fieldwork with coca growers carried out in the Chapare region east of Cochabamba between 2000 to 2022. It also includes interviews with US, EU, and Bolivian government officials as well as secondary research on local alternative development measures since the 1980s with an emphasis on the social control/integrated development with coca program under Evo Morales’s government (2006-2019).1,2

Coca crops in Bolivia

The coca bush (*Erythroxylum coca*) has been grown in the semi-tropical foothills of the Bolivian Andes for at least 1500 years. In indigenous cultures, coca plays a central role in life, from initiations, marriages, and death rites to dedicating a new building. It is essential for stimulating trust and community and as a ritual element in every exchange (Carter & Mamani, 1986; Pearson, 2020). While providing myriad social and health benefits, since its discovery in the mid-nineteenth century, coca also serves as the principal raw material used to process cocaine (see Cusicanqui, 2013).3

With only 12.5 percent of global production in 2020, Bolivia’s coca crop ranks a distant third behind Colombia and Peru4 (UNODC, 2022), although given its small economy, coca plays

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1 This research received ethical approval from the ethics committee at the University of St Gallen (HSG-EC-20220304). Oral and/or written consent was given for interviews, where consent could not be recorded only anonymised data has been used.
2 The authors report there are no competing interests to declare.
3 Coca’s mild stimulant qualities dull hunger and fatigue, aid digestion, reduce altitude sickness, and provide protein, vitamins, and minerals.
4 Recently, coca cultivation has expanded outside its traditional sites in the Andes to Central America and Mexico (US State Department, 2021)
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an outsized role in agricultural earnings, representing between 9% to 11% of agricultural income in 2020 (UNODC, 2021).

Bolivia’s two main growing regions, the Yungas and the Chapare, have historically suffered low living standards, although because of coca, income is higher than in the highlands and valleys, and similar to other lowland parts of the country (CEDIB, ND). Coca is an almost ideal crop—it grows like a weed on steep slopes, in acidic soil and at altitude; is light and easy to transport; reaches maturity after a year, and can be harvested once every three to four months, generating higher returns than any other crop. The tools required are widely available and inexpensive. Most importantly, while prices fluctuate considerably, for forty years the leaf consistently provided farmers with a steady cash income.

Most of the labour required can be done by either women or men as cultivation is close to home, allowing women to combine agricultural work with their household obligations (Gumucio, 2015). In the Chapare, women mainly cultivate, fertilize, harvest, and transport coca leaves (Alvarado Choque, 2020), while men do most of the heavy labour preparing fields for planting, a division of labour that in the Yungas, traditionally ensured nearly full employment (Spedding, 2004, p. 24).

Approximately two thirds of Bolivia’s coca crop comes from the Yungas, a semi-tropical region east and northeast of La Paz (UNODC, 2021). Almost all the 30,000 coca growers there claim indigenous Aymara descent, although there is also a significant Afro-Bolivian population.

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5 Coca bush is also grown in expansion zones in the Norte de La Paz known as the Alto Beni (1.5% of the total).
6 Numbering about 25,000 people, Afro-Bolivians descend from slaves who worked in Potosi’s silver mines during the colonial period.
Coca was first grown for the Tiwanaku empire, then the Inca empire and later the Spaniard’s mines at Potosí (Klein, 1986).

Fifty five percent of land cultivated in the Yungas is dedicated to coca, contributing to eighty percent of local agricultural income, with the remainder dedicated to fruit and coffee which grow better at lower altitudes and in higher quality soil, making coca the preferred crop (UNODC, 2020). Alison Spedding (1997) describes coca as a ‘total social fact’ in the Yungas, central to the social, political, symbolic, and economic fabric of Aymara communities.

_Campesino_⁷ (peasant) union organizations are universal in the Yungas. After peasants won freedom from bondage on large agricultural estates (haciendas) in 1953, they were granted individual plots of land (Arnold & Spedding, 2005, p. 73). The government then formed (and controlled) agrarian unions (sindicatos) at each hacienda, and these joined together into _centrales_ which by 1960 had united into six provincial federations affiliated with the departmental and national peasant organizations (Brewer-Osorio, 2021). Their aim was to ensure the equitable distribution of land, water, and other public resources, address internal conflicts, and represent community interests (Spedding, 2003, p. 169) They eventually gained independence from government control at the end of the 1970s, and during the 1980s parallel women’s organizations formed.⁸ In isolated regions, where coca production gradually expanded as a new generation of farmers moved east, south, and north to escape degraded soils and plots

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⁷ _Campesinos_ literally are people who live in the countryside. The word is commonly translated as peasants, which is incomplete in Bolivia’s case as the word campesino also implies indigenous. The majority of Bolivian campesinos are from Quechua and Aymara ethnic or linguistic groups (Albó, Libermann, Pizarro, & Godínez, 1990).

⁸ Throughout Bolivia, peasant unions represent the domestic unit with oldest male serving as representative. Only in his absence is he replaced by a woman although single mothers are also generally recognized as family heads. To increase women’s participation, women formed parallel unions countrywide.
too small to be subdivided, unions often served as local governments as well as growers’ representatives in negotiations with the state.9

A marketing arm of the unions, ADEPCOCA (Asociación Departamental de Productores de Coca), was established in 1989. It quickly gained a monopoly over legal coca sales, almost all from zones where coca had been grown for over a thousand years, which gave the organization considerable clout even though it only represented 15,000 growers (Brewer-Osorio, 2021). In 1994, the six peasant federations united into COFECAY (Consejo de las Federaciones Campesinas de los Yungas), a broader constituency than ADEPCOCA as it included farmers in the expansion zones. These differences in membership and interests generated fierce rivalries and disagreements that have at times erupted into violent conflicts (Vásquez, 2021).

