PREFACE

The Bulletin on Narcotics is a United Nations journal that has been in publication since 1949. It is printed in all six official languages of the United Nations—Arabic, Chinese, English, French, Russian and Spanish.

The Bulletin provides information on developments in drug control at the local, national, regional and international levels that can be of benefit to the international community.

The present issue of the Bulletin (Vol. LXI, 2017), whose guest editor is Jorrit Kamminga, Senior Fellow, Netherlands Institute of International Relations Clingendael and Strategic Policy Adviser for Afghanistan, Oxfam Novib, is focused on alternative development. It includes five articles that provide important insights and experiences about the current state and future directions of this development-driven drug-control strategy.
EDITORIAL POLICY AND GUIDELINES FOR PUBLICATION

Individuals and organizations are invited by the Editor to contribute articles to the *Bulletin* dealing with policies, approaches, measures and developments (theoretical and/or practical) relating to various aspects of the international drug control effort. Of particular interest are the results of research, studies and practical experience that would provide useful information for policymakers, practitioners and experts, as well as the public at large.

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Editorial: the way forward for alternative development

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Introduction

We are pleased to introduce this special issue of the Bulletin on Narcotics, which is devoted to the theme of alternative development. In addition to this introduction, it consists of five academic articles that provide important insights and experiences regarding the current state and future directions of this development-driven strategy. The articles were selected following an open call for submission announced in December 2015. Some of the articles offer a programmatic perspective, distilling lessons learned and best practices from projects and programmes implemented in various countries and contexts. Others present a more general analytical perspective, examining some of the principles and conceptual underpinnings of alternative development.

This special issue is part of a broader process that the United Nations Office on Drugs and Crime (UNODC) has undertaken to develop a thematic field of research on alternative development. In its publication World Drug Report 2015, UNODC included a thematic chapter on alternative development,¹ the aim of which was to review the evidence accumulated through the implementation of projects and programmes in countries with large amounts of illicit drug cultivation and analyse the application of the alternative development approach in different contexts. The World Drug Report 2015 demonstrated that alternative development is in a constant state of flux and is now far more than what Alimi’s article in this issue describes as projects grounded on “monocausal schemes of context analysis” and “a one-size-fits-all basis”.

¹World Drug Report 2015 (United Nations publication, Sales No. E.15.XI.6), chap. II.
The World Drug Report 2015 documented how alternative development interventions have evolved over the years, reaching a multidimensional approach beyond the single focus on reducing illicit drug cultivation, while recognizing that adequate funding and political support bring the long-term socioeconomic and environmental development needed to sustain the reduction of income from illicit crops. The success of alternative development is increasingly a result of the piloting of new and often more sophisticated approaches by governments and other actors involved in its implementation.

This special issue of the Bulletin on Narcotics intends to elaborate on that thematic chapter of the World Drug Report 2015 by showing in more detail the evolving debate around alternative development and the new ways in which it is implemented in practice.

Sustained efforts to exchange best practices and lessons learned

Especially in recent years, there has been a sustained effort at both the national and the international level to evaluate programmes and to exchange best practices and lessons learned during international workshops and expert group meetings. In 2002, the International Conference on the Role of Alternative Development in Drug Control and Development Cooperation, held in Feldafing, Germany, provided an important impetus to this process. More recently, the International Conferences on Alternative Development, held in 2012 and 2015, have provided a practical technical platform dedicated to discussing different scenarios and resolving some of the conceptual challenges that are addressed in this issue. Even more recently, the discussions taking place at the special session of the General Assembly on the world drug problem in 2016 resulted in operational recommendations on alternative development. The table below summarizes the main alternative development-related events since 2002.

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3 Outcome document of the thirtieth special session of the General Assembly, entitled “Our joint commitment to effectively addressing and countering the world drug problem” (General Assembly resolution S-30/1, annex).
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<td>International Conference on the Role of Alternative Development in Drug Control and Development Cooperation</td>
<td>Feldafing, Germany</td>
<td>7-12 January 2002</td>
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<td>International workshop on development in a drugs environment: beyond alternative development?</td>
<td>Berlin</td>
<td>29 May-1 June 2006</td>
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<td>Open-ended intergovernmental expert working group meeting on international cooperation on the eradication of illicit drug crops and on alternative development</td>
<td>Vienna</td>
<td>2-4 July 2008</td>
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<td>Global Partnership on Alternative Development regional seminar: Sustaining Opium Reduction in South-East Asia: Sharing Experiences on Alternative Development and Beyond</td>
<td>Chiang Mai, Thailand</td>
<td>15-17 December 2008</td>
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<td>International Seminar Workshop on Sustainable Alternative Development</td>
<td>Chiang Rai and Chiang Mai, Thailand</td>
<td>6-12 November 2011</td>
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<td>High-level International Conference on Alternative Development</td>
<td>Lima</td>
<td>14-16 November 2012</td>
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<td>Fourth German Federal Ministry for Economic Cooperation and Development (BMZ)/Transnational Institute (TNI) South-East Asia Informal Drug Policy Dialogue, on the future of alternative development in South-East Asia</td>
<td>Bangkok</td>
<td>18-19 December 2012</td>
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<td>Joint UNODC/BMZ expert group meeting on outreach to new stakeholders in the field of alternative development</td>
<td>Berlin</td>
<td>11-12 November 2013</td>
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<td>Second expert meeting in the framework of the Russian Federation presidency of the Group of Eight, on alternative development for drug producing regions</td>
<td>Moscow</td>
<td>25 March 2014</td>
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<td>Expert group consultation meeting on the alternative development chapter of the World Drug Report</td>
<td>Berlin</td>
<td>18 November 2014</td>
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<td>Joint UNODC/BMZ/German Agency for International Cooperation (GIZ) expert group meeting on alternative development in the framework of the preparations for the special session of the General Assembly in 2016 and the post-Millennium Development Goals debate</td>
<td>Berlin</td>
<td>19-20 November 2014</td>
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<td>Second high-level International Conference on Alternative Development</td>
<td>Bangkok</td>
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One of the most important results of these endeavours has been the United Nations Guiding Principles on Alternative Development, adopted by the Commission on Narcotic Drugs in March 2013 and by the General Assembly in December 2013. The Guiding Principles represent a step forward, as they are based on a broad participatory process and are grounded in decades of experience and learning. They also represent a more balanced conceptualization of alternative development, synthesizing ideas and working towards a conceptual consensus through expert discussions and assessments. As Alimi points out in this issue, the fact that the Guiding Principles were adopted by the General Assembly is important, as it endows them with greater political legitimacy.

The section on alternative development in the outcome document of the special session of the General Assembly has further pushed the multidimensional approach of alternative development, recognizing the value of implementing “strategies aimed at alleviating poverty and strengthening the rule of law, accountable, effective and inclusive institutions and public services

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<td>Joint UNODC/BMZ/GIZ/Mae Fah Luang Foundation expert group meeting on taking</td>
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<td>25-27 November 2015</td>
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<td>development seriously: alternative development in the process of the special</td>
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<td>session of the General Assembly in 2016</td>
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<td>Group of Seven Rome-Lyon group expert</td>
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<td>High-level panel discussion on alternative development and the Sustainable</td>
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<td>Development Goals</td>
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<td>Alternative development: new approaches</td>
<td>New York</td>
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<td>and key elements for the post-special session of the General Assembly framework</td>
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<td>Round table on alternative development;</td>
<td>New York</td>
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<td>regional, interregional and international cooperation on development-oriented</td>
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<td>balanced drug control policy; addressing socioeconomic issues</td>
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<td>Inter-American Drug Abuse Control Commission expert group meeting on</td>
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<td>comprehensive and sustainable alternative development</td>
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<td>High-level panel discussion at the sixtieth session of the Commission on Narcotic</td>
<td>Vienna</td>
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<td>Drugs on human security and the rule of law: alternative development’s contribution to 2030 Agenda for Sustainable Development</td>
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4United Nations Guiding Principles on Alternative Development (General Assembly resolution 68/196, annex).
and institutional frameworks" to address illicit drug cultivation and production. The Assembly also strengthened an evidence-based approach to alternative development by recognizing the importance of research to “better understand factors contributing to illicit crop cultivation” and to support programmes through impact assessments.

These policy documents set the standards for, and guide broad national policies on, alternative development. A research agenda such as the one produced by the World Drug Report 2015 can guide operational strategies by identifying successful approaches to, for example, increasing food security, strengthening cooperatives, developing sustainable value chains, promoting agro-industry, marketing alternative products or increasing access to land.

The limited size and scope of alternative development

Despite the evidence demonstrating successes in alternative development, the combined efforts of alternative development around the world still amount to only a very small percentage of overall development assistance. Between 2002 and 2013, alternative development-related disbursements of countries belonging to the Organization for Economic Cooperation and Development (OECD) accounted for $245 million per year, the equivalent of just 0.2 per cent of global development assistance. By 2013, alternative development assistance had fallen back to 0.1 per cent of overall development assistance. Since the adoption of the 2009 Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem, commitments of OECD countries have declined by 71 per cent. This seems to suggest that the political impetus behind more technical exchanges of best practices and lessons learned is not matched by a financial stimulus.

While the World Drug Report 2015 clearly showed the global downward trend in international support, that abstraction becomes a more concrete reality when alternative development projects are implemented in the local contexts of countries and regions. It is useful, therefore, to look more closely at the example of a single country. The two figures below depict the situation for Afghanistan, showing both the global commitments and global disbursements related to alternative development between 2001 and 2015.

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5 General Assembly resolution S-30/1, annex, para. 7 (a).
6 Ibid., para. 7 (g).
7 See World Drug Report 2015, chap. II.
8 World Drug Report 2015, p. 84.
9 Ibid., p. 118.
Figure I. Global commitments related to alternative development in Afghanistan made by donor countries of the Organization for Economic Cooperation and Development, 2001-2015

Note: Data extracted on 3 May 2017.

Figure II. Global disbursements related to alternative development in Afghanistan made by donor countries of the Organization for Economic Cooperation and Development, 2001-2015

Note: Data extracted on 3 May 2017.
Apart from the downward trend after 2007 (for commitments) and 2009 (for disbursements), two other interesting developments can be seen from the figures. Firstly, it took at least until 2005 before the international community started providing substantial funding for alternative development in Afghanistan, four years after the Bonn Conference of 2001, which marked the starting point of post-conflict reconstruction efforts. Secondly, there seems to have been a considerable delay between the first serious commitments (2005) and the first substantial increase in disbursements (2008). That delay is even more remarkable when one considers that the Afghan Government had launched its first National Drug Control Strategy in May 2003.

The overall downward trend of assistance for alternative development in recent years runs parallel to a broader pattern of international disengagement from Afghanistan, marked particularly by a security transition process (2011-2014) and the end of the International Security Assistance Force mission in 2014. It is difficult, however, to equate this disengagement with donor fatigue. At the Brussels Conference on Afghanistan in October 2016, international donors pledged $15.2 billion to assist Afghanistan until 2020. Nevertheless, it is not clear how much of those funds will be spent on alternative development programmes. Some ongoing projects will continue for the next few years, including the alternative development components of the Kandahar Food Zone programme, a five-year, $45.4 million project of the United States Agency for International Development (USAID) that will continue until the end of August 2018, and the USAID-run Regional Agricultural Development Program, consisting of regional five-year projects with a total budget of more than $300 million, focusing on increasing the food and economic security of farmers through strengthened value chains.

While the rapid decrease in financial commitments to alternative development does not bode well for future disbursements, Afghanistan, having received unprecedented levels of international support in a rather short time, has fared relatively well compared with other countries. But even in Afghanistan, support for alternative development has been slight in comparison with other types of counter-narcotics-related assistance. The average funds committed by international donors to agricultural alternative development in Afghanistan was $64 million per year in the period 1998-2008 and $85 million per year in the period 2009-2013. Although these amounts may not include a considerable sum of either unregistered spending on alternative development or funding coming from non-OECD

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11 United States, Special Inspector General for Afghanistan Reconstruction, Quarterly Report to the United States Congress (30 October 2016), pp. 139-141.

12 World Drug Report 2015, p. 86.
countries, they are still far less than the total annual spending on counter-narcotics programmes, which, for the United States alone, was roughly $566 million per year between 2002 and 2016.\footnote{As of 31 December 2016, the total spending of the United States on counter-narcotics efforts in Afghanistan was $8.5 billion since 2002, which amounts to about $566 million a year. The total figure is taken from Special Inspector General for Afghanistan Reconstruction, \textit{Quarterly Report to the United States Congress} (30 January 2017), p. 186.}

**Towards realistic expectations**

Alternative development project cycles are often short, while the challenges underpinning illicit drug economies require long-term solutions. What single alternative development projects can achieve is contingent on the size and scope of the investment. Most of the evidence collected for the \textit{World Drug Report 2015} documents the benefits of local interventions for rural communities, but it also shows how national large-scale development investments ultimately address illicit cultivation in a more structural way (in Thailand, for example). In looking for ways to make alternative development interventions more effective and more impactful, it is important to consider alternative development as part of a broader package of development and good governance initiatives that can decrease dependence on illicit crop cultivation over time.

When it comes to measuring progress, it is clear from both policy documents and project implementation on the ground that the impact of alternative development is no longer evaluated merely in terms of drug-control indicators.\footnote{\textit{World Drug Report 2015}, chap. II, sect. G, pp. 109-114.} But the inclusion of other important indicators, such as those related to human development or human security, brings new challenges to alternative development, not only in project design and implementation, but also in monitoring and evaluation. As alternative development constitutes only one of the national strategies applied within a broader policy framework, which contains elements ranging from eradication, conflict resolution and strengthening of the rule of law to overall socioeconomic development, it may be very hard to isolate the exact contribution of alternative development to or its direct impact on, for example, the quality of life of rural communities in a certain area.

**Linking drugs and development policies**

The research undertaken for the \textit{World Drug Report 2016} explored the linkages between the drug problem, drug policies and sustainable development.\footnote{\textit{World Drug Report 2016} (United Nations publication, Sales No. E.16.XI.6).} The conclusion drawn is that a dual track is needed: specialized drug
interventions in synergy with general development investments. This dual track has been well embraced in the alternative development approach. Incorporating alternative development into broader development, including in rural areas, has clear benefits, but the more it becomes embedded in wider approaches and strategies, the more it can lose the specificity of development efforts needed in areas with (or at risk of having) illicit drug cultivation. The World Drug Report 2016 presents examples of drug and development policies that had unforeseen counterproductive effects on each other because they were designed and implemented in isolation.

What alternative development offers to development strategies is a set of specialized thematic and operational development interventions in symbiosis with the aim of addressing multiple challenges not only related to dependence on illicit crops, but also associated with the illicit economy, such as violence, insecurity and the presence of criminal organizations or illegal armed groups. The common denominator of those problems is that building trust with the local communities is often essential before any development-driven intervention can be sustainable.

In her article for this Bulletin, Alimi explores the concept of alternative development as a viable policy entry point for bringing sustainable development options to areas affected by illicit drug cultivation. Her article particularly highlights the divide between what she calls drug policy actors and development-policy actors. She points out that while the concept of alternative development intrinsically calls for close cooperation, for various reasons, the gap between those two communities has never been bridged. As a result, there seems to have been no constructive debate on how alternative development can be most successful as a complementary instrument within broader development efforts. The tide may be turning, however, as Alimi also points out that recent developments, particularly the discussions leading to the special session of the General Assembly in 2016 and the adoption of the 2030 Agenda for Sustainable Development, could help to better connect drug and development policies in a common policy setting.

Often criticized, and sometimes even delegitimized, the concept of alternative development is at a crossroads for Alimi. The recent efforts observed may have critical implications that would mean strengthening the evidence base and setting out clearly the ambitions and limitations of alternative development as an element of a broader development approach. Such future directions of alternative development, however, require a global, multi-stakeholder reflection on how a development approach to drugs could be the way forward. That entails a shared understanding of root causes, driving factors and possible solutions to illicit drug cultivation on the part of all agencies working on sustainable development in contexts where illicit drug cultivation, production or trade plays a role. Together, they need to work
towards the same overarching goal, which is to contribute to an enabling environment in which economic and social development can create conditions for decreasing, in the long term, the dependence on illicit drug crops in a sustainable way. According to Alimi, ambitions seem to be renewed to establish a common normative foundation that would allow the better integration of alternative development into a sustainable development approach to solving the world drug problem.

### The practical implementation of the principle of shared responsibility

At the heart of the broad patterns of collaboration needed for alternative development to contribute effectively to this enabling environment lies the principle of shared responsibility to help address some of the driving factors of illicit economies, including lack of production-related infrastructure, basic social services, agricultural expertise and markets.

In this Bulletin, Kamminga and Zorro-Sánchez approach the principle of shared responsibility from two perspectives: firstly, as an ethical approach to challenges related to the world drug problem; and secondly, as a more practical commitment that a large variety of actors need to display as part of their social responsibility. While the former perspective explains why shared responsibility is so important, the latter creates more understanding about what it actually means in practice. The article analyses what the principle of shared responsibility could look like in terms of practical forms of collaboration that could help to create the above-mentioned enabling environment for reducing dependence on illicit drug crops.

Kamminga and Zorro-Sánchez particularly stress the need for specific commitments from a large number of partnerships between different actors and at different levels. It is especially in such partnerships—for example, between producer organizations and the private sector—that shared responsibility becomes embodied in practical and meaningful arrangements such as those linking local farmers’ associations with international companies and markets. If this practical translation of the principle of shared responsibility does not occur, the gap between the international level, where, at forums such as the Commission on Narcotic Drugs and the General Assembly, the principle is continuously stressed as the basis of all international cooperation, and the national level, where alternative development interventions take place, will not be narrowed.

For the moment, however, the embodiment of shared responsibility in practical arrangements remains very limited. A clear example is access to national and international markets. As Kamminga and Zorro-Sánchez explain, neither free trade nor preferential trade has so far succeeded in
strengthening the marketing of alternative development products. They argue that a broad-based dialogue should be started with the private sector, with governments and with international institutions such as the World Trade Organization that have influence on access to markets and the regulation of international trading schemes. As long as alternative development products are rarely marketed at the international level, it will remain difficult to establish an international movement around alternative development similar to those for fair trade and organic production.

**Linking alternative development and land**

The *Bulletin* article by Grimmelmann, Espinoza, Arnold and Arning subsequently addresses the link between illicit drug-crop cultivation and land rights. Building in part on a previous desk study with case studies from Afghanistan, Bolivia (Plurinational State of), Colombia, Myanmar and Peru, the article further explores access to and ownership of land as key determining factors when it comes to small-scale farmers’ livelihoods and their decisions to grow certain crops or to invest in their lands. It shows how the successful contribution of alternative development interventions may not only depend on the project-related components, but rather also on more structural enabling conditions.

While further research is required, the authors argue that, to be successful and sustainable, alternative development programmes need to adequately address land issues and integrate or connect to land policies and the promotion of access to land via land-use planning, land registration and a functioning cadastral system. This is also in line with the Guiding Principles on Alternative Development, which recommend that countries “take into account land rights and other related land management resources when designing, implementing, monitoring and evaluating alternative development programmes, including those of indigenous peoples and local communities, in accordance with national legal frameworks.” The authors conclude that alternative development could benefit from existing guidelines related to land governance and titling of land, such as the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* of the Food and Agriculture Organization.

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16 Nike Affeld, “The nexus between drug crop cultivation and access to land: insights from case studies from Afghanistan, Bolivia, Colombia, Myanmar and Peru” (Eschborn, German Agency for International Cooperation, September 2014).

17 General Assembly resolution 68/196, annex, appendix, para. 18 (kk).

Country case studies: Afghanistan and Bolivia (Plurinational State of)

After those three thematic articles, the Bulletin concludes with two country-specific articles. Firstly, García-Yi explores the case of Afghanistan. On the basis of field research, she evaluates farmer and community characteristics that promote resilience to opium poppy cultivation in Afghanistan. A particularly noteworthy aspect of that research is that it evaluates large-scale field survey data from different regions of Afghanistan using quantitative techniques. The analytical results of the article provide additional evidence that mostly supports previous qualitative and narrative findings on the determinants of illicit crop cultivation, many of which have been criticized for having a limited scope (e.g., because of the small number of interviews and the focus on only a few regions).

In this regard, the results constitute an important addition to the body of independent evidence needed for sound decision-making. García-Yi’s article explores the tensions between the often short-term investments associated with alternative development and the necessary long-term support that is required for the permanent transition from illicit drug cultivation to more diverse livelihoods. In that light, true resilience to opium poppy cultivation in Afghanistan can occur only if farmers are able to withstand strains and shocks without recurring to illicit cultivation. For the moment, many farming communities involved in alternative development projects are still “living on the edge”, which means a relatively small push can send them back to illicit crop cultivation.

Another important aspect of García-Yi’s analysis is that she frames alternative development activities as resilience-based interventions that are suitable for contexts of protracted crisis. This entails integrating farmer livelihood strategies, vulnerabilities and uncertainty with broad-based rural development to obtain sustainable reductions of opium poppy cultivation. The key element of these strategies is building confidence and ensuring farmers that they can sustain themselves even despite the recurrence of external shocks. But it is equally clear from her analysis that alternative development alone cannot create this enabling environment in which farmers become resilient. The evidence of her research also suggests that improvements in public services and governability are needed to turn poppy communities, over time, into non-poppy communities, and to keep communities poppy-free for longer periods of time.

Grisaffi, Farthing and Ledebur explore the case of the Plurinational State of Bolivia. They argue that the country’s “coca yes, cocaine no” policy provides valuable insight into the benefits of a sustainable livelihoods approach to supply reduction without prior forced eradication of drug crops. While acknowledging that the policy has inevitable limitations, its focus on
the social welfare, human rights and economic stability of coca-farming families has proved effective and sustainable in diversifying the economy and fostering political and economic stability. In this case, key success factors have been strong social organizations and the direct, meaningful participation of communities and grass-roots organizations such as the coca growers’ unions in finding more effective and sustainable approaches to drug control.

The community coca-control strategy builds on factors that are unique to the Plurinational State of Bolivia, including the strong agricultural unions present in coca-growing regions and the nation’s long history of traditional coca use. Still, key elements of the programme, such as grass-roots control, lack of conditionalities for assistance and a focus on human development, provide valuable lessons that could be implemented elsewhere. More broadly, the authors argue that farmers can reduce their reliance on planting coca and other crops used for illicit purposes only if their economic security is treated as a priority.

What both country cases have in common is that they confirm that there is still only limited knowledge about the key drivers of illicit drug cultivation within the broader context of socioeconomic development, governance and conflict. Much more research, project evaluation and learning is needed, not only to find ways to improve the effectiveness of alternative development projects but also to make sure that such interventions do no harm. As García-Yi explains in her article, the latter aspect has been mostly overlooked so far but is related to an imperfect understanding of causalities. If alternative development interventions wrongly attribute causes and motivations to the growing of coca or opium poppy, they might even contribute to more illicit cultivation. Similarly, short-term or quick-fix solutions might ultimately increase farmers’ vulnerabilities and might also result in prolonging or even expanding illicit cultivation. Lastly, while alternative development interventions need to be designed with a solid understanding of local conditions, they also need to be flexible so that they can adapt easily to changing contexts.

Conclusion

The country case studies presented in this special issue show that there are opportunities to improve alternative development and come up with more impactful and sustainable solutions, but they also highlight how complex the local contexts can be in areas where alternative development is implemented. That demanding reality means that there can be no single blueprint for successful and sustainable alternative development interventions. Nevertheless, there may be common elements that can be found in many alternative development projects, including, for example, community participation, producer associations or cooperatives, value-chain development
and agro-industry. The *World Drug Report 2015* grouped such common strategic elements into six categories: (a) economic and infrastructural components; (b) political components; (c) organizational components; (d) social components; (e) environmental components; and (f) a focus on women.\(^{19}\)

But the way these common elements come together to produce successful and sustainable outcomes will often differ from community to community, from region to region, and from country to country. This calls for targeted, in-depth research in areas where alternative development is planned, but it also emphasizes the value of exchanging best practices and lessons learned. A “technical research agenda” for alternative development requires much more research to be carried out and much more interaction among practitioners and experts from diverse backgrounds, including development, drug policy, governance, human rights, security, trade and the environment. This is the only way to bridge both the knowledge gap and the conceptual divide that continue to prevent alternative development interventions from realizing their full potential.

This thematic *Bulletin on Narcotics* aims to provide a small but substantial contribution to the evolving debate on alternative development and related discussions such as those focused on shared responsibility, land governance or the Sustainable Development Goals. Within the broader framework of the international workshops and expert group meetings taking place on alternative development, it intends to stimulate further academic research and informed discussions on how alternative development can be most effective, how it can be better integrated within broader development and governance efforts, and how it can be linked more strongly to the 2030 Agenda for Sustainable Development and the Sustainable Development Goals.

Same script, different play: policy implications of the conceptual struggles around alternative development

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ABSTRACT
The concept of alternative development suffers from its blurry, composite nature. Understood in different ways, the concept has also been reappropriated in various ways and has faced strong resistance, which has hampered its evolution into something more than an isolated instrument of drug-policy interventions, poorly connected to the development cooperation sphere and with a mixed record of results. The difficult balancing between short-term reduction of illicit cultivation and the longer time needed for sustained development efforts has limited the ability of alternative development to constitute a conceptual entry point to tie drug policy to a development rationale. Recent dynamics, however, suggest that the concept of alternative development has gained political momentum as a central component of “sustainable development-oriented and balanced drug control policies” [1]. Nevertheless, despite renewed interest in the drug issue in the development cooperation sphere, alternative development remains scarce in policy discussions. Applying concepts of policy transfer and agenda-setting, the present article examines the trajectory of the alternative development concept to better understand why, although in theory connecting drug and development policies, it struggles to be internationally accepted and integrated into a broad development approach to drugs.

Keywords: alternative development definition, policy entrepreneurs, transnational knowledge, drug policy change, sustainable development

INTRODUCTION
“Alternative development” originated as a hybrid operational policy option midway between drug control and development policies. Despite 40 years of programme implementation and the establishment of a commonly agreed definition by the General Assembly in 1998 [2], alternative development has never been an obvious policy concept and has suffered from its blurry, composite nature. As an object of diverse forms of policy understanding, the concept has been reappropriated in various ways and its translation into practice has faced strong resistance. For most beneficiaries, as well as experts, alternative development became a deceptive label whose “development” part tended
to be neglected [3-5]. Limited in size and scope, alternative development has rapidly come to constitute a specialized tool of drug policy intervention that is poorly connected to development policy frameworks and funding. Programme implementation has been traditionally concentrated in six countries where coca and opium poppy are produced (Afghanistan, Bolivia (Plurinational State of), Colombia, Myanmar, Peru and Thailand), with the largest share of financial support provided by the United States of America.

In Commission on Narcotic Drugs resolutions on alternative development adopted in the 2000s, the Millennium Development Goals were often only something to be “recalled”. More broadly, alternative development has never been fully understood as a relevant policy category by development cooperation actors, let alone integrated into their priorities or agendas [6]. For many, the difficult balancing between short-term objectives of illicit cultivation reduction and the longer-term approaches based on sustained development efforts has called into question the relevance and even the legitimacy of alternative development policies. The constant changing of labels, the variability of programme components, and the lack of research and impact assessments has cast further doubt on the credibility of the approach.

In recent years, alternative development has gained political traction. In the follow-up to the 2008 Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem, the concept has been increasingly debated and reconnected to its development component. The adoption of the United Nations Guiding Principles on Alternative Development by the General Assembly in 2013 demonstrated renewed thinking and interest. The concept of alternative development has evolved from a strict focus on crop-substitution projects to a broader, more holistic policy concept dealing with the root causes of illicit drug-crop cultivation and, when properly designed and implemented, a potential driver of sustainable development. In the midst of the international debate on more effective drug policies that led to the special session of the General Assembly on the world drug problem, held in April 2016, a hybrid community of actors actively contributed to the enrichment of the concept and its consolidation in a broader development-oriented rationale. Interested stakeholders support the proposition that alternative development implementation “can contribute and create conditions conducive to achieving all the Sustainable Development Goals” [7, para. 37]. For the period 2010-2013, 23 countries report having implemented alternative development at the national level, while new donors have made considerable investments in alternative development and national funding has been emerging [8]. The vision translated into the outcome document of the special session of the General Assembly in 2016 thus incorporates a clearer focus on the socioeconomic dimensions of the illicit cultivation of narcotic plants and makes alternative development a central component of “sustainable development-oriented and balanced drug control policies” [1, para.7].
Now, despite apparent normative rebalancing and broad political endorsement of alternative development in the drug policy community, the idea struggles to go beyond that policy community and to attract further support and resources. A link still seems to be missing. As the 2030 Agenda for Sustainable Development was being shaped, development cooperation actors recognized the need to tackle drug-related problems to achieve the goals set. Nevertheless, a development-oriented approach to the world drug problem is merely being sketched, and the concept of alternative development has remained relatively absent from the debate. There has been little consideration of alternative development as a potential instrument of development-based approaches to organized crime, let alone a clear vision of how alternative development interventions could be integrated into a broad sustainable development rationale [9-12].

In other words, facing the same problem—the nexus between drugs and development—actors from the drug and the development communities seem to be viewing it from different policy perspectives. How can this policy configuration be explained? Where does the concept of alternative development stand today, and what are the implications of the recent efforts to mainstream alternative development into broad development policy frameworks? This article first examines the trajectory of the concept in an attempt to understand why alternative development, although conceived in theory to connect drug and development policies, struggles to be used as an internationally accepted policy category that is well integrated into a broad development approach to drugs. It argues that the way the concept of alternative development has emerged and has been appropriated by various actors has been part of a dynamic of conceptual fragmentation and missed opportunities that (a) has had critical implications for policy coherence on drugs and development and (b) may explain why alternative development remained a mere specialized instrument of drug control interventions, loosely attached to the creation of a broader development approach to the drug problem.

Applying concepts of policy transfer and agenda-setting [13-15], this article further explores the recent dynamic and, in particular, the mobilization of a heterogeneous group of experts and practitioners to revive and perpetuate interest in alternative development. With the special session of the General Assembly in 2016 providing a window of opportunity and the

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1This article is based on interviews with representatives of international organizations and national governments specialized in alternative development, drug policy and development cooperation, and other relevant actors (growers of illicit plants, experts, etc.), as well as participation as an observer in international meetings on alternative development, drugs and development, and related agendas between 2012 and 2015. For confidentiality reasons, all interview sources have been kept anonymous. The author is particularly grateful to all interviewees who agreed to provide information. The author also expresses her great appreciation to the reviewers for their first-rate comments and suggestions, which helped improve the manuscript. Special thanks go to WMA, WHR and DMA.
2030 Agenda on Sustainable Development affording an enabling environment for greater international policy coherence, early signs show that the concept of alternative development is at a crossroads. Interested stakeholders seem engaged in a process of “assimilation of ideas” [14], thanks to which the concept is being reinvigorated and balanced. As will be underlined below, what seems to be at stake is the diffusion of alternative development as a viable policy entry point for bringing sustainable development options to areas affected by illicit drug-crop cultivation. The discussion will then turn to the implications of such new ties for the nature of alternative development and the possible scope of its portfolio.

Different perspectives: the uneven trajectory of the concept of alternative development

The emergence of policy concepts often follows turbulent paths. In the case of alternative development, the idea of providing producers of narcotic plants with alternatives so that they can exit the illicit economy of drug trade struggled to be “normalized”² [14]. Certainly, alternative development is regarded as an “accepted category for policy development” [14, p. 216] used in drug-policy reference documents and put into practice in technical instruments deployed in areas where illicit drugs are produced. However, its crumbling into many distinct denominations suggests that the question of how to define the concept still has not been settled.

Alternative development terminology has been used for 40 years to refer to drug-control projects based on the theoretical premise that the reduction of illicit drug-crop cultivation is conditional upon the improvement of the socioeconomic environment of production areas. The 1988 Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances already foresaw “economically viable alternatives to illicit cultivation” as a form of cooperation “to increase the effectiveness of eradication efforts” (art. 14, para. 3(a)). But not until 1998 was alternative development formalized “as a process to prevent and eliminate the illicit cultivation of plants containing narcotic drugs ... through specifically designed rural development measures in the context of sustained national economic growth and sustainable development efforts in countries taking

²Analysing the trajectory of the fragile-State concept, Olivier Nay proposes three normative processes affecting the production of transnational knowledge and the way concepts become internationally accepted policy categories used in most policy doctrines of a given sector: “normalization”—a process in which a rough idea is accepted as a transnational “norm” based on expert knowledge, detailed definition and statistical exercises; “fragmentation”—a concept is subject to various interpretations while being spread among a heterogeneous number of actors; and “assimilation”—a process of adaptation and enrichment of the overarching concept that stabilizes it and prevents it from profound critical dissent over time and installs it as a relatively stable policy category [14, p. 212].
action against drugs, recognizing the particular sociocultural characteristics of the target communities and groups, within the framework of a comprehensive and permanent solution to the problem of illicit drugs”. In this definition, alternative development seems confusely intertwined with counter-narcotics and sustainable development efforts. Yet this definition does not provide an explicit framework for defining the role of “target communities”, the components of a “permanent solution” to drugs or the development efforts and process timelines or forms needed to succeed. Suffice it to say that it provides enough leeway to encompass a wide array of understandings and interpretations. As reported in the World Drug Report 2015, alternative development is a concept in “constant flux”, whose essence one still struggles to determine: “process”, “method”, “policy”, “activities”, “component of multidimensional development activities”, “specifically designed measures” [8, annex]: the nature of alternative development remains multifaceted and highly dependent on how policy actors choose to use it. It has been conducted under other labels, such as “alternative livelihoods” in Afghanistan,3 or more recently “extended” into broader policies, such as “territorial consolidation” in Colombia or “sufficient economy” in Thailand. In other words, the alternative development concept is applied in different guises at the national level, which makes it more difficult to share models or lessons learned between countries.

The fragmented landscape of alternative development is closely related to the trajectory of the concept. Introduced in international drug-policy documents in the late 1980s, the conceptualization of alternative development follows an irregular path of operational bricolage. In the face of increasing relocation of illicit-crop cultivation areas, a consensus was forged among governments at the United Nations level, particularly among donors involved in the international fight against drugs, to use a strategy “based on massive rural development as a means to achieve eventually the level of development necessary to put an end to illicit drug production” [16, p. 13]. In theory, the concept was founded on the premise that the agricultural alternatives provided to growers of illicit plants would eventually generate sufficient income to facilitate their abandonment of illicit activities and allow them to live decent lives. In practice, however, the heterogeneous interpretations of that assumption had a great impact on the construction at the international level of the concept of alternative development that has come to be commonly accepted.

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3In theory, alternative livelihood programmes seek to mainstream counter-narcotics objectives into national development strategies and address the factors of illicit drug crop cultivation, whereas alternative development ones have been considered to lack strategic coherence and reduced to isolated area-based projects. Research shows, however, the similarities in terms of implementation and results hidden behind the distinct labels of “alternative development” and “alternative livelihood” [5].
From the early 1970s to the 2000s, parallel alternative development initiatives were deployed around the world as part of a global strategy to reduce the supply of illicit drugs, encompassing exploratory “crop substitution” and “integrated rural development” interventions, mainly in illicit coca- and opium poppy-producing areas in South-East Asia and Latin America. A relatively small number of actors took part in such initiatives. But discrepancies in policy objectives and instruments, as well as different levels of commitment and resource mobilization among actors, led to multiple appropriations of the “alternative development” idea and to great disequilibrium in the way the concept was further forged.

Through the United States Agency for International Development (USAID), the United States encouraged the adoption of alternative development initiatives early on in Bolivia (Plurinational State of) and Peru, and later used those experiences in Colombia, in the early 2000s. In the framework of those programmes, the United States Government intended to provide technical, legal and policy assistance, training and support personnel and to carry out market research and outreach to the private sector to support a transition from a “drug-led economy to one with a stable, legitimate, and diversified economic base” [17, p.12; 18, p. 3]. However, although the goal of alternative development programmes was to gradually replace coca with other economically viable crops, the political objectives of the United States counter-narcotics policy at the time—to achieve quick and visible results in terms of supply reduction—often overshadowed development measures that took longer to implement and to succeed.

As underlined in various United States policy documents from that period, “successful” alternative development efforts needed “host government control and security in project areas; effective interdiction operations; careful coordination of eradication, interdiction”; and extended economic assistance packages. For instance, in 1991, as the USAID Alternative Development Strategy in the Plurinational State of Bolivia was being developed,

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4The Government of the United States has funded “alternative development” projects in the Plurinational State of Bolivia since 1975 and in Peru since 1981. In the Plurinational State of Bolivia, efforts were first concentrated in the Chapare region and four alternative development projects were funded by USAID between 1983 and 2002. The United States even supported a programme of the Bolivian Government that paid farmers not to grow coca. In Peru, the first USAID-funded alternative development project (1981-1994) was designed to increase and diversify agricultural production through “agricultural assistance for alternative legal crops and improvements in roads and health and community services” Severe lack of security and other problems were identified as having drastically limited programme achievements [17].

5The Government targeted poppy-growing areas of Colombia in 2000 and expanded programmes to include coca-growing areas in 2001, but started activities in 2002 as part of Plan Colombia.

6The term “alternative development” has been used to refer to the activities since the early 1970s that “help growers of illicit crops find legal means of earning a living” and “entails a broad range of development initiatives to generate legal employment alternatives, alleviate poverty, and spur investment and economic growth. Such efforts often involve substituting licit crops for illicit ones” [17, p.1].
the Andean Trade Preference Act gave duty-free treatment to products from all countries of the region with the objective of supporting legitimate economic activities to reduce dependence on the illicit drug economy—an objective that was renewed a decade later with the signature of the Andean Trade Promotion and Drug Eradication Act. Micro-level alternative development interventions were coupled with broader economic support designed to ensure better access for Andean exports to the United States market [19], but since the arrangements involved all forms of produce from the region, it is difficult to measure the share of alternative products and the benefits to communities under those [8, 20, 21].

In this context, alternative development constitutes both an instrument to encourage the abandonment of illicit cultivation where development support has tended to be subsumed under “counter-narcotics assistance”, and a form of compensation for the damage and financial losses caused by the enforcement of a zero-tolerance approach to illicit drug-crop cultivation. The provision of viable economic alternatives to illicit cultivation is understood as a subcomponent of a supply-reduction policy mix responding to the political basis of the United States counter-narcotics policy at the time; this conceptualization of alternative development led to “overlapping agendas” [22] that had not been well balanced. Being externally driven, alternative development initiatives were implemented amid fundamental confusion between policy ends and means: the eradication of illicit-crop cultivation in the short term and the transition to sustainable development. The role of eradication (forced or voluntary) and the conditionality of development assistance upon eradication efforts crystallizes that duality [23-25]. Because of the historical balance of power in the drug-policy arena, that view dominated international discussions of alternative development for a long time. As underlined during interviews with some of the actors most fully engaged in alternative development today, “the United States had the interest, the resources and the influence” to act on this agenda on an international scale and developed a vision that “tended to overshadow alternative interpretations of alternative development”.

In different places, at different times, alternative development has been interpreted and implemented in different ways. It was the balance between development and security efforts that laid the foundations for divergences. Thailand, for instance, declared poppy-free in 2002, is today known for its holistic approach to the concept of alternative development. Yet its contemporary interpretation emerged from a rather complex process of balancing. From the first Royal Project of 1969, launched by King Bhumibol Adulyadej in the hill-tribe village of DoiPui, the Thai “people-centred” interpretation of alternative development has been developed over 40 years following the acknowledged failures of early government-led repressive eradication measures and the assessment that isolated crop-substitution programmes would
not be sufficient to enable farmers to effectively and sustainably transition to licit agricultural activities [26]. Gradually, market access, postponed eradication (six to eight years after development activities were initiated) and integration into the social mainstream became central. The critical political role played by the King and the continuity of donor support, as illustrated by the Thai-German Highland Development Programme (1981-1998), contributed to making the Thai model an ideal type of development-focused alternative development [20, p. 30].

Outside the experiences of Thailand and the United States, the development of an integrated path for the alternative development concept came late, as part of the broader dynamics of agenda cycles: on the one hand, the consolidation of the European agenda on drugs that slowly emerged in the mid-1980s once the HIV/AIDS epidemic had surged on the continent [27, 28], and on the other, the promotion of the principle of shared responsibility by countries of the Latin American region. In the late 1990s and early 2000s, the paths of the drug-policy discussions in Germany, the European Union and the Organization of American States converged towards the recognition that the concept of alternative development needed to be pushed into position midway between drug and development policies. In this interpretation, alternative development is one of the many components of what development assistance could bring to drug control, along with demand-side responses and health interventions. On the basis of the German experiences, notably in projects implemented in Peru and Thailand, alternative development is considered one of “the most important instruments” and “opportunities” for development cooperation in the field of drug control, as well as a viable option to contribute equally “to the control of drugs but also to sustainable human development as a whole” [29, p.9; 30]. In the Latin American region, alternative development is envisioned as an “important component for generating … sustainable economic options that will make it possible to overcome the factors that give rise to the [drug] phenomenon” [31, para. 22; 32], in the framework of a regional strategy stressing the principles of national sovereignty and shared responsibility. Cross-cutting and context-tailored development interventions such as conflict resolution, infrastructure support, social services provision, targeted-group participation and institutional strengthening are considered necessary to shift communities away from the illicit economy and towards sustainable development.