In contrast, the Cochabamba Tropics, known as the Chapare, has only been settled since the 1950s. This massive region currently produces about one third of all coca (UNODC, 2020). The population is nearly 200,000 people, the majority of whom self-identify as Quechua, and most people are bilingual, speaking a mixture of Quechua and Spanish (PNUD, 2005, p. 302).

Before the 1950’s, most of the Chapare’s population were nomadic indigenous peoples, the Yuracarés and the Yuquis, who, despite Roman Catholic missionaries, maintained much of their traditional life (Orellana, 1999; Stearman, 1996). Government colonization of the sparsely populated lowlands, including the Chapare, in the 1960’s led to the first significant wave of campesino migration, which pushed these local indigenous peoples north. In the words of one campesino ‘…They didn’t want to give up their lands. . . but we conquered them with alcohol, cigarettes and salt.’ The new settlers cleared small plots, used mostly manual production, and a

9 Traditional and expansion zones under Law 1008 were poorly delineated.
family-based labour force (see Blanes, 1983; Millington, 2018). They grew rice, bananas, and citrus fruits alongside coca.

Coca demand boomed in the 1980’s as demand for cocaine skyrocketed in the United States, pushing migration to the Chapare. With little understanding of cocaine and its effects, these impoverished *campesinos* and ex-miners grew coca as it was the most lucrative cash crop and the only one to keep pace with inflation. By 1983, the Chapare population had grown to 142,000, peaking in 1989 at between 215,000 and 350,000 inhabitants (Painter, 1994, p. 16).

Since government presence in the region was virtually non-existent (see PNUD, 2007), farmers organized into what are now over 1000 tightly knit unions, joined into six federations with an overarching coordinating body (formed in 1991), and later joined by parallel women’s organizations. Part of the same campesino confederation (the CSUTCB) as coca growers in the Yungas, these unions fulfill similar roles. They self-govern, settle disputes, and coordinate community public works. Highly participatory, the unions usually employ indigenous decision-making practices mixed with union traditions inherited from the ex-miners. They assign land to new settlers, arbitrate disagreements, organize road or school construction, and punish anti-social conduct (Grisaffi, 2022, pp. 1284-1285). Although women exercise growing influence, leadership remains concentrated in male hands.

**Alternative development in Bolivia: mid-1980s to 2005**

The UN General Assembly defined alternative development in 1998 as drug crop eradication with rural development as the facilitating mechanism (Brombacher & Westerbarkei,
This made the reduction of coca crops the barometer for success, not the wellbeing of the population. This focus shaped policy until coca grower Evo Morales became Bolivia’s President in early 2006.

Bolivia’s first alternative development project took place in the Yungas, funded by the United Nations Fund for Drug Abuse Control (UNFDAC). The six-year project (1985-1991), known as Agroyungas, sought to decrease coca dependence by expanding coffee production, but was widely considered a failure (Leóns, 1997; Lupu, 2004; Roberts, 2010). New coffee varieties proved more susceptible to disease than local ones and market development was non-existent. Aid was conditioned on communities as a whole relinquishing coca first which generated inter-community conflict. In addition to a failure to grasp the particularities of indigenous culture, local geography, and history, Agroyungas suffered from a short time horizon and a series of unfulfilled promises.

In the mid-1980s, the United States, the world’s largest cocaine consumer, launched a militarized interdiction and eradication policy directed at Bolivia’s Chapare. This ‘War on Drugs’ incorporated limited economic assistance programs conditioned on coca eradication administered by the US Agency for International Development (AID). Almost every U.S. government document defined coca eradication as the principal goal of USAID’s program, attaching secondary importance to economic alternatives to coca (GAO, 2002; Jackson, Bathrick, Martin, & Rodriguez-Schneider, 2003).

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10 This definition conceives alternative development as a “process to prevent and eliminate the illicit cultivation of plants containing narcotic drugs and psychotropic substances through specifically designed rural development measures in the context of sustained national growth and sustainable development efforts … within the framework of a comprehensive and permanent solution to the problem of illicit drugs” (UNGA, 1998)
In 1988, Bolivia adopted the US-designed anti-drug Law 1008, which allowed 12,000 hectares of coca to supply the licit domestic market (for chewing, to prepare tea and so on) in poorly demarcated ‘traditional growing zones’ in the Yungas\textsuperscript{11}. The law slated all other coca cultivation for eventual eradication.\textsuperscript{12} Not only did the Drug War bring less repression to the Yungas, but it also effectively created another fissure in later efforts to create participatory development with coca – the division between traditional and expansion zones in the Yungas meant that \textit{cocaleros} in the traditional zone rejected any legal change that threatened their privileged status under Law 1008.

In the Chapare, the USAID alternative development program was for many years one of its largest in Latin America and spent approximately $300 million, far less than that directed to militarized police and interdiction efforts (Farthing, 2004). Over a thirty-year period, most coca farmers participated in at least one of the principal approaches, all conditioned, some with compensation (cash payments to reduce coca crops) and others that eradicated forcibly.