By trial and error, the alternative development concept has taken multiple paths of conceptualization, interpretation and implementation that cannot be dissociated from the experimentations on the ground. Around the globe, alternative development has been highly dependent on engaged actors’ political agendas and available financial resources. The first efforts to normalize alternative development in the early international drug-policy instruments strongly echoed these experimental adjustments. For instance,
a 1993 United Nations International Drug Control Programme (UNDCP) technical information paper defined the term “alternative development” as an “instrument for drug control”, recasting under a catch-all terminology two decades of crop eradication and integrated rural development experience” [16, p.2]. Furthermore, the project approach adopted over time and the asymmetrical power relationships organizing the drug-policy arena precipitated the imposition of a dominant vision of alternative development rather than the constitution of a “discipline” per se.

Despite the 1998 definition, multiple appropriation schemes overstrained the initial idea, leading to a highly fragmented conceptualization landscape: “at least four views are found: that alternative development is a multifaceted strategic (or systemic) approach to a problem, that alternative development is one leg of a stool alongside eradication, interdiction, policing and education, that alternative development is a series of discrete projects (or pilot projects), and that alternative development is equivalent to crop substitution” [33, pp. 5-8]. The process of alternative development conceptualization turns out to be a pragmatic reformulation of strategic drug-policy lines, with political considerations often taking precedence over shared policies. This uneven process of emergence eventually fostered a patchwork concept that is difficult to homogenize and is vulnerable to criticism.

As discussed in the next section, the difficulty of constituting a knowledge basis for alternative development and the confused use of counter-narcotics and development efforts called into question the credibility of the concept. These elements contributed to the triggering of new conceptual struggles and to limiting the influence of non-drug-policy actors whose human and financial resources and expertise could have been significant in tipping the balance.

**Same script, lost act: the missed opportunity to bring development in**

For an idea to become an internationally accepted policy category integrated into a sector agenda, there must be something that makes it take hold and grow. In norm-cycle and policymaking theory, actors mobilize resources (human, financial, knowledge) to promote their ideas as the best solution to

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7 In policy agenda theory, Kingdon (1984) describes the policy terrain as affected by “multiple streams”: the problem stream—when a problem erupts or is identified; the policy stream—when a policy is generated to contribute to solving the identified problems; and the political stream—the events or forces that affect the way problems are managed. In this scheme, windows of opportunity open because of changes in the political stream (shift in power distribution or mood), or because a new problem has been recognized or defined as such by the actors involved. Policy actors play a critical role in that they can produce the necessary conditions for a policy window to open, and seize the opportunity to hook their interests and solutions to that particular problem or context.
an identified problem and engage in “organizational platforms” specifically constructed to that end or use existing ones with other agendas [34]. In the latter case, it is assumed that actors make good use of their knowledge, resources and leverage capacities to promote a specific position in return for anticipated future gains (material benefits, achieving specific objectives, etc.) and to persuade other policy actors to adopt that position.

In the context of alternative development, one could have expected that the idea of providing alternative agricultural options to farmers cultivating illicit crops would constitute a conceptual entry point to tie drug policy to a broad development approach, and thus to the resources specific to development-policy actors. Yet, in addition to its fragmented conceptualization trajectory, alternative development has rapidly evolved into an isolated instrument of policy intervention involving a small community of practitioners and limited financial means, poorly connected to the development cooperation sphere. As this section will emphasize, despite the theoretical possibilities of tighter linkages between drug and development policies, the conditions had not been met for the idea of alternative development to take hold as a shared policy of the drug- and development-policy communities. Critical elements were missing: first, a solid knowledge basis objectified through systematic statistical data, indicators and impact-evaluation systems. The fragility of the base prevented the emerging alternative development policy label from being turned into a “cognitive reality” [14, p. 217] on which a common understanding of what needed to be done could be built. Second, and correlatively, the organization of a dedicated policy forum to develop the foundations of such a policy with all interested and relevant actors has been a laborious endeavour.

Alternative development emerged as a policy instrument to be used in a specific and localized problem stream, but with the difficulty of combining agendas. It was assumed that drug-policy actors would reach out to external actors who had the necessary resources to support development efforts, but that process remained incomplete and did not bear fruit. For the implementation of new alternative development “solutions”, it was supposed that the larger development community, especially donors, would be vitally engaged, and would provide greater financial resources, expertise, tools and capacity to expand development efforts in various areas, supposedly including drug-production areas.

8For example, in its 1991 “Alternative development strategy” for the Plurinational State of Bolivia, USAID dedicated a section to the role of other donors, noting that the role of the donor community is vital to the successful implementation of the alternative development strategy of the Government of that country, and stating that the United States Government mission in the Plurinational State of Bolivia will actively seek support … among the main multilateral and bilateral donors”[18, p.6].
From 1979 to the early 1990s, the United States participated in the so-called donors club of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee, primarily in an attempt to persuade donors to support the United States counter-narcotics policy and coordinate the control of illicit drug supply. Slowly the issue gained some ground; it was first brought up by the United States delegations in meetings of experts and subsequently appeared on the agendas of specific ad hoc consultations and high-level Development Assistance Committee meetings. The United States made the case that illicit drugs had an alarmingly fast-growing impact on the OECD economies and that the problem was expanding in areas of development cooperation notably in Latin America. During those discussions, it was advocated that narcotic-crop-producing populations typically belonged to the poorest of the poor of the developing world, who, as such, were deserving of economic assistance. The cash superiority of narcotic-crop production was considered illusory, and farmers would readily shift if realistic alternatives were offered [6].

Instead of fostering a shared policy scenario, the discourse on alternative development in the donors forum ultimately became a mere rhetorical façade. Moreover, it seems to have been utilized at times to justify unconventional uses of development assistance. It is debatable whether the activities of “narcotics control” or “alternative development” financed with aid money met the criteria for official development assistance and represented only developmental expenditures. On the recipient-country side, the conditionality of development assistance upon the elimination of illicit cultivation was unsatisfactory and perceived as inappropriate. Some countries were reported to have tried to turn this argument on its head, demanding that donors pay for the financial losses the country faced when abandoning illicit crop production [16, p. 13].

The utilization of an alternative development script in a development assistance forum was counterproductive and revived conceptual struggles around alternative development among the development community at

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9 At the end of the cold war, the definition of official development assistance was reconceptualized to be global, focusing on aid requirements that maximized security as well as economic development and welfare, while also addressing humanitarian cases. It was agreed that aid should be used to address problems that could not be solved without joint efforts by developed and developing countries, such as combating narcotics. Crop substitution, support for judicial systems, law enforcement and health improvement were then included in the new official development assistance framework. However, the direct involvement of military or paramilitary forces was excluded. This amendment provided an incentive for donors to direct their support to the drug agenda [35, 36].

10 In informal conversations, a former representative of the United States to the Development Assistance Committee reported that projects financed with official development assistance contained explicit references to interdiction activities, which cast further doubt on the claim that the expenditures were principally development-oriented. Some expenditures, our interlocutor said, should not have been reported as official development assistance.
large. Until the 1990s, no agreement was forged. Concerns arose over the “dangerous” association of development assistance with enforcement activities such as repression. The drug issue did not enjoy the same level of priority among all members of the donor community, and donors’ receptivity to the alternative development solution was fairly limited, especially among those who considered the reduction of demand in the major consuming countries the key solution to the world drug problem [36]. Structural factors of international cooperation also played an important role. Not only was the scope of alternative development limited to areas where a number of organizations were already involved in drug programmes, but the size of the alternative development projects represented too small a share of international cooperation to hope to be able to drag the development cooperation machine in, and to justify the involvement of the Development Assistance Committee or any other development cooperation organization in terms of mandate, comparative advantage and division of international labour.

What could explain such difficulty in finding common ground? One explanatory element could be that over the relevant period, attempts by the United States to stir the development community to take an enhanced role in countering drugs with aid money were not backed by evidence that the advocated solution would be technically feasible, viable in practice and coherent in terms of policy design. At the implementation level, the main actors in alternative development evaluated the impact of their efforts in terms of reaching the eradication objectives: evaluations and impact assessments used the reduction of illicit-crop cultivation surfaces as the main metric, providing little visibility to any development achievements [37, 38]. As research and even some governmental evaluations show, eradication and policing efforts often outpaced development assistance and little consideration was given to development experts [17, 33, 39-43].

As later documented by experts, alternative development projects were mainly externally designed, donor-driven [44] and coordinated by national drug control agencies or external assistance regional bureaux whose local staff had limited knowledge of development support or drug-trade dynamics [33]. Often conceived on a one-size-fits-all basis, alternative development projects tended to be grounded on monocausal schemes of context analysis where the places of intervention were reduced to production areas, and funded on the assumption that drug-crop producers constituted homogeneous groups [45, 46]. Analysts and civil society organizations have further demonstrated how some projects bearing the “alternative development” label were involved to some extent in a dynamic of “instrumentalization” or even “securitization” of development assistance to fulfil law enforcement objectives rather than to reach the goal of a sustainable exit of producers of illicit plants from the drug economy [47-51].
The lack of a diversified set of data and indicators meant that there was only a partial image of the reality of alternative development achievements, but also of the socioeconomic conditions needed to achieve sustainable development. It meant further that external actors who might be able to enrich and support the concept with additional resources were not provided with the necessary basis for envisioning their potential role. A knowledge gap and a “metric trap” [52] restricted the way external actors could engage in policy discussions. Reciprocally, this partial knowledge contributed further to tipping the conceptual balance of alternative development towards its drug-policy components, making it less credible to development actors in terms of mandate and intervention rationale.

In addition, a specific organizational platform dedicated to discussing a drugs-and-development policy scenario and to resolving the conceptual struggles seems to have been difficult to put in place. Certainly, the emergence of global discussions on “human security” and “poverty reduction” provided a favourable context for the development of a landmark UNDCP publication entitled Drugs and Development in 1994. At the time, UNODC defended the idea that the links between drug control and human development “are self-evident” and that “overlapping interests [exist] on the problem side”. Common solutions and tools were explored, such as educational services, income generation and institutional capacity-building or improvements in infrastructure. However, conceptual misunderstandings were already being identified as possible reasons for the “untapped potential for a greater operational interplay between drug control and development bodies” [53, pp. 14-17].

If indeed the links of drug control with human development are self-evident and overlapping interests exist, there is a possibility of importing a broader development perspective into all aspects of drug control (involving also rule of law, health, etc.). The absence of a specific organizational platform to discuss a drugs-and-development policy scenario and to resolve conceptual struggles may have slowed down the evolution of the alternative development concept towards an agreed interpretation, and in turn its promotion as an entry point for a development-oriented drug policy.

Whether because of lack of political will or policy risks, tentative calls for greater inter-agency cooperation did not meet with a positive response. Although the primary objective of alternative development programmes consists in reducing drug production, the theoretical potential of the idea of alternative development to be transformed into a conceptual entry point to merge drug- and development-policy approaches turns out to be a mirage. In an important thematic evaluation report, UNODC hinted that a lack of
leadership weighed on the issue in the past.\(^{11}\) The alternative development niche thus provided limited space for bringing together two policy communities that differed in size, goals and vision. Besides, platforms such as the Development Assistance Committee were characterized by divergent strategic considerations regarding both the role of alternative development and the priority donors could give to the drug-production problem, and by limited structural capacity to engage in a new policy agenda. These factors finally contributed to reducing development actors’ receptivity and limited the chance for a window of opportunity for a common policy scenario to really open up. The misalignment of the policy and problem streams in the area of international cooperation finally contributed to a dynamic of missed opportunities to “bring development in”.

**Shared interests, different casts: embracing the renewed opportunities of the 2016 special session of the General Assembly and the 2030 Agenda for Sustainable Development**

Unresolved conceptual struggles, variations in implementation and limited policy overlap constrained the use of alternative development-based rhetoric to fully serve as an entry point for a common approach to drugs and development. Certainly some alternative development programmes have been successful, and some beneficiaries, such as the San Martin region of Peru, \(^{54}\) have even been promoted as models of improved socioeconomic conditions in a drug-affected environment. Yet alternative development experiences and assessments of them are mixed. In fact, the unstable balancing of drug control and socioeconomic support objectives has triggered resistance from both actual and potential stakeholders, with some disputing the conceptual and operational validity of alternative development and others sometimes adopting extreme positions regarding the legitimacy of that approach. For example, in 2016 some producers of illicit crops gathered at the Global Forum of Producers of Prohibited Plants, with the support of civil society organizations, and expressed serious concerns over alternative development programmes.

Although recognizing that proper sequencing of illicit crop-control activities may help producers in their transition to licit sources of income, participants in that Forum deplored the pre-eminence of eradication over

\(^{11}\)“Under UNODC leadership alternative development could evolve from its current position as a marginally supported and little honored social safety net into a progressive economic development program with measurable, positive, cost-effective results. This revitalization is dependent on the willingness of UNODC administrators, staff and the donor community to focus on alternative development as a holistic process, not a series of detached string of “pilot projects”. UNODC needs a systematic and strategic approach to alternative development, a comprehensive and coherent implementation plan, and a commitment to procedural excellence that will guarantee UNODC to realize alternative development’s full potential” [33, p.iii].
sustainable alternatives [55] and denounced the negative impacts of so-called alternative development in such conditions (violation of human rights, soil and water contamination, forced displacement, debt, food insecurity). Most participants interviewed during that Forum remain strongly opposed to alternative development—some even believe it to have ruined the lives of their families. At the policy level, some stakeholders interviewed may recognize that “ill-designed programmes happened to do more harm than good in some areas” and that alternative development, as it has been implemented so far, has “had little to do with development”. There are thus still profound misunderstandings and diverging perceptions on what alternative development is or should be, which may result in extreme disagreement over its legitimacy.

Despite long-running tensions around the alternative development concept, recent dynamics suggest that its conceptual framework is being reinvigorated. This section focuses on how traditional views on alternative development are being challenged and discusses the implications of such dynamics for the contemporary alternative development portfolio. One may note that an enabling political environment has accelerated a process by which stakeholders are working towards greater convergence of ideas on alternative development. The calls for a global debate on drug policy, which led to the special session of the General Assembly in 2016,\(^\text{12}\) seems to have precipitated the opening of a new window of opportunity for alternative development stakeholders to capture diverging views and to mobilize greater resources to devise and promote common solutions for the future drug-policy agenda. In addition, the parallel discussions on a new global agenda for sustainable development provided policy leeway to allow for new perspectives on the world drug problem and the policy rationale to deal with it. In that context, there seems to be a renewed ambition to place alternative development on a solid, common, normative foundation that could allow it to become more than a tool of a drug control policy mix and to be better integrated into a sustainable development approach to the world drug problem.

Since the turn of the millennium, a heterogeneous group of practitioners and experts has engaged in new reflections, attempting to fill the existing knowledge and metric gaps relating to alternative development. Central

\(^{12}\) Despite expansive century-long drug control efforts, the lasting world drug problem has created a climate of political frustration over the past few years. In 2012, in response to pressing calls by the Governments of Colombia, Guatemala and Mexico echoing discussions held at the Sixth Summit of the Americas, the General Assembly, in its resolution 67/193, decided to modify its evaluation calendar and to convene early in 2016, in addition to the initially planned 2019 date, a special session on the world drug problem (to evaluate progress towards the goals set in the Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem, and to adjust the relevant policy approach and actions to be taken.)
actors in the international drug-policy arena took positions, at first without a clear coalition being formed, to reinvigorate the concept on the basis of best practices and lessons learned. However, one can observe that there are more complex motivations for the desire to achieve a normative recasting of alternative development. In the follow-up to the 1998 Action Plan on International Cooperation on the Eradication of Illicit Drug Crops and on Alternative Development, alternative development implementers and policy analysts engaged in simultaneous processes of reviewing what worked and what did not work with alternative development projects.\textsuperscript{13} At the initiative of the German Foundation for International Development, the German Agency for Technical Cooperation and UNDCP, the International Conference on the Role of Alternative Development in Drug Control and Development Cooperation was held in Feldafing, Germany, in 2002, on the basis of the shared concerns that “the results of alternative development could be improved” and that increased dialogue would help to “lay the foundation for updating the existing concept of alternative development and [to form] strategic alliances”\textsuperscript{14} [61, pp. 2-4]. That Conference, which has been described by practitioners as one of the key international events on alternative development [8, annex], marked the beginning of a series of activities in which policy actors worked to forge common knowledge on alternative development.

The review of progress achieved towards the objectives set in the 1998 Plan of Action and the renewal of international commitments in 2009 constituted an enabling environment for actors to identify lessons from past programmes and policies, and to develop new expertise on alternative development. Between those two dates, milestone regional evaluations were also undertaken [62, 63], along with international expert discussions and unprecedented international analysis on alternative development. The International Narcotics Control Board, for example, often presented as a strict guardian of drug-control conventions, took up the question of whether the current perception of alternative development was adequate to meet new challenges. In its annual report for 2005, advocating against the obsolete distinction between supply and demand when analysing the drug problem, the Board encouraged broadening the focus of alternative development and recognizing its limitations, notably the project-by-project approach and the absence of such programmes in cannabis-production areas, including in the poorest

\textsuperscript{13}In particular, technical personnel of UNODC field offices, of USAID regional and country offices (notably in Afghanistan, Colombia and Peru) and GIZ, and representatives of Thai foundations and governmental agencies and of the Peruvian National Commission for Development and Life without Drugs. See for example, evaluations and audit reports [33, 56-60].

\textsuperscript{14}The conference gathered experts from development agencies from the Netherlands, the United Kingdom and the United States, and representatives of the World Bank, United Nations agencies, the European Commission, the Organization of the American States and non-governmental organizations. Regional workshops were also organized in that framework. The conference took place in a context (post-11 September 2001) in which strong connections between drug trafficking, political instability and poverty had a prominent place in public discourse.
drug-affected regions of Africa. Whereas it reaffirmed the need for a balanced conceptualization of alternative development,\textsuperscript{15} it also called for the consideration of a “more comprehensive definition” and a closer look at “rural, peri-urban and urban communities in terms of the development-oriented drug control needs” [64, para. 40].

The Board hinted further at regarding alternative development not only as a tool of a drug-policy mix, but also as a cross-cutting issue and a point of entry to a broader development-oriented approach to the drug problem as a whole: “what is needed in areas more seriously affected by drug problems and in countries dominated by the illicit drug economy are overall development approaches that take such problems fully into account. In other words, there is a need to follow overall development approaches that fully integrate into the mainstream the principles and practices of alternative development, including coordination with law enforcement agencies, whether in a rural or an urban context” [64, para. 41]. From that perspective, best practices in alternative development were tied to “sound principles of development” [64, para. 22], and it was recommended that the approach be integrated into a comprehensive and sustained development policy, including at the level of development cooperation agencies such as the World Bank [64, para. 48.b]. A set of basic principles was proposed [64, para. 23].\textsuperscript{16} Although it is difficult to gauge the effective impact of that report, it surely played a part in paving the way for a broader dynamic of conceptual convergence around alternative development.

The recent shift in the political stream induced by pressing calls, notably from Latin American governments, to debate the implemented policy approach to the lasting “world drug problem” accelerated those dynamics. Within a short time, important resources, in terms of financing, knowledge production and political leadership, have been mobilized. International workshops, informal drug-policy dialogues, open-ended intergovernmental expert working groups, regional seminars and high-level international

\textsuperscript{15}“Alternative development ... is a concept related to integrated development that has been applied in rural areas of developing countries where [illicitly cultivated] plants ... are grown. The decision to cultivate illicit crops is the product of many complex interacting factors .... The most successful approach ... involves a combination of disincentives and incentives. Thus, law enforcement and the threat of penalties and/or forced eradication, combined with the prospect of legitimate alternative livelihood and broad sustainable economic assistance ... may be the solution. ... A truly comprehensive concept of alternative development would include not only the cultivation of alternative crops, but also the development of infrastructure, the provision of viable means of transporting legal products to markets and the provision of assistance in the areas of education and health care. In addition, alternative development programmes are only possible where adequate security and stability can be ensured ”[64, paras.1 and 9].

\textsuperscript{16}Including the requirements of political will, funding and long-term commitment, the consistency of alternative development with development policies, the consideration of the complexity of the role played by illicit crops in growers’ lives, the full participation of crop growers in designing and implementing alternative development strategies, and the focus of law enforcement measures in illicit crop-cultivation areas on drug trafficking and criminal organizations.
conferences on alternative development were organized to share experiences, build know-how and formulate technical recommendations. These efforts facilitated dialogue among heterogeneous stakeholders, promoted alternative development at a higher policy level and contributed to the development of a common set of fundamental principles so that alternative development could be promoted as an internationally acceptable category and be integrated into broader policy doctrines, without risking fundamental dissent over the legitimacy of the alternative development option [14].

Some new actors, presenting themselves as examples of successful alternative development, are engaging resources to build up knowledge networks. Activities are organized in which stakeholders’ various interpretations of the idea of alternative development are addressed. Side events on alternative development programmed during regular sessions of the Commission on Narcotics Drugs multiplied, while the Commission adopted a series of resolutions between 2009 and 2012 to “promote best practices and lessons learned for the sustainability and integrality” of alternative development [65]. In this dynamic, Peru and Thailand acted as experienced dialogue facilitators, volunteering to host high-level International Conferences on Alternative Development) that first discussed the need to formulate international guiding principles on alternative development implementation and recognized the controversial struggles to balance “alternative development’s dual objectives of... reducing illicit crop cultivation, and ...promoting sustainable development processes and reducing poverty” [66, para. 17]. Those discussions led to the formulation of the Guiding Principles on Alternative Development, which, although criticized [67] and rather in line with a drug supply reduction logic, help towards settling the normative struggles around the idea of alternative development. Interestingly enough, the dual-objective dilemma has not disappeared and alternative development is clearly stated as a complement of law enforcement measures in crop-control strategies. Nevertheless, the Guiding Principles offer a more balanced conceptualization of alternative development, synthesizing conflicting ideas and critiques underlined throughout the expert discussions and assessments [33, 66].

17 The World Drug Report 2015 lists in its annex selected international alternative development events since 2001, including the International Conference on the Role of Alternative Development in Drug Control and Development Cooperation, held in Feldafing, Germany, from 7 to 12 January 2002, the first International Workshop and Conference on Alternative Development and several expert-group meetings, evidencing the will from alternative development stakeholders to provide evidence of the work done and the different stages of the reflection.

18 Between 2012 and 2016, the number of side events and exhibits on alternative development during the session of the Commission on Narcotics Drugs doubled.

19 Commission on Narcotics Drugs resolutions 52/6, 53/6, 54/4, 55/4, 57/1 and 58/4. In its resolution 68/196, the General Assembly adopted the United Nations Guiding Principles on Alternative Development.

20 In its resolution 2008/26, the Economic and Social Council encouraged Member States to consider developing guiding principles on alternative development.”.
The Guiding Principles emphasize the importance of proper sequencing of development interventions and the potential of alternative development to become “an integral element of an overall development strategy” [68, paras. 9 and 16]. The knowledge challenge is addressed, with emphasis on the importance of impact evaluation [68, para. 18 (w)] and balanced metrics integrating human development and crop-reduction indicators [68, para. 17]. Furthermore, despite the fact that significant disagreements, such as the issue of conditionality, have not been solved, the Guiding Principles recognize the centrality of multi-stakeholder participation in and enhanced ownership of alternative development implementation [68, para. 18 (b)], while connecting alternative development interventions more closely to macro-level considerations such as strengthening rule of law [68, para. 10], environmental protection [68, para. 11] and tailored, market-driven approaches [68, para. 18 (gg)].

In addition to working towards greater convergence of ideas, engaged stakeholders are investing in transnational policy forums and creating new platforms to frame the debate on alternative development and, more broadly, to promote it as an option on the international policy agenda. New “incubators of knowledge” are emerging [14, p. 224], while the traditional agenda-dominant actor (the United States) is less vocal as a new coalition of like-minded actors is forming around a readapted basic concept of alternative development. Efforts have been made to enlarge the support base for alternative development to be considered an “important, viable and sustainable option” [68, para. 2]. From that perspective, the choice of developing a policy tool such as the Guiding Principles to be adopted by the General Assembly is significant, as it confers political legitimacy and credibility. Internationalizing the policy discussions internal to the alternative development stakeholder community and placing them in a more flexible setting of working groups organized under the Chatham House rule allows for free speech. It may also have contributed to the dissipation of resistance on the part of potential “new stakeholders,” such as representatives of China, Egypt, Guatemala, India, Japan, Morocco or the Russian Federation, to participate in such debates along with representatives of civil society organizations and academia.

Alternative development expert group participants made sure to convey their ideas directly to high-level policymaking arenas and ensure that alternative development was well positioned on the agenda of the special session of the General Assembly. In 2014 four different meetings were organized on the theme; countries such as Colombia, Germany, Peru and Thailand took

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21 For example, the Second International Conference on Alternative Development brought together over 100 participants from 28 countries and 11 organizations for field visits and over 240 participants from 44 countries and 18 organizations for the high-level Conference.

22 Meetings produced outcome documents that were then submitted to the Commission on Narcotic Drugs for consideration.
firm positions to promote the idea of a thematic round table on alternative development on the agenda; position papers and high-profile publications such as the *World Drug Report* were drafted with the support of UNODC to inform the discussions at the Commission on Narcotic Drugs and the special session of the Assembly. Throughout that process, greater efforts were made to link the alternative development discussion to the broader development agenda. Thus, the expert-group meeting held by UNODC and the German Federal Ministry for Economic Cooperation and Development (BMZ) in November 2014 discussed alternative development in the framework of the preparations for the special session of the General Assembly and the post-Millennium Development Goals debate. An unprecedented Global Partnership on Drug Policies and Development was created by the German Agency for International Cooperation (GIZ) on behalf of BMZ to improve evidence-based development-oriented drug policy approaches and foster intergovernmental drug policy dialogue.

In other words, through various forms of mobilization, dissenting views on alternative development had been heard, reviewed and discussed and some were finally selected to be incorporated into an enriched and readapted alternative development concept that was first embodied in a policy tool—the Guiding Principles—and then in a political document—the outcome document of the thirtieth special session of the General Assembly. The socioeconomic dimensions of illicit cultivation of narcotic plants were more clearly brought into focus, while alternative development was politically positioned as a central component of “sustainable development-oriented and balanced drug control policies” to be “mainstreamed” into multi-level development strategies [1, para. 7]). A heterogeneous group of actors composed of development agencies, experts and State institutions of countries of alternative development implementation strengthened their internal resources to capture new ideas and enhanced their capacity to demonstrate that “another model of alternative development was possible” and could be framed in the broader drug policy debate as a “viable and balanced solution”. “Political momentum” had been renewed around a concept envisioned to go beyond a strict drug control-policy reading.

There are thus signs that the special session of the General Assembly provided an enabling environment for an “assimilation process” to be engaged, with stakeholders working towards a renewed normative framework for alternative development. The Guiding Principles and the negotiated commitments adopted by the Assembly at its special session have set

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23That is to say, a process by which stakeholders “gradually revise, enrich and perpetuate hegemonic concepts through the steady incorporation of additional insights and critical perspectives into the prevailing paradigm” [14, p. 215]. The result is an adaptation and enrichment of the overarching concept that becomes stabilized around shared principles and values and is protected from fundamental critical dissent over time.
out more clearly the key components and limitations of the concept, so that radically diverging views are absorbed into a shared conceptual appreciation and the term “alternative development” can no longer be dismissed as an empty label, as could have been the case in the past. What now seems to be at stake is the consolidation and perpetuation of alternative development as a credible policy category, defined around shared core principles. Now the issue is not to protect alternative development from all criticism, but rather to anchor a concept that only with great difficulty was able to be set into a shared framework.

The current tendency is to use the alternative development concept, formerly a tool of a drug-control policy mix, as a point of entry to a development-oriented approach to drug policy. Alternative development stakeholders are trying different strategies for tying alternative development interventions more closely to a broad sustainable development approach to the drug problem and new platforms are created for opportunities to emerge. Innovation labs, for example, have been put together at the initiative of the Global Partnership on Drug Policies and Development and the London School of Economics Ideas think tank to engineer intellectual partnerships among State drug-control agency practitioners, academics and development cooperation experts from multilateral and non-governmental organizations with a view to making practical use of the linkages between drug and development policies. New thinking is being developed on how to extend the alternative development concept to new areas of application, such as urban settings, as participants in the round table on alternative development at the special session of the General Assembly pointed out. The Global Partnership is also engaged in strengthening the evidence and scientific basis for a development-focused international drug policy, rethinking the links between illicit crop cultivation and development challenges (such as climate change), and the potential of resource schemes for such new portfolios. UNODC has also demonstrated its capacity to digest emerging ideas. It is playing a leading role in reinvigorating the more orthodox views on drug policy, and in the World Drug Report has repeatedly addressed the linkages between the world drug problem and sustainable development.

However, there is little evidence that this vision of alternative development as a potential point of entry to broader development-oriented drug policy is shared beyond that group of like-minded actors. And there lies the rub. Some interviewees underline that the drug policy community “has not

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24 Two pilot innovation labs took place, in October 2016 and February 2017, in an attempt to translate into operational thinking the results of the thirtieth special session of the General. Those labs were developed with a view to testing in practice the ideas developed collectively and to feeding them into the international drug-policy discourse through various forums.
been proactive enough in reaching out to the development practitioners” and has been “late in contributing to the post-2015 discussion”. In the framework of the post-2015 agenda discussions, the drug issue was relatively well taken into account in key policy documents serving as a framework for the Sustainable Development Goals, but the lack of cross-engagement is reflected in the vision on drugs developed in the Goals. The way the issue is integrated under Goal 3 (“Ensure healthy lives and promote well-being for all at all ages”), target 3.5 (“Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol”), and indirectly under Goal 16 (“promote peaceful and inclusive societies for sustainable development”), target 16.4. (“By 2030 significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime”), reflects an old-fashioned, dualistic interpretation (security and health, or else supply and demand) rather than clear consideration of the multidimensionality of drugs, now better recognized in the seven-chapter outcome document of the special session of the General Assembly.

Although the special session of the General Assembly and the 2030 Agenda for Sustainable Development coincided in a timely manner, alternative development and development policy actors have tended to engage with one another on a limited scale. Some interviewees express regret that internal United Nations tensions rub off on the policy debate, but also that criticism has become too easy regarding alternative development, considering that the specificities of interventions in drug-affected areas are not taken into due account by its detractors. There have certainly been significant efforts from both sides for enhanced exchanges. In addition to the activities organized in the drug-policy community mentioned above, the United Nations Development Programme (UNDP), for example, has been engaged on the issue, participating in the past two sessions of the Commission on Narcotic Drugs and contributing to the outcome of the special session of the General Assembly [10], while civil society organizations have been well integrated in intercommunity working groups. However, the forums and knowledge networks in place have not been fully engaged. Although there is some evidence

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25 For example, in the report of the United Nations System Task Team on the Post-2015 United Nations Development Agenda entitled “Realizing the future we want for all”, which reorganizes the Millennium Development Goals along four dimensions (inclusive social development; inclusive economic development; environmental sustainability; and peace and security), it is recognized that drug-related criminality should be at the heart of the agenda.

26 The outcome document firmly breaks with a binary reading of the world drug problem (in terms of supply and demand) and details in seven chapters its different facets and their corresponding policy implications.

27 For example, few organizations working on the development side, in particular civil society organizations that develop expertise on the issue, have attended alternative development or Commission on Narcotic Drugs events. In addition, informal conversations with actors from the alternative development community have underlined that there was not a clear awareness of studies on drugs and development conducted outside their community of practice.
of renewed interest in the drug issue in the development community, few demonstrate full adherence to the idea of alternative development as a preferred entry point.

What is visible is a broader vision of a development approach to the world drug problem timidly but actually being sketched. In addition to a long series of high-level international debates that placed the drug problem at the centre of development cooperation concerns, an emerging group of actors from the development community—notably representatives of UNDP, individuals within policy forums of OECD, academics and experts from civil society organizations such as the Open Society Foundations, Christian Aid, Health Poverty Action and the Global Initiative against Transnational Organized Crime have been exploring the impact of illicit drugs on development, how to “address the development dimensions of drug policy” and organized crime phenomena, and how to develop more appropriate metrics. There have been various proposals on how to put into practice the linkages between the Sustainable Development Goals and drug policy, including by addressing the root causes of the illicit drug economy (often linked to poverty and lack of opportunities), basing drug policies on context-tailored, people-centred and human rights based approaches, and making a commitment to consolidate good governance and rule of law for development. Such options are aimed at facilitating the “the future definition of more fit for purpose and balanced inter-agency coordination structures on drug-related issues within the United Nations, and a comprehensive and coherent system-wide response”.

If both communities of practice are thinking about related scenarios, they do not seem to be drafting them on the same page. Rather, one may observe intertwined, yet mostly parallel dynamics. Whereas the alternative development concept has been reframed in a more balanced way and envisioned as a key component of a broader development approach to drug policy, considerable uncertainty remains, despite clear opportunities, regarding the extent to which it will be anchored in a development agenda on drugs. On the one hand, considering the fragmentation of the drug policy

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28As the future of the post-2015 development framework was starting to be discussed, a number of United Nations leaders underlined the importance of considering the drug issue as part of a broad development agenda. For example, Secretary-General Ban Ki-moon stated that the “work to achieve the Millennium Development Goals and fight drugs must go hand in hand” [69]. In 2012, the General Assembly held a thematic debate on the topic “Drugs and crime as a threat to development”.

29For example, the Anti-Corruption Task Team of the Network on Governance Network of the OECD Development Assistance Committee addressed the drug issue at several of its regular meetings from 2013 to 2015. Donors and civil society expert, notably from Christian Aid and the Global Initiative against Transnational Organized Crime, presented their perspectives on and assessments of the issue.
arena, it remains uncertain that the building of a development-oriented agenda on drugs will be the way that is negotiated to move forward. On the other hand, it remains questionable whether there will be political will and capacities from both communities to develop a common agenda, let alone to designate the alternative development concept a preferred entry point to that end. Considering the communities’ disparities in terms of mandate, resources and scope, and taking into consideration the highly complex and specific working environments of both communities of practice, the question of what these dynamics imply for future directions in the field of alternative development is now open to discussion.

Conclusions: towards alternative development as an instrument of a development approach to the drug problem?

The present article has aimed to put the conceptual struggles around alternative development into perspective and thus to identify opportunities and vulnerabilities of alternative development in the post-2015 and post-thirtieth special session of the General Assembly era. The concept of alternative development has followed a turbulent and uneven path of emergence, closely tied to the way policy actors have interpreted the balance between development and security efforts entrenched in the theoretical premises of alternative development. The operational bricolage that turned the early normalization of alternative development into a patchwork concept made it more difficult for stakeholders to homogenize it around common knowledge and made the concept even more vulnerable to criticism. Despite the theoretical possibilities of and tentative calls for tighter linkages between drug and development policies, the alternative development concept long struggled to be accepted as a common ground of drug policy and development cooperation communities. Its fragile knowledge base and the lack of proper organizational platforms contributed further to the missing of opportunities to “bring development in”.

Nevertheless, the contemporary policy configuration around alternative development demonstrates renewed thinking and efforts. In an enabling environment of ambitious policy debates in the special session of the General Assembly and on the Sustainable Development Goals, new leadership has emerged on alternative development, investing political and technical resources to push a group of heterogeneous stakeholders to express their views and their differences. A process of convergence and assimilation of ideas has been observable, through which the concept of alternative development has been reinvigorated. Although some divergences still exist, the concept has become more balanced through the building of a new normative framework of common principles and values that diminish the risks of fundamental dissent over time.
The concept of alternative development is now at a crossroads. It has become fairly certain that there is political leeway for a broader drug-policy landscape. Ambitions have been renewed for the alternative development concept to be detached from its image of drug-control bricolage of the past and to become, beyond a tool of a drug-control policy mix, a viable policy entry point for bringing sustainable development options to drug-affected areas. Tipping the balance to the sustainable development components of the concept has critical implications that cannot be ignored. First, making alternative development an internationally accepted policy category to be integrated into a broad development approach to drugs is different from transforming the concept into a catch-all option to bring development into drug policy. If alternative development is too ambitious, it can result in denaturing or dispersing the concept. Considering the highly complex environments of application of alternative development, as well as the relatively limited scope and funding of the portfolio, claiming that alternative development programmes could achieve the same objectives as development cooperation would be unrealistic, as past attempts have shown.

The special session of the General Assembly, despite some limitations, had the merit of opening a new cycle for policy improvement and innovation. An opportunity seems to be again within reach, where the concept of alternative development is finding a new place, midway between drug-control and development policies. Now, to be fit for purpose beyond the limitations of an isolated drug-control policy instrument, and instead as a component of a broader development approach to drugs, there is a need to absorb past errors and draw new operational lines so that agendas no longer overlap, but rather converge in a common development-oriented strategy for drug-affected areas. Such a strategy could be designed to overflow the boundaries of alternative development, and apply comprehensive development responses to all areas of drug policy intervention, including drug consumption (for example, human rights-based interventions to improve access to treatment and prevention) and drug trafficking (for instance, economic opportunities and education). For the moment, such a vision may be pure fantasy. Nevertheless, if the concept of alternative development can now be embraced as a core component of sustainable development-oriented and balanced drug control policies, the following concluding remarks can serve as an attempt to open the debate on future directions:

1. Continuing to fill the knowledge gap on alternative development would further build up the credibility of the concept. Multidimensional metrics, innovative research and systemic, independent evaluations of alternative development interventions would help to determine the extent to which the new concept can be translated into practice, and be implemented adequately, coordinating drug-control objectives with overarching development goals. The Sustainable Development Agenda monitoring framework provides a good
opportunity to establish a more balanced indicator system to review the success of alternative development interventions and to embed them into a more development-oriented rationale.

2. Creating a specific “organizational platform” for drugs and development in the form of an open-ended working group or an independent expert group bringing together experts and practitioners from all branches of the drug and development fields would facilitate dialogue and provide a favourable setting to reconcile dissenting views over alternative development and the links between drugs, development and alternative development. Leading multilateral organizations specialized in drugs and in development could play central roles (inter alia, by providing institutional settings, operating as policy forums, coordinating the implementation of shared ideas or remaining active).

3. Developing and strengthening intellectual partnership across the drug and development communities, including among multilateral organizations, development aid and drug-control agencies and any other interested experts, seems critical for fostering greater knowledge and developing an evidence-based common policy setting. The deteriorating situations on the ground and the political engagement to achieve the Sustainable Development Goals should constitute significant incentives to that end. Enhanced exchanges could also help to bring about more policy coherence and rationalize funding mechanisms and scarce resources.

4. Considering a possible clarification or update of the definition of alternative development could complement the dynamics engaged so far. Although it would take time and risk bringing remaining divergences out into the open, such a process would normalize the concept as it has been reframed in the past few years. It would also provide the alternative development community with a common reference that could be mobilized and resonate within the development community. Certainly, the realities of implementation might differ on the ground, but the focus and core values of alternative development could be formally restated so that it is affirmed as a possible entry point to bring sustainable development options to drug-affected areas. It would be an imperative for the “new” alternative development to be implemented according to agreed principles and values, and to align dissenting views over time. The opening 2019 review process could provide an opportunity to that end.

5. Being clear and realistic about the potential of alternative development also remains key. Alternative development cannot be a substitute for a possible development agenda on drugs. Put more bluntly, “alternative development” cannot be “development” if it ignores the
complexity of sustainable development policies. All experience and expertise is valuable and can be complemented, whereas substituting one agenda for another would be counterproductive. At the end of the day, alternative development is not only about conceptions and definitions: it is mainly development-related programming in challenging environments, which means that where there is overlap, there should also be enough capacity, expertise and resources from both communities to back the implementation of projects and programmes. From that perspective, alternative development could be envisioned as one element or a sequence of a broader development strategy on drugs (with specific methodology, evaluation tools, project guidance and budget lines), providing the basis for sustainable development efforts. Although that would make it necessary to build a broader development approach to drugs than the one sketched so far, it would not imply that alternative development could be broadened limitlessly. It would, however, open new expertise and policy-articulation options, as well as innovative mechanisms of financing, including opportunities to tap into the development cooperation portfolio. Furthermore, it would not diminish the importance or quality of alternative development but instead serve to provide an evidence-based starting point and to put an end to the conceptual struggles to which alternative development has long been subject.

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Shared responsibility in alternative development: an ethical challenge

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Abstract

Focusing on the links between ethics and the problem of illicit drugs, Zorro-Sánchez and Kamminga explore the concept of shared responsibility in the context of alternative development. They address the notion of shared responsibility from two perspectives: firstly, as an ethical response to the challenge created by the world drug problem and, secondly, as the commitment that a wide range of national and international actors in different spheres must make as part of their social responsibility, on the basis of the application of ethics-based criteria. The authors then bring together both perspectives and highlight how the exercise of that responsibility should today lead to the forging of partnerships between different actors at various levels. For alternative development to be effective, those actors should undertake specific joint commitments which go beyond the chain of production of the crops that replace illicit crops. They should also address the human development of those who have become involved in illicit crop cultivation and who depend directly or indirectly on the genuine and effective exercise of shared responsibility.

Keywords: alternative development, ethics, human development, shared responsibility, social responsibility.

Introduction

The aim of the present article is twofold: first, to show that alternative development, as a process designed to provide opportunities to some of the poorest and most vulnerable groups and communities affected by the world drug problem, involves an ethical commitment that entails the social responsibility of all other public and private national and international actors that are or should be present in the territories where illicit crops are grown; and second, to set out several ways of ensuring the exercise of that shared responsibility.
To that end, the article contains three sections: the first sets out the links between social responsibility, as an ethical concept, and alternative development; the second examines the main statements made by international bodies regarding the exercise by social actors of shared responsibility in addressing the illicit drug problem; and the third reaffirms the need for an ethical commitment by such actors in relation to alternative development, on the basis of the shared responsibility expressed, for example, through public-private partnerships that generate genuine commitments by various actors both within and outside the production chain. The article concludes by making a number of recommendations aimed at strengthening the exercise of shared responsibility.