USAID began limited projects in the Chapare in the 1960s, but in the face of mushrooming coca production, the already existing Chapare Regional Development Project (CRDP) which prioritized increasing (licit) agricultural production, was revised in 1987 to focus on coca crop substitution. This was the first time that US assistance, particularly that tied to credit, was conditioned on farmers first eradicating their coca crops (Jackson et al., 2003). When no other crop could directly compete with coca, a new program, the Cochabamba Regional

\textsuperscript{11} Law 1008 identifies the Yungas of La Paz and the much smaller Yungas of Vandiola in Cochabamba as traditional zones.

\textsuperscript{12} The Chapare was identified as a ‘transitional zone’ this meant that eradication would be gradual and complemented with alternative development programs. Coca production anywhere else was outlawed and slated for immediate eradication (Durand Ochoa, 2012, p. 56).
Development Project (CORDEP), was launched in 1991. It expanded beyond the Chapare and USAID spent over half of its budget, with little success, in an effort to curb migration to the region (Painter, 1994, p. 107; Potter, 2002, p. 35)

Three Bolivian governments from 1985 to 1997 insisted that Chapare farmers be offered cash if they eradicated their coca voluntarily, as they were all aware of the crucial role coca played in absorbing labour and sought to minimize showdowns with the increasingly powerful Chapare coca unions (Brewer-Osorio, 2020, p. 269). In practice, many farmers eradicated their coca, received the compensation, planted the five crops the program promoted (banana, pineapple, passion fruit, palm hearts, and black pepper), but when they could not sell them (USAID invested almost nothing in marketing), they replanted coca (Linda Farthing, 2004).

When Hugo Banzer came into office in 1997, forced eradication and militarized interdiction, known as the Dignity Plan, were adopted for the first time, as the US had pushed for all along. Operations by U.S.-trained and funded police and military units led to repeated arrests, harassment and on occasion, for women, sexual assault (Linda Farthing & Ledebur, 2004; Ledebur, 2005). Consistent with the balloon theory of drug crops, forced eradication in the Chapare, which produced most of Bolivia’s coca leaf until the early 2000’s, led production to explode in the Yungas (Windle & Farrell, 2012).

Between 1997 and 2001, approximately 45,000 hectares of Chapare coca were forcibly eradicated and the underfunded alternative development program was unable to keep pace (GAO, 2002). This created a severe economic crisis for the estimated 45,000 to 50,000 families

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13 The balloon theory argues that, given the high price of drug crops and limited alternatives, when illicit crops are eradicated in one area they are simply replanted elsewhere, often pushing forward the agricultural frontier and contributing to deforestation.
in the Chapare, with negative consequences felt both regionally and nationally. Despite the catastrophic drops in income, not as many of the population out-migrated as expected.\footnote{Outlets for migration had substantially reduced. Economic collapse in Argentina meant that many of the one million Bolivians working there (of a total population of nine million in the early 2000’s) returned home.} Many farmers steadily replanted (Lishfer, 2003).

Only one attempt was made at forced eradication in the Yungas. In June 2001, Banzer sent the same US-funded and trained troops operating in the Chapare to destroy 1700 hectares of coca that was ‘excess’ under Law 1008. Without warning, soldiers began uprooting coca plants in La Asunta, east of the traditional zone of Sud Yungas. Local cocalero unions immediately mounted resistance, backed by hundreds of growers, merchants, truck drivers, and students, forcing the Banzer government to back down (Gutiérrez Aguilar, 2014).

By the early 2000s, USAID had shifted focus yet again: it began emphasizing commercial scale private investment. As none of the USAID-assisted companies were headquartered in the Chapare and most of their processing facilities were near the city of Cochabamba, they provided regional benefits but little direct impact on coca growers. These companies were accused of misappropriation of funds, inadequate accounting practices and conflicts of interest (Pinto Cascán, 2003). Lavish agricultural stations, Bolivian professionals earning in a month what campesinos earn in a year accompanied by U.S. supervisors paid four times more again, racing back and forth in new jeeps from Chapare to their offices in one of Cochabamba´s most luxurious office buildings, only reinforced coca growers’ frustration and distrust (Farthing 2004). In 2006 the director of the coca growers’ radio station explained: ‘On my show I used to say,
‘Alternative development has the highest wages in Bolivia! …we would be better off administering the money ourselves!’

Nonetheless, in 2003 interviews, USAID representatives stated that the program had seen steady success—each year, more legal crops exported, licit income of participating farmers increased, and more families incorporated into the program. Coca growers grudgingly acknowledged that improved road infrastructure facilitated them getting their crops (including coca) to market. A Chapare mayor and union leader identified three principal problems with the US approach: an uncoordinated strategy that operated outside existing community organizations and local governments; an inflexible conditioning of assistance on eradication; and a large, expensive bureaucracy.

While bloated and pricey bureaucracies are a hallmark of bilateral and multilateral aid (Easterly, 2002), US AID’s refusal to work with community representatives ran against all conventional wisdom about rural development. US AID consistently described coca grower unions as ‘drug dealers’ or at a minimum, that their leaders were in the pay of drug dealers (Rivera, 2011). In reality, the loyalty, involvement and sense of ownership of grassroots peasants to the union was and continues to be very strong (Grisaffi, 2019).