**Ethics, shared responsibility and alternative development**

*Social responsibility: an ethical expression of human behaviour*

Ethics, as a guide for human actions, requires that every natural or legal person be accountable to others for any action or failure to act that could affect those other persons positively or negatively. That is the essence of social responsibility—often understood in a superficial manner as engagement in philanthropic activities—which is all the greater the more disadvantageous the situation of the persons affected and the greater the power and authority of the persons or entities that perform or fail to perform the actions concerned. When decisions are taken or actions are carried out by a number of actors, each actor is expected to assume its share of the responsibility, in accordance with its role and the extent of the impact of its involvement. In such cases, it is a question of the joint or shared responsibility of all those actors.

The concept of social responsibility, understood as the commitment of every person to his or her fellow human beings, has deep and long-established roots in Western ethical thinking, which is anchored in the beliefs of the ancient Greek philosophers and in the Judaeo-Christian tradition. However, it was only towards the middle of the nineteenth century that the idea that human beings have a responsibility towards others began to be systematically associated with other concepts which, despite being consistent with that idea, have different bases [1].

Those new approaches to the ethical rules that should guide the behaviour of all human beings towards one another gradually shaped various conceptions of what, in contemporary language, has been termed “social responsibility.” The common denominator of those conceptions is behaviour that seeks not only to contribute to the improved well-being of other human beings but also, in terms of the theory of human development, to provide
them with opportunities for self-improvement. The exercise of that responsibility tends to extend not only to individuals but also to organizations as legal persons. However, far from a consensus having been reached with regard to the nature, necessity, extent and management of social responsibility, a fierce debate on the subject has arisen, such as when attempts are made to apply that concept to capitalist companies whose primary objective is to maximize their profitability. A further element of the debate is the refusal of influential authors to accept that social responsibility goes beyond strict compliance with market laws.1

If it is accepted that any human decision involves a degree of freedom; if it is recognized that the market often fails; and if the deplorable situation in which much of humanity lives is considered, it is clear, as shown by Amartya Sen [2, 3] and Martha Nussbaum [4], that the exercise of social responsibility makes it necessary to transcend the above-mentioned laws. Social responsibility, regardless of the manner in which such responsibility is defined, is something that also applies to individuals, non-profit organizations and even States.

It follows that the social responsibility of the various actors stems directly from ethics: an actor is socially responsible to the extent that its values, attitudes and behaviour contribute to its own improvement as well as the improvement of the lives and prospects of those with whom it is connected. To put that concept into practice, following a proposal by the European Commission [5], it is accepted that social responsibility entails (a) preventing, mitigating and reversing any negative impacts of actions, and (b) promoting and maximizing their positive impacts.

The debate regarding the extent of the responsibility of social actors has spread to the geopolitical sphere. Since the middle of the twentieth century, authors and leaders have highlighted the need for such responsibility to extend to people who, while residing outside the jurisdiction of a particular State, sometimes find themselves in dire circumstances that cannot resolve themselves or be resolved by the States of which they are a part. Instead, these can be resolved with the cooperation of other States that are equipped with sufficient resources, or by private actors of such States. Therefore, shared responsibility tends to be accepted as extending beyond national borders to address situations that ultimately affect human groups irrespective of their geographical location or their connection with a particular State, which, for example, would be the case with regard to persons addicted to substance use.

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1 Among whom the most explicit on the subject of social responsibility is probably Milton Friedman [6].
That stance has not been unanimous, for theoretical and practical reasons. From a theoretical perspective, it is contested by authors from both individualistic and different perspectives. For example, Milton Friedman believes that, from an individualistic perspective, each person is responsible for resolving his or her own problems within the framework of a State, whose responsibility is limited to protecting the life, physical safety and property of its inhabitants. On the other hand, John Rawls argues in his Theory of Justice [7] that that theory should apply at the national level but not the international level, at which the value of solidarity should apply. In practice, shared responsibility has been called into question either because some States have tried to use cooperation as a means of interfering in the domestic affairs of other States, or because some aid recipients have a tendency to transfer personal responsibility to aid workers; both behaviours are contrary to the ethical values that should guide the exercise of social responsibility at the international level.

In his work on justice [3], Sen, critiquing Rawls, argues that support for the improvement of the conditions of the human development of the inhabitants of the various States is not simply a matter of solidarity that places different societies on unequal levels. It is instead a matter of justice that places all human beings on the same level by virtue of their inherent dignity, and that requires the commitment of societies and the Governments of States that consider themselves developed. In those terms, they are jointly responsible, together with other national, international and transnational actors, for providing opportunities to facilitate capacity-building among the population of countries with fewer resources. In today’s global world, there is truth in Edgar Morin’s view that the community of destiny of humankind in the face of common matters of life and death requires a policy of humanity to which humankind should subscribe in the future [8, p. 47]. Accordingly, shared responsibility at the international level is an inevitable corollary of the ethics-based concept of social responsibility.

**Social responsibility in the context of alternative development**

Like all human activities, the process that has become known as “combating illicit drug supply”² has ethical implications that are, in the context in question, particularly significant. That process is not only destroying the lives of

²The phrase should be reformulated to reflect the shift from a destructive position, such as the one that has previously prevailed, to a constructive position, according to which the objective is not to combat drugs per se but, rather, to provide persons who have, for one reason or another, voluntarily or involuntarily, become involved in the trafficking or consumption of narcotic substances with tools that offer them opportunities to break that cycle and prevent it from becoming a source of individual alienation and social unrest. For that reason, references in the present article that looks toward the future will not use the phrases “combating drugs” or “combating illicit crops”, but rather to the quest for a world free of drug addiction or simply to alternative development, as appropriate.
many individuals, but is also jeopardizing the future of certain communities and even, in some cases, seriously obstructing the development of societies. This raises the question of the extent to which the teleological purpose of achieving elimination of the scourge of addictive drugs from society justifies the use of certain highly repressive measures. One example is crop spraying, which has adverse effects on health, the environment and the licit economy of farming communities,\(^3\) and the brunt of which is often borne by highly disadvantaged sectors of society.

The shared responsibility for decisions taken and actions carried out to address the world drug problem is particularly relevant given the multitude of actors involved. They include international actors such as the United Nations and, in particular, the United Nations Office on Drugs and Crime (UNODC), the International Narcotics Control Board (INCB) and the Commission on Narcotic Drugs (CND); transnational actors including certain non-governmental organizations; national actors including States affected by the production and consumption of illicit drugs and, within those States, the specific agencies responsible for managing and implementing the counter-narcotics strategy; the governors of regions within those States; the local authorities of the areas affected by the production and consumption of illicit drugs; the growers and distributors of the inputs needed to produce those drugs; the producers and consumers of the drugs; and, of course, the communities affected by those activities.

The present article does not seek to address the fundamental question of the conflict between the ultimate purpose of combating drugs and the injustice of certain actions that affect some of the most disadvantaged groups in society, a question currently being studied in other spheres.\(^4\) Rather, it seeks to draw attention to the responsibility that all actors bear in relation to the decisions they take within the context of drug control policies and the need for them to assume that responsibility in an effective and coordinated manner. In other words, it is important that all actors recognize that they are jointly responsible for such decisions and, depending on individual roles, for the consequences of those decisions, guided by ethics-based criteria (i.e., criteria that lead to a better society).

One of the tools that has been used to tackle the increased production and distribution of illegal drugs at its source is the strategy of alternative development, which, according to the United Nations, is “a process to

\(^3\)See, for example, the 2015 report of the World Health Organization, published on 19 March 2015 by the International Agency for Research on Cancer, regarding the harmful effects of glyphosate [9], which is used to fumigate coca crops in countries including Colombia.

\(^4\)Various public and private bodies, such as the Organization of American States and the Global Commission on Drug Policy, are examining this issue and questioning the appropriateness and effectiveness of the policies that have been guiding the fight against illicit drugs.
prevent and eliminate the illicit cultivation of plants containing narcotic drugs and psychotropic substances through specifically designed rural development measures” [10]. From an ethical perspective, its purpose cannot simply be to eradicate or replace the production of drugs, but must be to promote the human development of the affected population. That means not only providing that population with the opportunity and the capacity to obtain the resources it needs in order to enjoy a decent standard of living under conditions of freedom, but also restoring a culture of lawfulness from which it has often found itself excluded for reasons beyond its control. This focus is included, for example, among the main objectives of the Forest Warden Families Programme in Colombia. Consequently, alternative development programmes cannot be evaluated solely on the basis of their short-term effectiveness in combating drugs, but must also be evaluated in terms of the extent of their contribution to resolving a human problem that would be unfair to tackle by force alone. In that regard, the tendency to measure the impact of alternative development programmes using human development indicators is perfectly justified [11, p. 111].

In producing countries, most of the above-mentioned crops are grown by small-scale farmers for whom they often represent the only means of making a living in their region of origin. That is why the alternative development strategy goes beyond the simple substitution of certain plants for others: the most important element is to provide those farmers with decent livelihoods that do not involve the cultivation of crops used for the production of narcotic drugs.

Accordingly, it must be recognized that the farmers concerned are the weakest link in the drug production and distribution chain. Owing to their circumstances of particular vulnerability, they can abandon such cultivation only if there are programmes in place that allow them to substitute the cultivation of the crops in question with other income-generating activities in a sustainable manner. That fact was once again reiterated at the second High-level International Conference on Alternative Development, held in Bangkok as part of the preparation for the special session of the General Assembly on the world drug problem held in 2016, with the participation of high-level authorities. At the Conference, it was noted that farmers who engage in illicit crop cultivation or drug trafficking frequently do so because of poverty and the need to meet their basic needs. It is often the lack of opportunities to earn a legal and sustainable income that forces them to cultivate illicit drugs [12]. However, it is important to highlight that poverty is not the only motivation of the farmers involved [13, p. 42].

At the Conference in Thailand, the Executive Director of UNODC, Yury Fedotov, delivered a video message that reaffirmed the immense potential of alternative development and how it can dramatically improve the lives
of people. The Deputy Executive Director of UNODC stressed that the Sustainable Development Goals are an ideal platform for alternative development to be effective in areas including poverty reduction, sustainable agriculture, the protection of the environment and the promotion of peaceful and inclusive communities. Lastly, the need was highlighted for the strategy to become an adequately funded and sustainably implemented pillar of international counter-narcotics policy that would encompass not only the highest political levels but also individuals in the community.5

It is important to note that, unlike other components of what has hitherto been known as the “fight against drugs”, including the fumigation of illicit crops, alternative development does not give rise to objections of an ethical nature; on the contrary, there is consensus that it is one of the few strategies which, under certain economic, technical and management conditions, do not harm efforts to create a world in which narcotic drugs are not a burden on individual and social development.

Given that drug use remains one of the most pressing concerns at the global level, there is no doubt that all of the social actors directly or indirectly involved in the search for solutions to the production, distribution and consumption of drugs at the various levels—transnational, international, national and local—must acknowledge and decisively assume their responsibility in relation to the alternative development strategy. In addition, it must be stressed that the issue of small-scale farmers who become involved in illicit crop cultivation out of necessity or as a result of the almost overwhelming pressure placed on them by drug traffickers or illegal armed groups is first and foremost a human problem whose solution requires the actors at all levels, from the local to the global, to assume that responsibility.

That acknowledgement of responsibility further requires, as a corollary, that all individuals and organizations involved in making decisions that are liable to have an impact on the development processes of the regions affected by illicit cultivation coordinate their efforts in supporting that development. Therefore, the concept of shared social responsibility or shared responsibility, as referred to above, comes to the fore as a prerequisite for the success of alternative development programmes. In other words, all of those individuals and organizations are jointly responsible, within their respective areas of competence, to the individuals whose future largely depends on those programmes.

5In that regard, it should be noted that at a meeting held in Vienna in March 2016, prior to the special session of the General Assembly on the world drug problem, the representatives of the Governments of Colombia, Germany and Thailand, together with UNODC, emphasized that where alternative development programmes are created in collaboration with beneficiary communities, meet their needs and are implemented within the framework of broader strategies for development and strengthened State presence, they tend to deliver results that are sustainable over time and have a positive impact on social cohesion, the promotion of lawfulness and integration with national territories and economies [14].
Accordingly, those who fail to acknowledge and assume, to the extent possible, their responsibilities in that area, which is so important for a large proportion of the world’s population, are behaving in an ethically reprehensible way.

**International statements on shared responsibility in the context of alternative development at the global level**

The concept of shared responsibility has evolved in parallel with international efforts to control illicit drugs since the end of the nineteenth century [15, pp. 1-4]. At its core, the world drug problem has increasingly been seen as a problem of global governance; a true challenge that cannot be solved by individual States. However, until the mid-1990s, the principle of shared responsibility was based at least partly on a division of the world, currently perceived as decontextualized, into producing and consuming countries [15, pp. 1-4], in which the greater part of the burden of responsibility often fell on the producing countries, which were seen as “to blame” for the increase in illicit drugs globally.

For the reasons set out in the first section of the present article, alternative development programmes are a potentially vital tool for tackling the problem in those countries. In practice, however, such programmes continue to be implemented in a limited number of countries, generally the traditional producers of illegal drugs, and the lack of resources allocated to the programmes severely limits their potential. In that regard, it is worrying, to say the very least, that while large sums are spent on destroying illicit crops using methods such as fumigation, which sometimes also destroy the future of entire communities, restrictions are placed on contributions to processes that, like alternative development, can pave the way for the individual and social development of the inhabitants of the regions affected by illicit cultivation. Suffice it to note, for example, that as shown by the *World Drug Report 2015*, overall disbursements of alternative development funds from States members of the Organization for Economic Cooperation and Development (OECD) accounted for just 0.1 per cent of global development assistance [11, p. 118].

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6 Those countries are Afghanistan, Bolivia (Plurinational State of), Colombia, Indonesia, the Lao People’s Democratic Republic, Morocco, Myanmar, Peru, the Philippines and Thailand (according to United Nations reports published between 2011 and 2013).

7 An additional example, which relates to Colombia, shows that of the State’s total expenditure on the six strategies, as referred to in its report of 2012, to address the problem of illicit drugs [17, p. 12], the strategy of reducing supply through various forms of interdiction accounted for 64.2 per cent, followed by legal and institutional strengthening (25.7 per cent), while alternative development accounted for barely 5.5 per cent. The latter percentage reflects a decrease in the historical average, which had been 7.1 per cent from 2003 to 2008. Moreover, the total sum of investments in alternative development made by Colombia and through international cooperation from 2003 to 2009 not only fluctuated widely but also represented an average of just 2.3 per cent of the annual investment budget (figures provided by the Social Action initiative of the Government of Colombia, quoted by Zorro-Sánchez [1]).
The necessity, urgency and complexity of the goal of countering the world drug problem, as well as the importance of the alternative development strategy as part of that goal, require the commitment of multiple actors that are dedicated to the strategy at different levels and, consequently, must work together to achieve that goal. It should be recalled that the challenge posed by the strategy relates not only to its effectiveness in limiting the supply of illicit drugs but also to its effectiveness in creating opportunities in a sustainable manner and building capacities in communities that have in many cases been perennially excluded from human development processes.

In recent years, there has been growing recognition by both States and the United Nations of the importance of the concept of shared responsibility, which has gradually become one of the fundamental features of statements regarding international cooperation in various fields, including alternative development as one of the core strategies to address the world drug problem.

In the context of the United Nations in particular, States have increasingly used the concept of a common and shared responsibility to tackle the world drug problem. In March 2011, at the fifty-fourth session of the Commission on Narcotic Drugs, a round table was organized that was devoted to the “revitalization of the principle of common and shared responsibility as the centrepiece of international cooperation to confront the challenges posed by the world drug problem…” [16]. Participants emphasized the need for countries to share experiences and good practices so as to embody the principle of shared responsibility [18, para. 36].

In March 2012, the same topic was selected as the theme of a round table, with a view to highlighting the need to further improve understanding of the principle, its implications and the modalities for its application and operation, as well as the way in which States should use it in their international cooperation programmes to address the world drug problem [19, pp. 37 and 38]. At that session, participants highlighted that an operational definition of the principle of common and shared responsibility was lacking, as was a definition of the extent of each country’s responsibilities and commitments in the fight against illicit drugs, and concluded that the concept of common and shared responsibility required further clarification [19, p. 38].

At the fifty-sixth session of the Commission on Narcotic Drugs, in March 2013, a resolution dedicated to the issue of strengthening shared responsibility was drafted by Colombia, El Salvador, Mexico, Peru and Thailand [20]. The resolution not only highlighted the fact that shared responsibility should guide the individual and joint actions of all States, but also advocated “firm political will, on the basis of equal responsibilities and with international cooperation and coordination between all relevant actors at all levels” [20]).
Board for 2012, the principle of shared responsibility can be seen as a joint undertaking involving various actors, including government institutions, the private sector, local communities and individuals [15, p. 1].

Lastly, the special session of the General Assembly on the world drug problem held in 2016 addressed the issue of shared responsibility and established it as one of the key features of the fight against drugs. Promoting shared responsibility between governments and society is an essential task in tackling the structural causes of the production, trafficking and consumption of drugs, thereby countering violence and social damage [21].

**Constraints on support for alternative development at the international level**

While the rhetoric surrounding shared responsibility seems to be used primarily within the Commission on Narcotic Drugs and other international forums, there are a number of constraints when it comes to applying the principle in local, national and international practice.

The first constraint, inherent to international legislation, lies in the fact that shared responsibility is restricted by respect for the sovereignty and territorial integrity of States and the principle of non-intervention in their domestic affairs. International treaties and resolutions generally refer to their non-mandatory nature and instead merely seek to guide international commitments and conduct. However, they do not have sufficient power to impose rules and regulations.

The second constraint is that calls to support alternative development tend to take the form of general recommendations and fail to provide specific guidelines on how to support the strategy. Despite efforts to rally support for the relevant programmes and the existence, since 2013, of the United Nations Guiding Principles on Alternative Development [22], it is ultimately for States to decide whether and how to support other countries in the implementation of such programmes.

The third constraint is that there are relatively few countries that support alternative development. Although 18 countries have an alternative development strategy or an action plan,\(^8\) support is often limited to a much smaller group of donor countries that have traditionally provided assistance for such cooperation. In Colombia, for example, support for alternative development

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\(^8\) Those countries are: Bolivia (Plurinational State of), Canada, China, Denmark, Ecuador, Finland, Germany, Iran (Islamic Republic of), Italy, Japan, Lithuania, the Netherlands, New Zealand, Peru, Saudi Arabia, Thailand, the United Kingdom of Great Britain and Northern Ireland and the United States of America (as reported by the United Nations between 2011 and 2013).
development has come mainly from the United States of America, the European Union, and a few European States, including Belgium, France, the Netherlands and Sweden [23, pp. 266-271].

Partly as a result of the above, a fourth constraint is the absence of an international coalition or movement for alternative development. Unlike other global governance challenges such as arms trafficking, the proliferation of minefields in areas of armed conflict and the “responsibility to protect” the civilian population from crimes against humanity, there is no identifiable global commitment to alternative development. There are some events related to fair trade and symposiums among professionals, experts and academics in national and international settings, but there are no structural commitments involving third countries, transnational companies or international consumers, which are essential actors in the successful marketing of products resulting from alternative development processes.

Lastly, a fifth constraint is that there is very little connectivity between alternative development projects and international markets. Previous research conducted by Kamminga at the University of Valencia [23, pp. 387 and 388] sought to gather evidence regarding the international marketing channels for alternative development products in three regions of Colombia. Any such evidence could be considered indications of the embracing of the principle of shared responsibility. However, apart from a very limited number of projects receiving international support, the research revealed that very few products of alternative development projects were reaching international markets (ibid., pp. 387 and 388).

In corroboration of those findings, the World Drug Report 2015 showed that preferential trade agreements aimed at supporting producing countries did not provide any direct support to alternative development projects [11, p. 117]. In addition, in its discussion of some examples of good practices in the exercise of shared responsibility, the International Narcotics Control Board refers only to “… many examples of concerted and collaborative efforts … in programmes to develop alternative livelihoods”, but does not explain precisely what those efforts entail [15, para. 33].

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9 Annex II of the World Drug Report 2015 contains a list of selected international events related to alternative development that have taken place since 2001.

10 However, there has been some recent progress that demonstrates that the exercise of shared responsibility in that area is perfectly feasible. There are three examples: firstly, partnerships promoted by a well-known Swedish furniture chain with organizations in Thailand to promote alternative products [14]; secondly, the participation of six alternative development organizations in the Macrorrueda 60 business fair in Colombia, which demonstrated that it was possible to establish a constructive dialogue at various levels between the public and private sectors, both national and international [24]; and thirdly, collaboration between an Austrian chocolate maker and the Montebravo producers’ association in Chocó department, Colombia [25].
Considered together, the constraints lead to two initial conclusions. Firstly, there appears to be a significant gap between the international level, where emphasis has systematically been placed, at different times and in different bodies, on shared responsibility, and the local and national levels, where alternative development programmes are implemented and where that shared responsibility appears to be very limited in size and scope. Secondly, the constraints in question also show that it is not enough to work towards shared responsibility solely at the State level. The solution to the drug problem as a global challenge must include a wide range of non-State actors at the local, national and international levels.

Towards the exercise of shared responsibility in alternative development processes

In the light of the above, it is not surprising that the World Drug Report 2015 concluded that there was a disconnect between international rhetoric and financial support for alternative development [11, p. 118], nor is it surprising that the report revealed that disbursements of alternative development resources from States members of OECD had declined by 71 per cent since 2009 [11, p. 118].

The reasons for that decline may be partly related to the financial crisis or to the possibility that some countries do not record such resources separately but, rather, include them within broader categories of development assistance. However, it is clear that there is a real gap between rhetoric and international support which, irrespective of its exact size, extends in general to all areas of development cooperation11 and validates concerns regarding the commitment of various actors to assuming their shared responsibility with respect to alternative development. In order to bridge that gap, a new approach is required to ensure that shared responsibility in the area of alternative development is more than just empty rhetoric. It should rather be an active network, which drives the actions of multiple local, regional, national, international and global public and private actors that understand the current realities of their respective areas of activity and are willing to take on the challenges that those realities pose.

There is no doubt that producing States should continue to play a key role in alternative development projects, whether that role takes the form of funding programmes, providing technical assistance or facilitating the processes required for the success of those projects (such as the recognition of land rights or access to markets). However, other countries and bodies must

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11As evidenced, for example, by the successive reports produced by the United Nations Development Programme on the progress made in achieving the Millennium Development Goals.
also assume their role in exercising the shared responsibility that rests with them. Nevertheless, the support of those countries and bodies seems to be gradually decreasing, a trend that is liable to force countries in which alternative development projects are being conducted to supplement the resources allocated to those projects with their own funds [11, p. 86]. To date, only a small number of other countries, including Canada, Germany, the Netherlands and the United States, have played a significant role in bilateral programmes to support alternative development (ibid., p. 85).

As it is unlikely that, for example, all 53 member States of the Commission on Narcotic Drugs will suddenly start to provide direct support to alternative development projects in other States, it should be asked what they and other countries could do at the bilateral or multilateral level to give definite form to the exercise of their responsibility. In that regard, it is entirely feasible for them to take a dual approach involving the promotion of action in support of alternative development taken by the companies most closely linked to their economic processes, and assistance in creating an environment that facilitates the opening up of their markets to alternative development products. However, that often depends on their willingness to negotiate trade agreements at the multilateral level. In any case, those States could also play a direct role as buyers of goods produced through alternative development processes, or as promoters of the production or marketing of those goods by companies or non-governmental organizations based in their territories.

In that respect, it should be noted that non-governmental organizations have been called on not only to become involved in the marketing of alternative development products but also, inter alia, to help raise awareness about the relevance of the projects concerned, a task that only a few such organizations have undertaken to date. It should be highlighted, for example, that while various local, national and international non-governmental organizations are committed to promoting organic or fair trade products, their efforts do not extend to alternative development products. There are only a few exceptions, in the form of high-quality products generated by a handful of projects around the world, such as the organic coffee produced by the Ecolsierra network (Red Ecolsierra) in Santa Marta, Colombia, or the fair trade products of the Mae Fah Luang Foundation in Thailand.

The same is true of national and multinational companies. Although the United Nations Guiding Principles on Alternative Development emphasize the crucial role of the private sector and the creation of public-private partnerships aimed at making alternative development successful and sustainable [22], the actual number of companies committed to providing that support through the purchase of raw materials or finished products is very low. Public-private partnerships have been established in some drug-producing
regions, such as the partnership promoted by the United States Agency for International Development (USAID) in Colombia with Starbucks and several national companies [26, p. 33], and the partnership promoted by UNODC in Colombia and Peru between the Austrian chocolate maker Zotter and associations of local producers [25]. Often, however, those partnerships are not directly related to alternative development projects, or remain limited in scope and duration.

Public-private partnerships as a means of exercising shared responsibility

The proper exercise of shared responsibility requires levels of coordination between the parties that enable the smooth implementation of their activities. While that coordination may be formal or informal, in most cases only formal coordination (established clearly in agreements that may have various modalities) offers a degree of security sufficient to satisfactorily link the responsibility of the different actors. Those agreements should go beyond the implementation of short-term actions that establish the specific commitments of the parties in relation to a particular project or infrastructure [27] [28, p. 4]. They should rather take the form of partnerships, which often give rise to broad-based coalitions that comprise not only public entities but also community leaders, national or international entrepreneurs, private consultants, academics and non-governmental organizations [29, p. 12].

Public-private partnerships strengthen the capacity of actors to make a positive impact on the society in which they operate. For example, Devlin and Moguillansky [30, p. 66] argue that in many cases, the information that is available to private companies regarding the market, even if incomplete, enables them to identify opportunities and obstacles in order to successfully establish strategies aimed at improving the economic conditions of certain groups—for example, those who seek economic activities that are alternatives to illicit crop cultivation. In contrast, government entities approach the issue with a long-term goal, strategic guidelines and various kinds of resources in relation to the actions concerned. When both sectors work together, their potential to identify and overcome constraints is thereby increased. One such example is the promotion of economic growth and the transformation of the living conditions of the population connected to alternative development programmes.

In the specialized literature, there is broad recognition of the classification by the World Bank of the roles that the public sector could play in

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12 Lucía Torres Alvarado, a master’s student at the Interdisciplinary Centre for Development Studies (CIDER) of the University of the Andes in Bogota contributed to the present analysis through her literature review.
creating an enabling environment for corporate social responsibility: mandating, facilitating, partnering and endorsing. Fox, Ward and Howard [31] explain the respective roles as follows:

• Mandating: establishing minimum standards for business performance through legislation
• Facilitating: offering private-sector companies different types of incentives in order to engage them in the issue
• Partnering: acting as a partner of the private sector and civil society and harnessing the complementary skills of each
• Endorsing: recognizing the good practices of organizations and supporting socially responsible initiatives through the example set by those organizations

Those roles are not incompatible and it is possible that, in relation to a specific issue, a combination of them may be reflected in various actions.

For its part, General Assembly resolution 66/288, entitled “The future we want”, highlights the potential role that the private sector can play as a partner in addressing complex issues directly related to sustainable development, such as those which arise in alternative development processes and consequently require the involvement of various social actors. In that regard, it should be noted that in countries such as Colombia, where those processes are of paramount importance, the foundations of the National Development Plan 2014-2018 provide that in order to achieve the established goals, the Government will work hand in hand with the business sector and local governments to develop public strategies and public-private partnerships [32, p. 63].

Contemporary globalization has made both local and regional development processes and the relationships between the actors who work together to promote them increasingly complex. From that perspective, efforts to contribute to development become increasingly difficult and ineffective if they depend on the actions of a single actor, regardless of the form that those actions take. For that reason, the exercise of social responsibility increasingly requires the seeking of partnerships with other relevant actors.

13 Although management problems largely thwarted the business capitalization initiative launched in the 1990s in the context of the alternative development strategy of the Government of Colombia of the time, the initiative’s conception in fact represented an attempted partnership between the public sector, private enterprise and illicit crop growers, and the experience provided could be drawn upon in the future. The business capitalization initiative, implemented through the Agricultural Production and Marketing Business Incubator, sought to capitalize alternative development projects and enterprises through the establishment of public limited companies that would bring together rural farming organizations and private-sector enterprises interested in the proposed programmes [33, p. 9].
The scope of that responsibility may be very broad if, for example, it binds all the actors involved in a value chain—in this case, the value chains of alternatives to illicit crop cultivation—from the input stage to the final marketing of the products concerned. Authors such as Scott (2014) suggest that it is appropriate to build matrices that make it possible to identify the actors involved in each case, define their responsibilities within the chain and establish partnerships as a means of fostering the exercise of those responsibilities.

**The international context as an enabling environment for the exercise of shared responsibility**

Although the world drug problem is frequently discussed in bilateral or multilateral forums, the alternative development strategy is seldom part of those discussions. Beyond the sharing of good practices and lessons learned, which almost always are of a technical nature and relate to specific projects, there is little discussion of what international actors do and could do to support alternative development as part of their shared responsibility.

For example, in many of the resolutions, declarations and action plans of the United Nations, reference is made to international financial institutions and regional development banks as important actors in supporting or financing alternative development. However, it appears that bodies such as the World Bank are not structurally committed to alternative development. This is a missed opportunity as the World Bank is an institution that, like the Inter-American Development Bank, could help alternative development to transcend the relatively small-scale projects that struggle to make an impact despite the size and reach of the illicit economy and of legal competing industries. In addition, with a view to strengthening producer associations, those bodies could provide resources for production and marketing infrastructure that could improve productivity, quality and, as a result, market potential. An example would be the funds required for the often lengthy and expensive processes of certifying organic or fair trade products.

However, international support should go beyond financial and technical assistance for alternative development. Given the importance of international markets, international actors, which are often an extension of States, can create an international trading scheme in which the products concerned can be promoted successfully. Regardless of whether recent attempts to promote a global brand for alternative development products are feasible or desirable [23, pp. 300 and 301], it is clear that the vast majority of those products fail to reach profitable markets at the national, international or global level.

Although at first sight the trend towards free trade agreements, such as those concluded between the European Union and Latin American countries, would appear to foster the creation of an enabling environment for
alternative development products, the poor conditions in which many of those projects are carried out tend to confound that expectation. Many alternative development projects are producing low volumes of relatively expensive, low-quality, non-uniform products at irregular intervals. That means that they struggle to compete on national and world markets, not only with illicit alternatives, but also with the legal competition.

Given the adverse conditions in many regions in which alternative development projects are being implemented [11, pp. 90-93], it is necessary to lend those projects ongoing support in terms of both production and marketing. In addition, preferential trade agreements are needed in order to carve out a space for them on international markets in a more structural way. Previous trade agreements such as the Andean Trade Preference Act and its successor, the Andean Trade Preference and Drug Eradication Act, as well as the Generalized Scheme of Preferences of the European Union, have facilitated free access to agricultural products but have not specifically sought to promote alternative development projects [11, pp. 116 and 117].

To date, neither free trade nor preferential trade has succeeded in strengthening the marketing of alternative development products. In that regard, if the international community is to take the principle of shared responsibility for supporting alternative development seriously, a debate should be initiated in which bodies such as the World Trade Organization (WTO) and others that have a direct or indirect influence on the regulation of international trading schemes also participate, with a view to identifying the best mechanisms to support alternative development products at the international level. If preferential treatment were impossible, an improvement in the standards for the production and marketing of alternative products would be even more necessary. From the perspective of that group of bodies, it should not be forgotten that alternative development is also a source of growth—potential or real—of the trade flows and economic activity both of the countries that produce the goods concerned and of those that buy them.

The process of incorporating alternative development more fully into the international trading scheme can be regarded as part of the process of positioning it within the broader sphere of the development efforts of every

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14 As also explained in the World Drug Report 2015, to which Kamminga contributed as researcher and writer, preferential treatment may be difficult to establish. For example, the Generalised Scheme of Preferences of the European Union was changed in 2005 after a WTO legal case that was started in 2002. WTO ruled that tariff advantages under the Special Arrangements to Combat Drug Production and Trafficking were inconsistent with article I.1 of the General Agreement on Tariffs and Trade, on general most-favoured-nation treatment. This meant that the European Union could not grant preferential treatment to illicit drug-producing countries, unless it granted the same treatment to other Generalised Scheme of Preferences beneficiaries with similar “development, financial and trade needs” [34].
country. The best way to achieve that objective seems to be to place it within the context of the recently adopted Sustainable Development Goals. In that respect, a study has been undertaken to explore how the issue could fit the logic of the Goals [35]; [11, p. 116], but more research is needed to explore how that could be achieved. It should be highlighted that the necessary incorporation of support for alternative development programmes within broader national development strategies may further complicate the exercise of the shared responsibility that the various social actors must assume in relation to such programmes as their specific roles and responsibilities related to alternative development may become more obscured.

It is equally important to reiterate that there can be no confusion between the instruments designed to promote alternative development—financial and otherwise—and the ultimate goal of alternative development, namely to increase the individual and social opportunities enabling persons who, for one reason or another, have become involved in the cultivation of plants that can be used in the manufacture of narcotic drugs, to abandon that activity in a sustainable way.

Conclusions

The challenge of addressing illicit crop cultivation has many interrelated facets. Firstly, such crops are often grown by communities that face conditions of extreme poverty, instability or external pressure and that lack other opportunities to overcome those conditions. That is why it is necessary to ensure, before any eradication of illicit crops takes place, that those communities will have sustainable alternative livelihoods. Achieving that requires the determination and assessment of the social, technical and economic feasibility of such alternatives. But it also requires the provision of essential basic services to enable those who have voluntarily or involuntarily been involved in illicit crop cultivation to establish a dignified existence under conditions that befit the modern world. It also necessitates an approach that reintroduces farmers into the governance framework, and above all the culture of lawfulness from which they have been excluded.

In that regard, it should be recalled that a significant proportion of that population has been living within an institutional system defined by actors that operate outside the framework of the law and tend to impose their decisions by force. Ensuring that that population not only understands the need to comply with the law but also is able to do so is one of the great challenges of alternative development. That understanding and that ability require the presence of the State, which in most cases has been absent from the regions most affected by illicit crop cultivation. Therefore, alternative development programmes cannot simply be the responsibility of a specialized body. It
must be the responsibility of a group of entities that, through the shared exercise of their responsibilities, are able to contribute to opening up paths towards social, political and economic development, and inclusion by working hand in hand with the population concerned.

Given that the problem of narcotic drugs is seen as a critical issue at the international level, responsibility for solving that problem must also be assumed at that level. However, that does not mean that a group of countries has the right to dictate rules with which all those affected in one way or another by the production or use of narcotic drugs must comply. What it does mean is that there is a need to implement, with the participation of the population concerned, structures and processes of shared responsibility in which every global, national and local social actor assumes part of the financial and other costs of addressing the problem—insofar as each of those actors has contributed to the problem in one way or another and to a greater or lesser extent.

Moreover, it is vital that alternative development programmes be designed with the future in mind. Past experiences and the lessons learned from those experiences should be taken into account in order to guide forward-looking actions, but those actions should not be held back by the failures of the past, which are clearly attributable to the absence of the conscious, organized and efficient exercise of shared responsibility by the individual actors called on to promote such development. In other words, the true potential of alternative development has yet to materialize owing to the lack of genuine and active shared responsibility.

The actions in question should be the focus of specific partnerships established on the basis of a systematic programme and a long-term commitment to promote alternative development. Within such partnerships, all actors, including small-scale farmers; local and national authorities; enterprises; members of the international community; non-governmental organizations with a local, national or global reach; and other institutions could contribute, to the extent possible, their efforts, capacities—including technical expertise—and financial resources.

The responsibility of national and international public actors is not limited to issuing guidelines or adopting standards with a global or national reach to promote alternative development and thus replace illicit crops. Their responsibility commits them to ensuring that the standards they issue are flexible enough to be applied in a versatile manner by the persons who are located in the area concerned. Those experiencing the problem as farmers, neighbours or authorities with jurisdiction over that area should be fully familiar with the characteristics of those standards and are also expected to assume responsibility for the cost of implementing the solutions adopted.
However, that flexibility cannot be achieved and such persons cannot be called upon to assume their full share of responsibility until they have become part of the group that has participated in the discussion and adoption of the measures concerned. In other words, farmers and, in general, members of local communities must be part of the partnerships and not seen as the “object” of those partnerships. Moreover, it is on the basis of partnerships established in that manner that commitments of financial and other support that link the various actors should be formalized.

Furthermore, in the case of alternative development, almost all of the solutions that may be proposed require the commitment of other private actors. They play a role either in promoting the productive development of small farms that have already eradicated or are in the process of eradicating illicit crops, or in facilitating access to input and product markets. The role of promoter may go beyond the mere provision of advice or financial resources. With the informed agreement of the farmers, that role may, for example, develop into a partnership between entrepreneurs and small-scale producers.

Partnerships should be forged between various groups, each composed of actors from diverse backgrounds and areas of expertise. These include government entities at the national, regional and local levels; farming communities willing to eradicate illicit crops; centres for generating knowledge and technologies applicable to alternative development processes; international cooperation agencies; other non-governmental organizations interested in supporting alternative development processes and multilateral agencies that can create an enabling environment for the access of products to international markets.

Multilateral bodies and national Governments have a dual role: to shape the regulations applicable to alternative development processes, each within its area of competence, and to participate directly in the implementation of the programmes and projects defined within the framework of the partnership. Although the composition of partnerships would vary, community members committed to substituting illicit crops through alternative development programmes and projects should always have a major role in those partnerships.

Moreover, all of those actors are called on to play an important role in the creation of an enabling environment for alternative development, ensuring, for example, land rights, respect for the rights of indigenous groups and other minorities, human security, and the existence of political and financial institutions that are stable and inclusive\(^\text{15}\) at the local level. Thus, shared responsibility also extends to other areas that determine the impact of alternative development programmes.

\(^{15}\text{In the sense of institutions that serve citizens, as proposed by Acemoglu and Robinson [36].}\)
The sphere of activity of each of those actors is different, and they are therefore ranked on different hierarchical scales. That does not mean, however, that those hierarchies have to be replicated in every partnership. It is proposed that partnerships should have a non-hierarchical structure, a network organized according to the specific characteristics of each programme, on the basis of which the actions of the various actors are coordinated.

In today’s world, that coordination does not require a physical presence, and as a result, networks between the actors in a partnership are becoming increasingly important. In addition, those networks do not necessarily connect locations that are close to one another; some of the persons or entities that form part of the various groups of actors may be located in remote places, far from not only members of other groups but even members of their own group. It is important, therefore, to geographically locate every member of the partnership; to understand that every member is a component of the alternative development support network; and to establish the channels that connect them with the other members, and the type of flows that each is expected to generate and receive in order to develop the partnership. In other words, it is a question of translating the partnership into a network and “spatializing” it in order to understand and guide in a more appropriate manner the processes that take place within it.

Beyond technical exchanges at various levels, creating an international movement around alternative development has proven to be difficult. Nevertheless, the multifaceted network of local, national and international partnerships that is needed for alternative development to become increasingly effective will by itself create more linkages, more cooperation and a stronger sense of working towards common objectives among the various actors involved. As such, shared responsibility—if properly embodied in practical arrangements—will contribute to creating and strengthening an international movement around alternative development, especially if backed by the visibility and marketing power of the international private sector.

Alternative development cannot be regarded as a religion with almost immutable dogmas and practices. Far from being subject to rigid rules, the partnerships that are necessary for its success should be designed as practical, flexible and effective tools that are geared towards a future that transforms the tenets of human development into reality for those who have experienced the uncertainty of poverty, lawlessness and insecurity. The alternative development strategy requires the commitment of multiple actors and, for that reason, must be implemented on the basis of the principle of shared responsibility that is clearly established for each of those actors and expressly assumed by them. Today, that responsibility is part of the ethical commitment of every individual, every organization and every State to others.
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The land-drugs nexus: how illicit drug crop cultivation is related to access to land

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ABSTRACT

Illicit drug crops are mostly cultivated in rural areas affected by poverty, landlessness, insecure land rights and conflicts over natural resources. Land is one of the key factors of production in areas where the illicit drug economy is present. Whether or not the rural population has secure access to land influences its decision regarding which crops to cultivate: insecure land tenure makes farmers more vulnerable to the cultivation of illicit crops that can provide short-term income. Secure land rights and access to land can serve as incentives for long-term investments in arable land and facilitate access to credit. The present article examines the land-drugs nexus, analysing alternative development experiences and field research findings from Afghanistan, Bolivia (Plurinational State of), Colombia, Myanmar and Peru. The article concludes that alternative development programmes can benefit from land governance and titling of land. In that regard, the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security of the Committee on World Food Security of the Food and Agriculture Organization of the United Nations can provide important guidance.

1The content of the present article exclusively represents the opinions of the authors, not those of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) or any other third party. It is based on a previous GIZ desk study by Nike Arning (formerly Nike Affeld), commissioned by GIZ on behalf of the Federal Ministry of Economic Cooperation and Development (BMZ) of Germany, entitled “The nexus between drug crop cultivation and access to land: insights from case studies from Afghanistan, Bolivia, Colombia, Myanmar and Peru”.