In the Chapare, USAID/Bolivia aggravated existing campesino suspicion by creating parallel local ‘associations,’ whose leadership and promoters were paid. In no small part, grower antipathy stemmed from memories of 1950s efforts by the Bolivian government to similarly control rural populations through government unions (Albó et al., 1990). The refusal to recognize

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15 Interview, Egberto Chipana, Chipiriri, Chapare, January 2006.
16 Interviews with Oscar Coca, Mancomunidad de Municipios del Chapare and Felipe Cáceres, mayor of Villa Tunari, July 15, 2003.
growers’ representatives meant that union-government agreements, many tied to coca growers’ demands concerning alternative development and often forged during periods of intense conflict, repeatedly went unfulfilled because the U.S. embassy withheld its stamp of approval. This significantly contributed to political instability, increased violent conflict, and fueled the decisions of individual growers to replant coca (Linda Farthing, 2004).

Chapare growers were convinced, usually through expanding police and/or military presence, to give up their coca in exchange for the promise of assistance. Forcing farmers to give up their most reliable source of cash income before reliable alternatives were in place severely limited reducing coca production and promoting rural development (Lishfer, 2003; Lupu, 2004). The distrust was compounded because coca-growing families were unlikely to differentiate between U.S.-funded military and police activities and U.S.-funded development programs. This doomed projects from the outset.

USAID had considerably more success in the Yungas. The US-funded Yungas Development Initiative began in 1999 to address coca production ‘more holistically’ than in the Chapare by improving roads and health care, funding college scholarships, and providing rural electrification, without coca eradication conditions (Jackson et al., 2003, p. 9). Resources were conditioned on community-wide coca eradication in exchange for social and productive infrastructure. Beginning in 2001, specialty coffee production (and to a lesser extent tea) experienced reasonable success in part because of improved coffee processing, growing international demand for high-end coffee, and sophisticated marketing (Jackson et al., 2003).

17 Researchers have noted a similar lack of trust and flawed dialog between coca growers and development agencies in Peru’s VRAEM region (Busnel, 2022; Paredes & Pastor, 2021; Paredes, Pastor, & Grisaffi, 2021).
However, the project remained susceptible to dramatic price fluctuations and particularly in areas where coca cultivation was illegal under Law 1008, conflicts occurred similar to those in the Chapare (Conzelman, 2007b).

**Turning the tide: emerging municipalities, the EU’s PRAEDAC and the cato accord**

In 1994, Bolivia’s Law of Popular Participation (LPP) devolved administrative responsibility and funding to municipalities, many of which were newly formed, turning the municipality into an important site for social and economic development (Kohl, 2003). While USAID provided training to 86 municipalities across Bolivia (including the Yungas), it largely ignored local governments in the Chapare as all of them, with virtually no opposition, have been controlled by the coca growers’ unions and their political party, the MAS, since 1995. The two exceptions were a US-funded road maintenance program which successfully worked with two of the Chapare’s municipal administrations beginning in 2002 and the early 2000’s program with Yungas municipalities.

In the Chapare, in 1998, the European Union program in Bolivia changed the dynamic by initiating a program with no coca-related conditions. The Assistance to the Chapare Alternative Development Strategy Plan, known as PRAEDAC, supported land titling, strengthened municipal administrative capacity, natural resource management and access to credit. While PRAEDAC was similar in style and staff composition to other bi- and multi-lateral development institutions, what distinguished it from USAID/Bolivia was its willingness to work with
established local organizations without demanding coca eradication. Carlos Hoffman, the EU’s Director of Municipal Programming, explained:

Our approach is radically different. Our attitude is that we will help campesinos improve their lives and then they will abandon drugs. Our philosophy is to support popular participation through the municipalities… USAID carries out projects that the municipality doesn’t know anything about, which makes a real planning process absolutely impossible (Linda Farthing & Kohl, 2005, p. 9).

Coca grower leaders perceive these programs to have achieved far more, and with considerably less money, than USAID. Felipe Cáceres, former mayor of the Chapare’s largest municipality, Villa Tunari, insisted that ‘in eight years, with one quarter of the money, the municipalities have achieved ten times what AID accomplished in 20 years’.18 With the assistance of Bolivian non-governmental organizations (NGOs), the municipalities developed detailed mappings of their resources, potentials, and limitations, and of their spending priorities. For example, the 2002-7 Municipal Development Plan (MDP) for the consortium (Mancomunidad) of Chapare municipalities Plan prioritized human and economic development, and included classroom construction and teacher housing, water systems, and urban electrical grids (Mancomunidad, 2002).

The Chapare municipalities used participatory rural appraisal techniques and relied heavily on community and union leaders to gather information (Chambers, 1994; Gobierno Municipal de

Villa Tunari, 1997, pp. 8-9). Planning reflected higher levels of community involvement than in the rest of Bolivia, and while NGO employees coordinated the studies, union leaders expected the NGOs to transfer planning skills to municipal employees. In addition, a degree of horizontal mobility between the municipalities and the NGOs developed, providing the Chapare with a skilled labour pool for community planning and development. Observers agree that PRAEDAC helped Chapare municipalities develop greater administrative capability and capacity than other Bolivian municipalities but also concurred on the need for independent municipal oversight, as one political party (MAS) controlled (and still controls) all the municipalities.\textsuperscript{19}

In the Yungas, the LPP had far less impact on coca growers’ political clout and economic development: as many governance competencies intersected, competition between the unions and already established Yungas municipalities grew. In the Chapare, the unions effectively took over recently created municipalities, integrating them within the union structure (Grisaffi, 2013). In the Yungas, the most important municipalities of Chulumani and Coroico, both in the traditional coca growing zone, were founded a hundred years earlier and controlled by local elites that the Chapare never had.\textsuperscript{20} This made it difficult for the unions to control or even influence them.\textsuperscript{21} As well, the division between traditional and expansion zones as well as between the union and marketing arm of coca growers all created friction within and between Yungas municipalities (Conzelman, 2007a, p. 159). Municipalities came into conflict with


\textsuperscript{20} Throughout Bolivia, struggles over municipal resources played out between towns and their rural hinterlands which were universally poorer and more indigenous.

\textsuperscript{21} In the municipalities in the expansion zones such as Caranavi and La Asunta, coca growers had far more influence.
unions in some areas, such as Irupana, where the unions wanted a greater role in the municipal planning process, closer to how the unions operate in the Chapare (Jackson et al., 2003, p. 39).

The next step in away from the conditioning of development assistance happened in late 2004 when President Carlos Mesa, weary of constant protest and violent police repression, acquiesced to a long-standing grower demand, and permitted a subsistence plot of coca leaf (known as a cato). Conflict abated almost immediately. ‘It’s very simple,’ said Yungas grower Celestina Ticona. ‘The cato lets us to feed our families.’ ‘We bought our plot and built our little house thanks to the cato,’ confirmed Sabina Ortiz, who worked at a Chapare community radio station.

**Social control of coca**

When Evo Morales took office in early 2006, he vowed to reassert national sovereignty and revaluing the coca leaf. His administration quickly formalized the cato program and in 2007, built on its success to introduce a novel approach, called ‘social control of coca’ until 2013 and ‘integrated development with coca’ since then. Both programs’ emphasis on community participation and respect for human rights make it the world’s first supply-side harm reduction initiative (Linda Farthing & Kohl, 2012). Vice Minister of Social Defense (and former Chapare mayor) Felipe Cáceres explained, ‘We decided to leave the machine guns, the bullets and the

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22 Due to the differences in topography and crop yields, a cato ranges from 1600 in the Chapare to 2500 square meters in the Yungas.
23 Author interview, Caranavi, Jan 26, 2014.
24 Author interview, Villa Tunari, January 31, 2014.
25 Harm reduction refers to policies that strive to minimize the adverse health, social, and economic consequences of legal and illegal psychoactive drugs.
bombs behind. We opted to include coca growing communities in the debate and analysis that created our policies’ (Cáceres, 2012).

A new constitution adopted in 2009, that recognized traditional uses of coca leaf for the first time, was a fundamental step. Bolivia then successfully petitioned the United Nations in 2013 for a reservation that legally permits coca-growing and its licit uses within its borders.

To promote community control over coca production, in January 2009, the EU-funded Social Control Support Program (PACS) got underway. It emphasized union participation and privileged collective over individual rights. Its consciousness-raising campaign worked to convince growers to cooperatively limit production, strengthened state/union and inter-union coordination and made coca control secretaries part of union leadership.

‘It certainly wasn’t easy,’ explained union leader Marcela Lopez who worked in the Chapare with PACS. ‘Some local union leaders understood and put in time and effort to make it happen. Others didn’t which was difficult.’ The program estimates that it effectively reached 30-40 percent of Chapare unions and 88 percent of coca eradicated during the program was removed through cooperative reduction with growers (Linda Farthing & Ledebur, 2015, p. 25).

Former EU Cooperation Attaché Nicolaus Hansmann explained that ‘Much of PACS’ positive impact is due to three technical elements: the biometric registration of almost all growers except for the Yungas traditional zone, land titling (just under 1.2 million acres or 48,000 hectares), and UN-financed satellite surveillance and cross-referenced coca monitoring. The 2013 Agrarian Census and initial efforts to bring licensed coca merchants into the electronic registry strengthen the effort.’

27 Author interview Nico Hansmann, La Paz, January 30, 2014.
Grower motivation was tied to deep-seated loyalty to Evo Morales and profound respect for the coca leaf, closely entwined with the practical need for the subsistence income the cato brings. Coca growers, whether as agricultural extension agents or inspectors, Vice-Ministers or until 2019, the President himself, were largely the program’s implementers, greatly enhancing the sense of ownership. Men held almost all these positions, which led PACS to fund female social control delegates. However, women were assigned mostly cooking and cleaning duties within unions and that along with ongoing household responsibilities impeded their full participation (Linda Farthing & Grisaffi, 2022).

The heterogenous nature of the Yungas made social control far more complex to apply there. The cato system was introduced to the Yungas in 2006, and subsequent registration concluded in the non-traditional zones in 2011. But conflicts persisted between traditional coca zones, where growers refused to limit or regulate production, and expansion zones that had agreed to the cato for fear of losing rights to coca cultivation altogether.

Efforts were made to tailor the program. ‘We have adopted specific and distinct regulations for each zone,’ explained PACS Director Pedro Ferrano in 2014.28 Initially, given the Yungas distinct organizational, legal, and spatial configurations, most targeted farmers completely rejected the program.29 ADEPCOCA leaders led the resistance, arguing that accepting the cato limit would destroy their privileged status under Law 1008 (Brewer-Osorio, 2021).

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29 Ibid.
Nonetheless, sustained efforts led Yungas farmers in Caranavi, Irupana, and Circuata to participate and four equipped regional offices were constructed. ‘The ideal scenario is when producers pull up their own excess coca,’ said Nicolaus Hansmann.30 This occurred in Irupana in the Yungas (and in some areas of the Chapare) when local unions and government monitors announced inspection of their plots.