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Introduction

Poverty, weak infrastructure, fragile institutions, lack of rule of law, weak governance and lack of access to markets are some of the main drivers of illicit drug crop cultivation. Rural populations living in drug crop cultivation areas often lack resources, access to public services and, most importantly, access to alternative sources of income. Afghanistan, Bolivia (Plurinational State of), Colombia, Myanmar and Peru together comprise a large share of the total global land area under opium poppy and coca cultivation. All five countries are characterized by insecure land rights and an unequal distribution of land, especially in drug crop cultivation areas, where land rights are often insufficiently formalized. In many drug crop cultivation areas, the land area available to small farmers is often not large enough to sustain their households. In eastern Afghanistan, for instance, opium poppy cultivation was found to be prevalent especially in those areas where farmers had access only to small areas of land. Mansfield finds that “the correlation between the size of land holdings and the proportion of land dedicated to drug crops is evident. Where household access to land is acute, both coca and opium [poppy] have been found to be extensively grown”.

In some cases, land conflicts coincide with violence, displacement and the resilience of the illegal economy. For example, the high level of land inequality in Colombia (with a land-related Gini coefficient of 0.87 in 2011) can partially be explained by drug trafficking and violence; in some cases, the presence of illegal armed groups hinders small farmers’ access to land and leads to forced displacement, which intensifies land abandonment.

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6 Instituto Geográfico Agustín Codazzi, Atlas de la Distribución de la Propiedad Rural en Colombia (Bogotá, 2012).


8 Ibid.
While local contexts may differ substantially in terms of infrastructure, rule of law and governance, land is one of the basic factors of production in areas with agriculture-based illicit drug crop cultivation. Whether or not the rural population has secure access to land influences its decision regarding which crops to cultivate: as the *World Drug Report 2015* indicates, in many drug crop cultivation areas, farmers of illicit crops tend to have smaller land holdings than those who only cultivate licit crops.\(^9\) Where access to land is scarce and food insecurity prevails, many farmers cultivate illicit crops as a cash crop that can provide short-term income. Conversely, secure land rights and access to land can serve as incentives for long-term investments in arable land and facilitate access to credit.\(^10\) As such, the land-drugs nexus has important implications for alternative development projects that intend to address the root causes of illicit cultivation in rural areas. In that context, land governance plays a fundamental role. The facilitation of responsible governance of land tenure can serve as an important pillar of alternative development initiatives and contribute to their sustainability. In that regard, the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*\(^11\) of the Committee on World Food Security of the Food and Agriculture Organization of the United Nations (FAO) can provide important guidance to current and future alternative development interventions.

Research on the correlation between access to land or security of land rights and drug crop cultivation is scarce. Therefore, as a first step towards closing the research gap, the present article attempts to answer the question of how access to land and drug crop cultivation are interrelated. Based on a review of recent literature and reports from international organizations, field missions and project evaluations, the present article is guided and complemented by information gathered from background discussions with authorities and experts from alternative development projects, international governmental entities and non-governmental organizations.

After providing a brief overview of the international drug policy framework on alternative development and the relevant concepts of land governance, the present article presents findings from five of the main drug crop-producing countries—Afghanistan, Bolivia (Plurinational State of), Colombia, Myanmar and Peru—and from experiences drawn from alternative development projects.

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\(^10\) Ibid.
International drug policy and land governance

Alternative development is an approach to rural development that seeks to sustainably reduce illicit drug crop cultivation by tackling its root causes, such as poverty and lack of access to licit markets.\(^{12}\) Sustainable use of natural resources lies at the heart of alternative development.\(^{13}\) However, in the past, the international drug policy framework generally has not considered the importance of access to land, land rights and land tenure security. In most international and regional drug control strategies and alternative development policies, land rights have played only a marginal role. Nonetheless, land governance can impact significantly on development efforts in rural areas characterized by fragile institutions, in particular on alternative development projects in which land use is expected to shift from illicit to licit purposes.

International drug policy framework

Relevant foundational documents for alternative development, such as the Action Plan on International Cooperation on the Eradication of Illicit Drug Crops and on Alternative Development (General Assembly resolution S-20/4 E), make no reference to land rights, access to land or ownership in general. That is also true of the Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem.\(^{14}\)

Only in 2011, the first International Conference on Alternative Development in Chiang Mai and Chiang Rai, Thailand, laid the foundation for greater consideration of land issues in international drug policy. Land ownership and other resource management issues were considered important in establishing legal and sustainable livelihoods, and in creating incentives for transitioning to legal agricultural activities. The recognition of existing land rights, in particular, was seen as crucial for lessening the dependency on illicit drug crop cultivation and, therefore, for the success of alternative development projects:

Illicit cultivation mostly takes place in remote and underdeveloped areas where communities’ land rights and usage is unclear. Successful [alternative development] programmes should therefore also address land

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\(^{13}\) United Nations Guiding Principles on Alternative Development (General Assembly resolution 68/196, annex); “Rethinking the approach of alternative development”.

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rights and tenure in order to improve access to and use of land and reduce the vulnerability of communities and their dependency on illicit cultivation. Collective and community property needs to be respected. Improving access to markets and social and productive infrastructure leading to value added systems is also important to create economically viable and licit alternatives.  

At the International Conference on Alternative Development, governmental delegates, in consultation with civil society, formulated what would later become the United Nations Guiding Principles on Alternative Development when they were adopted by the Commission on Narcotics Drugs in 2013. The Guiding Principles recognize the protection of land rights as an important factor for the success of alternative development programmes:

Effective alternative development strategies and programmes require, as appropriate, the strengthening of relevant governmental institutions at the national, regional and local levels. Public policies should be supported to the extent possible by, inter alia, strengthening legal frameworks, involving local communities and relevant organizations, identifying and providing adequate financial support, technical assistance and increased investment, and recognizing and enforcing property rights, including access to land.  

In their action and implementation measures, the Guiding Principles take land rights and land management issues into account for the planning, implementation and evaluation of alternative development programmes involving indigenous peoples.

Only recently has the importance of access to land been considered more prominently: at the second International Conference on Alternative Development, held in Chiang Rai and Chiang Mai and Bangkok in 2015, and at the thirtieth special session of the General Assembly on the world drug problem, held in 2016. The outcome document of the second International Conference on Alternative Development highlighted the important role the promotion and protection of access to land and land rights play in the implementation of alternative development programmes. The General Assembly, in its resolution S-30/1, adopted at its special session on the world drug problem in 2016, underlined the role of “access and legal titles to land”.

\[\text{\textsuperscript{15} International Workshop and Conference on Alternative Development in Chiang Rai and Chiang Mai, Thailand, 6-11 November 2011 (E/CN.7/2012/CRP.3), para. 41.} \]

\[\text{\textsuperscript{16} Outcome of the International Conference on Alternative Development: International Guiding Principles on Alternative Development” (E/CN.7/2013/8, annex, appendix).} \]

\[\text{\textsuperscript{17} Outcome of the international seminar/workshop on the implementation of the United Nations Guiding Principles on Alternative Development and the Second International Conference on Alternative Development (E/CN.7/2016/13).} \]
for farmers and local communities, which will also contribute to preventing, reducing or eliminating illicit cultivation and other drug-related activities”; this document is expected to guide international drug policy in the years ahead and therefore can be an important step forward in mainstreaming land issues effectively in alternative development.

**Concepts of land governance**\(^{18}\)

Land relations are based on “the rules of the game”, on formal and informal institutions\(^{19}\) and, in particular, on property rights. Governance refers to the processes by which authority is conferred on different decision makers, such as national parliaments, administration at different regional levels, family heads, village elders, elected community leaders or international regimes and organizations. Governance also refers to the processes by which decision makers design these rules (e.g., statutory rules in contract law, land laws, land use regulations or informal, often unwritten rules and codes of conduct summarized as customary tenure), and the processes by which those rules are enforced (for example, by forest officers or land priests, or by the FAO Voluntary Guidelines) and modified. This modification may refer to new regulations on foreign direct investment in land, restricting specific rental contracts from the past, such as sharecropping, as well as formulating land reform principles (e.g., the “willing seller, willing buyer” approach) and implementation procedures for recovery measures in post-conflict situations.

Violence is often linked to land conflicts, for example, as various armed groups and government and civilian actors compete for control over land and its exploitation.\(^{20}\) Therefore, it is important to have an adequate understanding of land tenure issues, at the least to avoid causing additional harm, but also in efforts to design effective development programmes. Land policy and land regularization as elements of land governance and peacebuilding tend to be underrated and have received insufficient attention in development cooperation.\(^{21}\) Yet land policy clearly plays a fundamental role both in recovering from conflict and in ensuring that further conflict does not arise.\(^{22}\)

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\(^{21}\)*Land in German Development Cooperation*, p. 60.

\(^{22}\)John Bruce and Sally Holt, “Land and conflict prevention”, *Conflict Prevention Handbook Series*, No. 6 (Colchester, United Kingdom, Initiative on Quiet Diplomacy, University of Essex, 2011).
Bearing in mind the historical development of land tenure systems, not only in developing countries, and resulting conflicts about land relations (e.g., as a result of large-scale land investments), it becomes evident that considerations on governance and its quality are the key to understanding the functioning and shortcomings of land tenure today and to formulating standards for future land tenure systems. In countries such as Zimbabwe, South Africa and some Central American countries, the struggle for access to land has left traces of violence and political unrest.\textsuperscript{23} In such contexts, ignoring the rule of law has not only hindered land reform processes and led to land expropriation for public purpose (e.g., large dam projects) but also led to the denial of customary or secondary resource rights of the rural poor, especially women.\textsuperscript{24} The principles of accountability and giving local inhabitants a voice in matters are often neglected when it comes to the conversion of land use patterns, for example, as a consequence of deforestation or direct investment in large tracts of land.

The regulatory instruments in most countries are, at best, developed at a national, de jure level, while transforming rules and regulations into viable practice at a local user level is often still lacking. This is partly due to ineffective, sometimes corrupt government agencies that are allocating land, formulating land use regulations or addressing local land conflicts. Faced with such challenges, land governance has become more complex in recent decades, requiring a thorough analysis and policy recommendations that are based on a systematic approach and working at multiple levels. To solve land tenure problems and strengthen sustainable land management, rules and enforcement mechanisms are required at different administrative levels, because only multi-level or multi-layer governance can adequately meet these challenges.

Experiences over the past two decades have shown that setting or reforming constitutional norms, such as new land legislation (e.g., in parts of Africa, and in Cambodia) is only a first step at the national level to provide for effective governance.\textsuperscript{25} Local community-based monitoring and enforcement mechanisms based on statutory and customary norms have to be equally aligned and harmonized with the national level.\textsuperscript{26} Land governance is at the core of all “local to global” endeavours to create favourable conditions for sustainable land and resource use, to enable organized change and adaptation to newly emerging challenges, and to allow for comprehensive stakeholder participation.

\textsuperscript{25} Land in German Development Cooperation, p. 7.
\textsuperscript{26} Ibid.
Thus, land governance is fundamental for the effective implementation of sustainable alternative development projects.\textsuperscript{27} Drug crop cultivation areas are generally located in remote rural areas, characterized by fragile institutions and, in many cases, a post-conflict setting. As various decades of implementing alternative development have shown, establishing sustainable development and livelihoods for the population living in these areas cannot be achieved simply by substituting illicit drug crops with licit income opportunities; this must be accompanied by the improvement of overall socioeconomic conditions.\textsuperscript{28}

Land policies are a fundamental component of political strategies to achieve sustainable development. To support alternative development, a land policy should first set the objectives to be achieved through the implementation of the policy framework. The primary objectives are securing land rights for all, improving livelihoods and socioeconomic development and, in general, the sustainable management of land and related resources in order to effectively contribute to sustainable development. While each country will have a different emphasis, based on its specific context, there are three main superordinate guiding principles necessary for a rational land policy: (a) efficiency and promotion of economic development; (b) equity and social justice; and (c) accountability through clear responsibilities and transparent processes.\textsuperscript{29}

Land administration systems provide the infrastructure for implementing land policies and strengthen land governance through regulations and technical instruments and tools to document and manage land rights. They provide the background information for structural change and transformation processes. Therefore, the establishment of a comprehensive structure for efficient land administration has become a central part of development cooperation efforts.\textsuperscript{30}

Some of the advantages that the systematic establishment of a land register provides for individual owners and the community are:\textsuperscript{31}

\begin{itemize}
  \item Improved certainty in law with respect to land
  \item Creation of incentives for investments and for the sustainable use of land
  \item Improved access to credit
\end{itemize}

\textsuperscript{27} World Drug Report 2015.

\textsuperscript{28} Ibid.

\textsuperscript{29} W. Zimmermann, “Land policy and land governance issues”, presentation at the regional symposium “Towards efficient land management for development and economic growth”, held in Kuwait on 4 and 5 December 2013.

\textsuperscript{30} Land in German Development Cooperation, pp. 14 and 15.

\textsuperscript{31} Ibid.
• Security and efficiency of property transactions
• Minimization of land conflicts and the costs associated with them

Some potential advantages for the Government are:
• An efficient basis for raising a land tax
• A basis for structural adaptation such as land reform, land redistribution and rehabilitation of urban areas
• Control over land transactions
• An efficient basis for planning (land use planning, effective procedures of land allocation and permission for specific land use)
• An effective management of information in the public administration

On the other hand, some possible concerns regarding the establishment of land administrations systems include:
• High institutional and financial cost of the establishment of the land register and especially its maintenance
• The concern that the establishment of a land register may strongly change or manipulate indigenous land tenure
• The concern that the establishment of a land register could mean that land ownership becomes individualized, and secondary rights will be ignored
• The concern that the land register could soon become out-of-date because changes are not recorded for various reasons, including but not limited to corruption, inaccessibility of land administration services and high transaction costs

The Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security set out internationally accepted standards and practices for responsible tenure governance. They set forth clear expectations to be fulfilled by Governments with the purpose of increasing land tenure security, urging States to do the following:
• Recognize and respect all legitimate tenure right holders and their rights. They should take reasonable measures to identify, record and respect legitimate tenure right holders and their rights, whether formally recorded or not; to refrain from infringement of tenure rights of others; and to meet the duties associated with tenure rights.
• Safeguard legitimate tenure rights against threats and infringements. They should protect tenure right holders against the arbitrary loss of their tenure rights, including forced evictions that are inconsistent with their existing obligations under national and international law.
• Promote and facilitate the enjoyment of legitimate tenure rights. They should take active measures to promote and facilitate the full realization of tenure rights or the making of transactions with the rights, such as ensuring that services are accessible to all.

• Provide access to justice to deal with infringements of legitimate tenure rights. They should provide effective and accessible means to everyone, through judicial authorities or other approaches, to resolve disputes over tenure rights; and to provide affordable and prompt enforcement of outcomes. States should provide prompt, just compensation where tenure rights are taken for public purposes.

• Prevent tenure disputes, violent conflicts and corruption. They should take active measures to prevent tenure disputes from arising and from escalating into violent conflicts. They should endeavour to prevent corruption in all forms, at all levels, and in all settings.

The nexus between access to land and drug crop cultivation

Taken together, Afghanistan, Bolivia (Plurinational State of), Colombia, Myanmar and Peru comprise the principal countries of illicit coca and opium poppy cultivation (see table 1). Afghanistan is by far the world’s largest producer of illicit opium poppy. In that country, illicit cultivation has experienced rapid growth since 2004. Moreover, 90 per cent of the total illicit cultivation takes place in the country’s southern and western regions.32 After Afghanistan, Myanmar is the country with the second largest opium poppy cultivation. Most of the opium poppy of Myanmar is grown in Shan State, with the remainder grown in Kachin State.33

Worldwide, coca bush cultivation is mainly concentrated in Bolivia (Plurinational State of), Colombia and Peru. In 2014, the area under cultivation in Colombia increased. Coca bush is currently grown in 23 of 32 departments.34 Coca cultivation in Peru decreased in 2014. According to UNODC estimates, in 2014 coca was being grown in 13 regions of Peru, with the VRAEM geographical area (Valle de los Ríos Apurímac, Ene y Mantaro) accounting for 43.9 per cent.35 The Plurinational State of Bolivia is the third largest

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33 UNODC, Southeast Asia Opium Survey 2015: Lao People’s Democratic Republic and Myanmar (Bangkok, 2015).
34 UNODC and Government of Colombia, Colombia: Coca Cultivation Survey 2014 (Bogotá, July 2015).
producer of coca, which is mainly cultivated in the Yungas de la Paz and the Trópico de Cochabamba.\textsuperscript{36}

Table 1. Area of cultivation of opium poppy (Afghanistan, Myanmar) and coca (Plurinational State of Bolivia, Colombia, Peru), in hectares

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca bush</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bolivia (Plurinational State of)</td>
<td>30 500</td>
<td>30 900</td>
<td>31 000</td>
<td>27 200</td>
<td>25 300</td>
<td>23 000</td>
<td>20 400</td>
<td>20 200</td>
</tr>
<tr>
<td>Colombia</td>
<td>80 953</td>
<td>73 139</td>
<td>61 812</td>
<td>63 762</td>
<td>47 790</td>
<td>48 189</td>
<td>69 132</td>
<td>96 084</td>
</tr>
<tr>
<td>Peru</td>
<td>56 100</td>
<td>59 900</td>
<td>61 200</td>
<td>62 500</td>
<td>60 400</td>
<td>49 800</td>
<td>42 900</td>
<td>40 300</td>
</tr>
<tr>
<td>Opium poppy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afghanistan</td>
<td>157 000</td>
<td>123 000</td>
<td>123 000</td>
<td>131 000</td>
<td>154 000</td>
<td>209 000</td>
<td>224 000</td>
<td>183 000</td>
</tr>
<tr>
<td>Myanmar</td>
<td>28 500</td>
<td>31 700</td>
<td>38 100</td>
<td>43 600</td>
<td>52 000</td>
<td>57 800</td>
<td>57 600</td>
<td>55 500</td>
</tr>
</tbody>
</table>

Source: UNODC crop monitoring.

Little comparable data exist on access to land for different countries. One possible measurement to act as a proxy for accessibility of land is to measure the effectiveness of land governance and administration. The World Bank Group’s Doing Business project,\textsuperscript{37} which ranks countries according to the ease of doing business in them, includes an indicator on the ease of registering property. One of its measures is the quality of land administration index (see table 2), which measures the reliability of infrastructure, transparency of information, geographic coverage and capability for land dispute resolution, based on an analysis of each economy’s largest business city. As such, this measure serves as an indicator for the general land administration system. The index shows relatively positive results for Peru and Colombia, while Myanmar and Afghanistan are at the lower end of the ranking.

Table 2. Quality of land administration index

<table>
<thead>
<tr>
<th>Country</th>
<th>Registering property rank</th>
<th>Quality of the land administration index (0-30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD high-income economies</td>
<td>-</td>
<td>22.7</td>
</tr>
<tr>
<td>Peru</td>
<td>35</td>
<td>17.0</td>
</tr>
<tr>
<td>Colombia</td>
<td>54</td>
<td>16.0</td>
</tr>
<tr>
<td>Bolivia (Plurinational State of)</td>
<td>143</td>
<td>7.0</td>
</tr>
</tbody>
</table>

\textsuperscript{36}UNODC and Plurinational State of Bolivia, \textit{Estado Plurinacional de Bolivia: Monitoreo de Cultivos de Coca 2014} (La Paz, August 2015).

\textsuperscript{37}World Bank, Doing Business project data. Available online at www.doingbusiness.org/ (retrieved on 7 April 2016).
However, the functioning of the formal land administration system is not a sufficient condition for access to land. Even where formal institutions are in place, land is often distributed unequally, especially in rural areas in many developing countries: “The regulatory quality in most countries is at best achieved at a national, de jure level, transforming rules and regulation into viable practice at a local user level is often still missing”.\(^{38}\) The 2011 United Nations Development Programme (UNDP) national human development report for Colombia, for instance, compares Gini coefficients of land concentration, showing high levels of concentration in Colombia (0.85) and Peru (0.86).\(^{39}\) Illicit drug crops are mainly concentrated in remote rural areas, often characterized by fragile State institutions and a low prevalence of the rule of law.\(^{40}\) In most cases, the population in these areas is affected not only by poverty but also by landlessness or insecure land rights, even when land rights are well acknowledged at the national level. This holds true, for example, for some of the most relevant drug crop cultivation regions in Colombia. Ten Colombian departments that together account for more than 95 per cent of all coca cultivation in the country exhibit considerably high levels of inequality in land property (see table 3).

### Table 3. Gini coefficient of properties in drug crop cultivation regions of Colombia, in 2009

<table>
<thead>
<tr>
<th>Department</th>
<th>Gini coefficient of property, 2009</th>
<th>Coca cultivation (as a percentage of total national cultivation level in 2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nariño</td>
<td>0.82</td>
<td>25</td>
</tr>
<tr>
<td>Putumayo</td>
<td>0.72</td>
<td>20</td>
</tr>
<tr>
<td>Norte de Santander</td>
<td>0.73</td>
<td>10</td>
</tr>
<tr>
<td>Caquetá</td>
<td>0.64</td>
<td>9</td>
</tr>
<tr>
<td>Cauca</td>
<td>0.84</td>
<td>9</td>
</tr>
<tr>
<td>Guaviare</td>
<td>0.56</td>
<td>8</td>
</tr>
</tbody>
</table>

\(^{38}\) *Land in German Development Cooperation*, p. 24.