Built on the foundation of the earlier USAID specialty coffee program, the National Fund for Alternative Development (FONADAL) with EU and Bolivian state funding, provided support to coffee production. Coffee prices soared in 2011 and 2012 encouraging a boost in production. In 2012, Yungas coffee outpaced coca in value and acreage, but by early 2013, international prices tumbled and have fluctuated ever since, undermining coffee’s long-term viability as a substitute for coca.31

**Integrated Development with Coca**

The strategy was renamed in 2013 but continued its emphasis on 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. ‘We allow coca cultivation — but the idea is to gradually reduce reliance on coca crops,’ explained John Cornejo32 of the partially EU-funded National Fund for Rural Development (FONADIN) (which replaced FONADAL in 2017). The

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30 Author interview Nicolaus Hansmann, La Paz, January 30, 2014.
31 In neighbouring Peru coffee farmers are turning to coca because of low prices (Linda Farthing & Grisaffi, 2021).
32 Author interview, John Cornejo, Chief of the technical project unit at FONADIN, La Paz, July 2019.
sequencing of assistance was seen as critical because the guaranteed income from the cato— which is slightly over the minimum wage at around 400 dollars per month, represents a guaranteed income, reducing the risk of experimenting with alternative crops or livestock. Funding went to increased mechanization, such as rice husking machines, temperature-controlled supply chains for dairy produce, as well as for fruit, honey, and fish processing plants.

Rather than agencies working in isolation on specific projects, as was the case with USAID (see Farthing and Kohl 2005), government branches collaborate to develop health, education, and physical infrastructure. A national Council on Revaluing, Producing, Marketing and Industrializing Coca (CONCOCA) formed, and the Ministry of Rural Development and Land incorporated the integrated development with coca concept into all its programs.

Until late 2019, coca grower leaders meet regularly with FONADIN officials to set priorities, and development workers and government officials attended coca union meetings to report back. Leon de la Torre Krais, the EU ambassador to Bolivia, argued: ‘FONADIN … does not promote projects born on the desks of technicians but helps to bring to life initiatives that come from the communities’ (FONADIN, 2018, p. iii).

Farmers and government outreach workers say that integrated development worked. To give but one example, Edilberto Godoy, a union leader and the administrative secretary for Villa Tunari explained that local government had helped to dig and stock more than 300 fish-ponds and that there were now over 1000 operating commercially in the Villa Tunari municipality.\footnote{Author interview, Villa Tunari, July 2019.} Vincente Cruz, a FONADIN community outreach worker said that 3,000 commercial fish farms now operate throughout the Chapare’s five municipalities.\footnote{Author interview, Chimore July 2019.} ‘We are building a fish processing and
packing plant, starting a project to breed the fry, and investing in a fish food processing plant. These things will reduce the costs,’ Godoy said. Local farmer, Eusebio Rubios voiced his support, ‘Our president is actively looking for markets for coffee. When did other governments ever think to do that?’

**Results:**

In areas where unions are strong, the community control model has proven more effective at reducing coca acreage and promoting development than police and military repression, and it successfully extended social and civil rights (Grisaffi, Farthing, & Ledebur, 2017). The program has been recognized as a ‘best practice’ by the Organization of American States (OAS, 2013) and the United Nations Development Programme stated in 2019 that ‘the [Bolivian] government has helped stabilize household incomes and placed farmers in a better position to assume the risk of substituting illicit crops with alternative crops or livestock’ (UNDP, 2019). In mid-2018, the EU commissioner for development in Bolivia, Neven Mimica, tweeted, ‘The fight against drugs trafficking in #Bolivia is progressing thanks to #EU cooperation centered on alternative development and law enforcement.’ In contrast, the United States was consistently critical of the initiative, repeatedly labeling Bolivia one of the world’s least-compliant countries in controlling drug exports (ONDCP, 2020; White House, 2012), and black-listing it every year since 2008 (Brewer-Osorio, 2021, p. 577).

However, coca growers’ unions, like any other organization, are not immune to noncompliance or corruption. Many farmers in the Chapare initially petitioned for another cato by registering part of their land as belonging to a family member. While this practice steadily
declined, it persisted despite government opposition. Farmers repeatedly complain that they cannot support their families solely on income from one cato (Grisaffi, 2016, p. 161). Government agents counter that they should not expect to, but rather need to develop other income sources through crop diversification (Opinión, 2011).

 Debates about enforcing the cato happen at every local union meeting and can last as long as three hours (Grisaffi & Ledebur, 2016, p. 11). In some places, union leadership has tried 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,’ explained Godofredo Reinicke, director of Puente Investigación y Enlace. ‘Results from a policy as innovative as this are not going to be immediate’, he continued. ‘Social control of coca needs to be given sufficient time to see if it makes sense as a sustainable approach to reducing drug-related violence.’

 Reduced dependence on coca is displayed by the number of farmers who now describe the cato as a ‘savings account’ rather than their main source of income. As one farmer explained it, ‘You earn money to fill your stomach from something else, but coca is for saving.’ A leader at a coca union meeting remarked: ‘Today we are not only cocaleros, we are also bananeros (banana growers) and palmíteros (palm heart growers).’ Banana, citrus fruit, and palm heart currently cover more cultivated land than coca in the Chapare, which the UN attributes to sustained, integrated development efforts (Grisaffi, 2016, p. 161).

35 Godofredo Reinicke interview, Cochabamba, April 20, 2012.
The Chapare and the Yungas, along with the rest of Bolivia, were transformed during the upturn in government investment and the economy after Evo Morales took office in 2006. The government advanced redistributive policies, while political participation increased through indigenizing the political sphere, re-writing the constitution, nationalizing strategic economic sectors, and investing in public services (Postero, 2017).

This improved living conditions in both the Chapare and the Yungas significantly (Crabtree & Chaplin, 2013). For example, in Chulumani in the Sud Yungas, basic sanitation increased 23% between the 2001 and 2012 census and women’s illiteracy dropped from 20.3% to 6.9% (Apaza Quispe, 2019, p. 11). In 2015, former Vice Minister of Social Defense Felipe Cáceres described the change, ‘Before, the children of growers didn’t think beyond coca. But now, three hundred students just graduated from the local high school. Ten years ago, there were only 7 or 8 graduates.’ A state housing program replaced many wooden shacks with brick-and-mortar houses, and low-income households, except for the most remote, now have access to basic services. Up to 2019, many young people in the Chapare, some of whom had job offers abroad, decided to stay rather than migrate.

Government scholarships, technical institutes, and a local indigenous university mean that children can now study in the Chapare at a post-secondary level, and cheap government loans allowed them to start up their own businesses (such as shops and taxis). One report by the German Development Agency (GIZ) states, the Chapare is ‘now a space of economic opportunities … and improved living conditions’ (Addicks, Hübner-Schmid, & Cabieses, 2010, p. 39).

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36 Author interview, Felipe Cáceres, La Paz, January 27, 2015.
37 Author interviews with Chapare coca growers -ongong.
Increased citizenship rights for Bolivian growers fostered unprecedented acceptance of the once-hated antidrug police (the FELCN and its rural unit, UMOPAR). Social control of coca was ‘bad for the cocaine business,’ says ex-FELCN Director, Gonzalo Quezada, ‘The growers themselves turn in traffickers, something they never did before.’

Coca industrialization

Beyond diversifying crops, central to incorporating coca into development is to come up with alternatives uses for the coca leaf, which has high levels of protein and nutrients. While a 2013 EU-funded study found that Bolivia requires 14,700 hectares (35,721 acres) to satisfy 3 million local consumers (CONALTID, 2013), production has ranged from 20,000 to 30,000 hectares according to the UNODC (UNODC, 2021). While Yungas coca is preferred for chewing, a substantial amount of its coca ends up in the cocaine paste circuit. In the Chapare, although some unspecified amount likely travels east to supply agricultural laborers in Santa Cruz, the largest domestic market for the leaf, much of the crop never finds its way to the legal market and is transformed into cocaine paste (Grisaffi, 2021).

Against this backdrop, broader markets for Bolivia’s coca crop are essential. Grower unions regularly discuss industrialization and have encouraged their rank and file members to cultivate organic coca for use in export products like teas, flour, shampoo, skin creams, drinks and diet pills. To manufacture these products, the Venezuelan government funded construction

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of a coca processing plant EBOCOCA in the Chapare that initiated production in 2008 (Brewer-Osorio, 2021).

Alternative coca food products have struggled because continued international prohibition of coca exports limits the market.\(^{39}\) Yungas grower, Lucio Mendoza explains, ‘We want to sell the leaf worldwide for the medicinal value we know it has. This would provide us legitimate income from coca and be good for the world, which will benefit from our sacred leaf’ (Linda Farthing & Ledebur, 2015, p. 33).

The Chapare coca processing plant runs well below capacity. In 2019, Godoy told our team ‘We need more studies. We don’t have good scientists to be able to industrialize coca – we need more support … If we are able to industrialize coca, then that will help counter drugs trafficking.’

In the Yungas, two revitalized 1960s factories package coca tea and baking flour, but a new plant was postponed for several years because of inter-union disagreements over its location.\(^{40}\) An organic coca leaf project in southern Yungas, developed in response to ecological degradation caused by coca mono-cropping advanced slowly. ‘In Irupana, we worked to certify 500 parcels as organic according to European criteria, which took us several years. There is a market for this kind of coca, and the 2,800 growers currently growing organically cannot meet the demand,’ recounted Bruno Terceros, who worked for PACS.\(^{41}\) While a similar project in the

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\(^{39}\) Pearson argues that the history of listing coca leaf as a controlled substance reflects colonial, ethnocentric, and racist attitudes towards the Andean region and traditional users of so-called ‘drug plants’ (Pearson, 2016).

\(^{40}\) The coca leaf flour/tea bag factory was supposed to have been financed by revenue from ADEPCOCA and built in Trinidad Pampa (Coripata municipality), but the project never materialized. Personal communication, Caroline Conzelman, 5\(^{th}\) October 2022.

\(^{41}\) Bruno Terceros. Former Director, Community Control Support Program (PACS), Vice-Ministry of Social Defense and Controlled Substances. La Paz. February 28, 2013.
Chapare has not gained the same traction, government funding is committed for further scientific studies into the benefits of organic coca leaf and leaf-based products.

Efforts to expand coca markets internationally have to date not seen much success. Despite signing an agreement with Ecuador in 2018, coca exports stalled after Morales’ ally, Rafael Correa, left office. Expanding exports to northern Argentina where coca is consumed traditionally been stymied by a local government committed to increasing production. However Mexico has expressed interest in researching Andean medicinal plants, including coca leaf which could lead to expanded markets for the leaf (Chulver Benítez, 2020).

The ouster of Evo Morales and coca crop control

After Jeanine Añez took over in November 2019, her government closed legal coca markets, usurped control over producer licenses and used military force to subdue cocalero protests (Brewer-Osorio, 2021). After ten Chapare coca farmers died during protests on November 15, 2019, growers immediately expelled the police (Linda Farthing & Becker, 2021). Banks refused to operate in the Chapare after the police left, which meant that when COVID-19 exploded, residents were unable to collect emergency subsidies and loans. For two weeks in April 2020, no gasoline was available because the government insisted that gasoline was being diverted into cocaine paste production. The cutoff killed thousands of fish in ponds that relied on gasoline-fueled aeration pumps (AIN, 2020).

The Añez government quickly drafted its own drug strategy, that presented a hardline stance on drug use, interdiction, and supply control issues, with directly copied text from US international narcotics control strategy reports. The previous strategy was dismissed as
‘permissive and impractical’ and ‘merely a political discourse’ (Ledebur, Farthing, & Grisaffi, 2020).

Chapare coca farmers said that their relationship with the state had switched back from partnership under Morales to enemy (Grisaffi, 2022, p. 17). One grower told us, ‘Why should we respect the cato - when the government does not respect us?’

Coca plants were on sale in the main towns, something the community coca control program outlaws and not seen for many years. This turn of events reinforces how critical a positive relationship with the state is for effective community-based coca control.

Although the Añez government suspended existing development projects, with the election of Luis Arce in October 2020, economic and community development programs were re-initiated through a four-year plan (Estrategia de Desarrollo Integral Sustentable con Coca 2020/2024 - ENDISC). This has created local economic development agencies in coca regions designed to better respond to local demands, both from growers and local businesses (Chulver Benítez, 2020).

But it may not be enough to resuscitate the previous success in crop control. In September 2022, an official at the Vice-ministry of Social Defence and Controlled Substances (Viceministerio de Defensa Social y Sustancias Controladas or VDSSC) informed us that coca acreage is now at its highest levels recorded since 2011. The official attributed the expansion to farmer disengagement, driven by a lack of trust in the state following the coup, but also less commitment towards President Luis Arce – a UK trained economist - who has no history in

42 Author interview, coca grower, Chapare, 22nd December 2019.
43 Interview with Official at the Viceministerio de Defensa Social y Sustancias Controladas, La Paz, phone call 13th September 2022.
Bolivia’s social movements. Arce is unable to pressure cocaleros the way Morales could. The official also commented that as corona disrupted the cocaine supply chain (Linda Farthing & Grisaffi, 2020), demand for coca decreased, driving down its price. In September 2022, one pound of coca was 10 Bolivianos (US$ 1.45), compared to 35 Bolivianos (US$5.09) in early 2019. This has prompted migration: one farmer we have known since 2005, now works as a day laborer picking avocados in Chile and plans to migrate to Ireland.44

Conclusions

Drug control policies have often had a negative impact on human development, exacerbating the poverty, marginalization and exclusion that fuels drug crop production in the first place (Linda Farthing & Ledebur, 2015: 32). Thirty years of U.S.-funded alternative development was a poorly designed attempt to justify U.S.-funded military and police actions by putting a friendly face on a repressive policy designed to separate impoverished campesinos from their livelihoods and demonize an ancient and valued part of Andean culture (Linda Farthing, 2008).

Bolivia’s shift to the social control and integrated development programs with coca offered a different path after 2006. These models contribute to addressing the root causes that sustain the cultivation of illicit crops, by reducing poverty and adding to local and sustained economic growth. They have also promoted peace, justice, and strong institutions. The UNDP signals that polices are most effective ‘through long-term investments in sustainable livelihood strategies, strengthening access to ownership and local control over land, developing markets and

44 Interview, coca farmer, telephone call to Chile. 20th September 2022.
infrastructure for crops or products to replace drug crops and ensuring the meaningful involvement of farmers in development strategies’ (UNDP, 2016, p. 10).

Bolivia’s success reinforces that any development program must be rooted in trust in state actors and the extension of citizenship rights. The state must treat local farmers as citizens and partners, rather than as criminals. The legal recognition of a restricted quantity of coca, combined with land titling, investment in basic infrastructure and economic development initiatives creates the framework necessary for positive state engagement.

Strong social organizations are the critical element. Agricultural unions with members formally incorporated into local drug crop control and development programs create legitimate counterparts. This means that strengthening local groups, particularly in places without strong grassroots representation must be the first step, combined with reinforcing local government capacity and budgets so that town halls can respond to local demands.

Proper sequencing is essential – this means front-loading development assistance without calling on farmers to first reduce crops. But Bolivia went one step further by permitting subsistence coca as an anchor for crop diversification. Policy makers need to adopt new benchmarks for success, moving away from emphasizing crop eradication figures, to metrics based on human welfare and development. Even where an agricultural product only has illicit uses, permitting farmers to grow a small amount of the crop they rely on, if mixed with participatory technologically sophisticated monitoring, improved government services, economic development and a reduction in repression, places them in a better position to curtail their reliance on an illegal crop. By emphasizing human rights, social and economic development and increasing state presence in remote rural areas, Bolivia’s innovative approach has worked towards rather than against sustainable development.
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