\(^{40}\) *World Drug Report 2015*. 

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**Country Registering property rank**

<table>
<thead>
<tr>
<th>Country</th>
<th>Registering property rank</th>
<th>Quality of the land administration index (0-30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myanmar</td>
<td>145</td>
<td>4.0</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>184</td>
<td>3.0</td>
</tr>
</tbody>
</table>

The land-drugs nexus: how illicit drug crop cultivation is related to access to land

<table>
<thead>
<tr>
<th>Region</th>
<th>Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meta</td>
<td>0.86</td>
<td>7</td>
</tr>
<tr>
<td>Antioquia</td>
<td>0.91</td>
<td>3</td>
</tr>
<tr>
<td>Chocó</td>
<td>0.85</td>
<td>3</td>
</tr>
<tr>
<td>Bolivar</td>
<td>0.76</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Author’s compilation based on data from UNODC crop monitoring (Colombia: Coca Cultivation Survey 2014) and the 2011 UNDP human development report for Colombia (Colombia Rural: Razones para la Esperanza). A similar table can be found in a joint publication from UNODC and the Government of Colombia (“Estructura económica de las unidades productoras agropecuarias en zonas de influencia de cultivos de coca”).

Land is an important production factor in drug crop cultivation areas. In areas where arable land is scarce, people often rely on the illicit cultivation of drug crops such as coca bush or opium poppy, serving as cash crops. In transitioning to viable alternative income activities, they face challenges such as limited market access for licit products due to a lack of roads and infrastructure, information, and knowledge and capacities needed to effectively market alternative produce.

Especially in drug crop cultivation areas affected by conflict, land can play an important role for the livelihoods of farmers and to a large extent determines their vulnerability. A study on conflict processing in the provinces of Kunar, Laghman and Nangarhar in Afghanistan describes a prevalent risk scenario: "The dependency and vulnerability of farmers with little or no land has increased with the extent of the opium poppy economy. Conflict-prone coping strategies applied to outside shocks (eradication, crop failure, price fluctuation) become more widespread as a result of dependency and vulnerability.”

Secure access to land can influence decisions on the type of crops that farmers cultivate. The income of farmers cultivating coca or opium poppy is not necessarily higher than the income of other farmers. The Southeast Asia Opium Survey 2015, for example, indicates that opium-producing households in Shan State of Myanmar had a higher household income than non-opium-producing households in 2014 but a lower household income in 2015. In this regard, prices are a key factor. Often the returns per land unit of opium

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41“Estructura económica de las unidades productoras agropecuarias en zonas de influencia de cultivos de coca”.

42Noam Lupu, “Towards a new articulation of alternative development: lessons from coca supply reduction in Bolivia”, Development Policy Review, vol. 22, No. 4 (2004), pp. 405-421. This is also substantiated in a very broad range of literature on alternative development and confirmed for instance by different socioeconomic analyses of UNODC, inter alia, the Afghanistan Opium Survey 2015.


poppy or coca cultivation are higher than for other crops, especially where technical knowledge for the cultivation of other cash crops is lacking. Therefore, where legal alternatives on small land plots are not sufficient to provide a livelihood, many farmers grow drug crops. What is more, the transition to licit crops that have the potential to provide a livelihood not only requires financial resources and sufficient land but also a certain transition period. While coca leaf can be harvested up to three or even four times a year, coffee, for instance, needs several years before it produces the first fruit. Insecurity over land rights, limited access to lands or the risk of recurrent conflicts therefore often means that farmers refrain from investing in this kind of long-term licit activities. In the context of Afghanistan, Goodhand finds that “farmers grow poppy firstly because of its comparative advantages and multi-functional role in relation to other crops and secondly because it provides access to land and credit” and that “poppy in many places has become the main way of gaining access to land or to seasonal employment.”

How lack of access to land is interlinked with the cultivation of illicit drug crops

Systematic crop monitoring by UNODC in several drug crop-producing countries has provided ample evidence of the relevance of land issues to drug crop cultivation. This is further documented by several studies and evaluation reports on alternative development projects. While there are different factors contributing to drug crop cultivation, areas of cultivation are typically characterized by poverty and inhabitants often suffer from lack of access to land. In Afghanistan, for instance, in many areas there is a close connection between the cultivation of opium poppy and rural poverty, with the latter being determined, inter alia, by landlessness and insecure land rights.

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46 “Estructura económica de las unidades productoras agropecuarias en zonas de influencia de cultivos de coca”, p. 59.
48 Southeast Asia Opium Survey 2012; Southeast Asia Opium Survey 2015; and “Estructura económica de las unidades productoras agropecuarias en zonas de influencia de cultivos de coca”.
49 For instance, see Mansfield, Diversity and Dilemma: Understanding Rural Livelihoods and Addressing the Causes of Opium Poppy Cultivation in Nangarhar and Laghman, Eastern Afghanistan; ibid., “Responding to the challenge of diversity in opium poppy cultivation in Afghanistan”, in Afghanistan’s Drug Industry: Structure, Functioning, Dynamics, and Implications for Counter-Narcotics Policy, Doris Buddenberg and William A. Byrd, eds. (UNODC and World Bank, 2006).
51 Goodhand, “Frontiers and wars: the opium economy in Afghanistan”.
The land-drugs nexus: how illicit drug crop cultivation is related to access to land

In addition to this, land prices, rent levels and borrowing costs are increasingly dependent on opium poppy production. Research conducted in Nangarhar Province has shown that the cultivation of opium poppy is spurred not only by factors such as high population density and the limited opportunities for income generation outside the agricultural sector, but also by the lack of access to irrigated land.

In several areas in Afghanistan where opium poppy is grown, accessible land parcels are too small for a family to secure a legal income. With its high per-hectare yields, opium poppy cultivation is the only option for many families with few resources—including land resources—to make a living from agriculture. Isolated households without access to resources have little prospects of achieving alternative livelihoods. In 2012, 20 per cent of those interviewed for the UNODC Afghanistan opium survey named the high income that it is possible to generate on a small plot of land as their main reason for cultivating opium poppy in the 2011/12 growing season. By the time of the 2014 Afghanistan opium survey, that was the fourth most frequent answer, given by 8 per cent of the farmers.

The situation in Myanmar is similar. According to the Southeast Asia Opium Survey 2012, the lack of access to land was one of the main reasons for the continued growing of opium poppy in the country. While villages with opium cultivation and those without have many commonalities, there is a major difference between them with regard to the availability of land for the production of food. In villages without opium poppy fields, households had access to larger land plots, which were also better irrigated. Households had access to an average of 1.2 hectares more land (corresponding to 62 per cent more land than had households in areas where opium poppy was grown). Households with limited access to land, meanwhile, were growing opium poppy in order to purchase food with the proceeds from their sales.

The Southeast Asia Opium Survey 2015 shows that in 2014, only 38 per cent of households in poppy-growing villages owned permanent paddy land,
compared with 56 per cent of the households in non-poppy-growing villages. For 2015, these figures converged, with 48 per cent of the households owning paddy land in poppy-growing villages and 53 per cent in non-poppy-growing villages. The report infers that poppy-growing households tend to invest their earnings in livestock and land.59

For Colombia, a 2010 UNODC study on the economic structure in four of its main drug crop-producing departments found that a large share of the rural population did not have formal land titles.60 In those regions, 46 per cent of households cultivated land without land titles. From that share, the household income of those households involved in the cultivation of illicit crops was greater than those of households without illicit crop cultivation. The study attributes the occupation of land without titles mainly to the tradition of informality among small holders and the lack of access to formalization procedures.61 Eradicacion further contributed to the cultivation of coca on parcels that were difficult to access and far from the farmers’ homes. Especially in Meta-Guaviare, farmers were found to cultivate illicit crops in isolated areas, which led to increased deforestation.62 A crucial observation of this study is that only 7 per cent of the households had formal access to credit. While 8 per cent of the households without coca cultivation could access credits, only 4 per cent of the coca-producing households were able to do so. Credits are often conditional on having land property as collateral for the issuing credit agency. That limits the potential investment that households without formal access to land can make in either agricultural production or the purchase of further land.63

**Gender aspects**

Lack of access to land often affects women disproportionately in drug crop cultivation areas (as well as elsewhere).64 This has important implications where access to land determines the ability of small farmers to transition to

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59 *Southeast Asia Opium Survey 2015.*
60 In Meta-Guaviare, Putumayo-Caquetá and Orinoquia 50 per cent, 48 per cent and 79 per cent of the households, respectively, did not have formal land titles. In Pacifico, 32 per cent of the households did not have officially registered land, while most of the population who had access to land benefited from communal land titles.
61 “Estructura económica de las unidades productoras agropecuarias en zonas de influencia de cultivos de coca”.
62 Ibid.
63 Ibid.
64 “Gender and alternative development: experiences gained with participatory project work in the coca-cultivating areas of Peru” (Eschborn, Germany, Deutsche Gesellschaft für Technische Zusammenarbeit, 2000).
licit livelihoods. A survey of a land titling programme in the Trópico de Cochabamba in 2006, for example, found that 47 per cent of land titles were held by men, 35 per cent were held by both a man and a woman, and only 13 per cent were held exclusively by women. Often women can access legal land titles only through their husbands or male relatives. This impedes their access to formal credit systems and sometimes also to programmes for alternative development. Thus, women’s decision-making power and possibilities to invest are often severely restricted, and it may even be impossible for them to have access to land.

While women, due to prevailing gender roles in many drug crop cultivation areas, often have less access to land, they tend to have a more integral understanding of securing a livelihood with a longer-term perspective. The responsibility for supplying food can motivate households to diversify agricultural production and to grow food crops rather than illicit drug crops. Engaging women can therefore be particularly conducive to the sustainability of alternative development because in many cases they have shown to be more reluctant than men to curtail subsistence production in favour of coca.

In Afghanistan, for instance, the few land titles that have been formally issued are almost exclusively held by men. According to the constitution, women have a right to own land. But in reality, women often sign over their land rights to the men in their families. It is estimated that fewer than 2 per cent of Afghan women own land. A study on the role of women in opium poppy cultivation found that only 3 of 157 women interviewed in several northern and eastern Afghan provinces responded that they were involved in making decisions to select the crops their household would cultivate. Those three women reporting being involved were widows, employing either a sharecropper to cultivate the land or taking decisions in conjunction with a son. Widows or single women often have access to neither land nor

65 Lupu, “Towards a new articulation of alternative development: lessons from coca supply reduction in Bolivia”.
67 “Gender and alternative development”.
68 Ibid.
69 Ibid.
71 Ibid.
financing, which excludes them from some of the most important resources for securing their livelihood in rural areas.\textsuperscript{73}

While more research is needed on gender roles in drug crop cultivation, the UNODC \textit{Afghanistan Opium Survey 2015} already offers some important insights regarding the diversity of women’s perspectives on opium poppy cultivation.\textsuperscript{74} Women have great potential to generate more licit income. The survey states that “it is obvious that additional cash income from the labour of women can reduce the economic pressure to cultivate poppy”. This also depends on women’s access to arable land. For example, the survey highlights cases in which women were not able to cultivate land because they were not allowed to access land far from their home. Furthermore, the survey found that “[a] stronger inclusion of women into the work force and the provision of income-generating opportunities for women can reduce the dependency of households on illicit crop cultivation and empower women to play a stronger role in the decision-making processes of households”. While there is still no clear-cut picture of women’s decision-making power over land use and in the selection of crops,\textsuperscript{75} the question of how improved access to land for women can contribute to sustainable livelihoods in drug crop cultivation areas needs to be addressed.

\textit{Fragile institutions}

The following examples show that drug crop cultivation is frequently related to fragile institutions (e.g., property insecurity and legal ambiguity over land access), as well as to issues such as migration or security related to land issues. For example, migration to drug crop cultivation areas can be triggered by the degradation of soils, as for instance in the Yungas de la Paz region in the Plurinational State of Bolivia.\textsuperscript{76} Such migration might also be caused by conflicts related to land or lack of access to land, for instance, when land is illegally appropriated by armed groups who, in some cases such as in Colombia, finance themselves through trafficking in drugs and even fight over control of drug trafficking.\textsuperscript{77} In addition, migration can also cause environmental degradation, pushing the frontier of agricultural land further into new areas where, once again, people do not have legal access to land. In many cases where farmers cultivate illicit drug

\textsuperscript{73}“Gender and alternative development”.

\textsuperscript{74}UNODC and Afghanistan, Ministry of Counter-Narcotics, \textit{Afghanistan Opium Survey 2015: Socio-economic Analysis} (Kabul, March 2016).

\textsuperscript{75}Ibid.

\textsuperscript{76}Ana B. Villamil Soler, “Informe de consultoría: descripción y análisis de la situación actual del sector de desarrollo integral con coca en Bolivia y el rol del FONADAL en este sector”, (La Paz, 2011).

crops, Governments apply forced eradication strategies.\textsuperscript{78} This can also lead to farmers abandoning their fields and the shifting of illicit cultivation to new growing areas. The following examples will highlight some of these mechanisms.

In the past, government coca eradication activities in Andean countries have pushed coca farmers deeper into the Amazon, where due to a lack of economic alternatives, forest areas were first cleared and then planted with new coca cultivation.\textsuperscript{79} In Peru, for instance, coca cultivation is mainly spread on the eastern slopes of the Andes and the Amazon lowlands. In the 1970s and 1980s, migration flows from the Andes into those forest areas were sparked by the agrarian reform law of 1969.\textsuperscript{80} This migration was subsequently further fuelled by the eradication of coca fields in the 1970s and 1980s.\textsuperscript{81}

The agricultural reforms led to a number of large-scale landholders to give up their haciendas (large plantation holdings).\textsuperscript{82} Before the land reform, some of the large-scale landholders had been growing coca for traditional use in limited quantities, licensed by the State company ENACO. When those holdings of land were redistributed to the field workers over the course of the land reform, some of these workers began to grow coca themselves, for sale on the black market, benefiting from the skills they had learned while working on the haciendas. The increase in illicit coca cultivation in the sparsely populated forest areas of the Amazon basin and the eastern slopes of the Andes led to the migration of many Peruvians from the highlands looking for work. The high rates of return for coca production further contributed to the increasing displacement of other crops such as corn or coffee, while the uncontrolled settlement process led to a dispersion of the illicit cultivation of coca.\textsuperscript{83}

In the Plurinational State of Bolivia, access to land and migration are also linked to coca cultivation. In some parts of the Yungas de la Paz region, cultivation in the “traditional zone”\textsuperscript{84} is legal to a certain extent.\textsuperscript{85} While coca cultivation is prohibited in most other parts of the country, in the

\textsuperscript{78}“Estructura económica de las unidades productoras agropecuarias en zonas de influencia de cultivos de coca”.


\textsuperscript{80}Fernando Eguren, eds., Reforma agraria y desarrollo rural en la región andina (Lima, Centro Peruano de Estudios Sociales, 2006).


\textsuperscript{82}Peru, Nueva reforma agraria: Decreto-Ley No. 17716 (1969).

\textsuperscript{83}Information based on anecdotal insights from discussion with an alternative development expert from Peru.

\textsuperscript{84}The traditional zone comprises the municipalities Coroico, Coripata, Chulumani, Cajuata, Irupana, Yanacachi, and parts of La Asunta and Apolo.

\textsuperscript{85}Law No. 1008 of 19 July 1988.
“transitional excess production zone” coca cultivation is subject to reduction strategies under the framework of “rationalization and eradication.” In these areas, coca cultivation is defined as “the result of a process of spontaneous or directed settlement, by which the expansion of excess cultivation accompanying the growth of demand for illicit uses was supported.” In this context, dispersion of coca crops can be a consequence of a lack of access to arable land in the traditional cultivation zone, for instance due to degradation of soils by excessive coca cultivation. In some parts of this area, households have divided their lands in order to provide a livelihood for their children when they start their own families. This has resulted in land fragmentation and consequently forces families to make a living from small properties. Research on alternative development projects in the municipality of La Asunta in the Yungas de La Paz has shown that many people then migrated to areas that were still fertile in order to engage in coca cultivation.

In Colombia, the concentration of land ownership and the displacement of farmers by the armed conflict have forced many among the rural population to settle elsewhere. According to the Office of the United Nations High Commissioner for Refugees, in Colombia the number of internally displaced persons was 5.7 million in 2014. Depending on the estimate used, these people have been displaced from at least 4 million up to 6.6 million hectares of land. About 80 per cent of those displaced by violence come from rural areas. People within the country have fled, inter alia, from violence and conflicts involving insurgent or paramilitary groups. These groups often intend to gain control over trafficking routes for coca or its derivative products for the drug market, as well as lands and plantations, in

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86 Ibid.
87 Ibid.
88 Villamil, “Informe de consultoría: descripción y análisis de la situación actual del sector de desarrollo integral con coca en Bolivia”.
89 Information from several project evaluation reports on the project BOLI79 (Sustainable and integrated management of the natural resources in the Tropics of Cochabamba and the Yungas of La Paz), conducted by Deutsche Gesellschaft für Internationale Zusammenarbeit in 2011, 2013 and 2015.
90 Amira Armenta, “The illicit drugs market in the Colombian agrarian context: why the issue of illicit cultivation is highly relevant to the peace process”, Drug Policy Briefing Nr. 40 (Amsterdam, Transnational Institute, 2013).

order to finance their operations. This form of land-grabbing has led to the further concentration of land ownership, especially in rural areas. In Colombia, both the land and drug issues are intrinsically linked to the peace process and part of the peace agreement between the Colombian Government and the FARC. One initiative of the Government therefore aims at the formalization of land rights for small-scale farmers in order to provide incentives to abandon coca cultivation.

Labour-intensive drug crop cultivation can attract migration as people look for work in the coca or opium poppy economy. This pull factor is even stronger where migrants have no access or only restricted access to land. After an initial engagement as day and seasonal workers, many move on to marginal areas looking for new agricultural land. In Afghanistan, for instance, seasonal migrants move from areas where no opium poppies are grown to areas where the illicit opium industry creates a demand for labour. Members of households with little or no access to land have in some cases migrated to other provinces when the landowners in their home provinces abandoned poppy cultivation. The increase in opium poppy cultivation in Balkh Province during the 2004/05 growing season, for example, can partially be traced back to newly arrived families that had come to Balkh searching for access to land and income-generating opportunities, because opium production in their home province Nangarhar had markedly fallen.

In some regions of Afghanistan, access to land and credit for many of the landless population is controlled by informal power-holders via the opium value chain. In those areas, for many, access to land can be gained only through relationships known as sharecropping, by which the landowner, or whoever controls the land, makes the land available to the sharecroppers along with part of the necessary agricultural inputs. In return, the sharecroppers receive a share of the harvest. Many sharecroppers sell their harvest, or part of it, in advance, at prices that are generally far below the market value, in order to buy the necessary production inputs. In some cases, it is not landless individuals entering into these sharecropping

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97 Ross Eventon, “Colombia: drugs and the peace agreement”, GDPO Situation Analysis (Swansea, United Kingdom, Global Drug Policy Observatory, Swansea University, 2016). Available at www.swansea.ac.uk.
98 Mansfield, “Responding to the challenge of diversity in opium poppy cultivation in Afghanistan”, p. 104.
99 Ibid.
relationships, but landowners, who thereby gain access to additional land. The decision as to what to grow on the land is generally made by the lessor with the agreement of the sharecropper. Sharecroppers who are willing to grow opium poppy are usually given preference when it comes to the allocation of parcels of land.  

In Afghanistan, whether or not opium poppy farmers are sharecroppers has an impact on the level of the income they derive from opium cultivation. Many sharecroppers receive only a small part of the opium harvest, which they sell at relatively low prices before the harvest. These advances can be used to purchase the agricultural inputs needed for opium production but also to cover their living costs. The income they receive from the opium harvest is often used to meet the family’s basic needs. Landowners, on the other hand, who lease their fields to sharecroppers, receive approximately two thirds of the harvest and therefore a much higher income. In addition, landowners are generally able to store the harvest for a certain period of time and sell it after the harvest period, for example, when market prices rebound. The sharecroppers, who enter into poor contractual terms, often do not have any capital or alternative sources of income.

A typology of dependency on opium poppy cultivation in Nangarhar, Afghanistan, shows that sharecroppers were highly dependent on the crop, while other tenants were less dependent, and landlords were not dependent at all. In terms of the extent of land cultivated in the summer and winter, farmers with small holdings (i.e., less than 7.5 jerib) were most dependent on opium cultivation, those with between 7.5 and 15 jerib of available land were less dependent, and those who cultivated over 15 jerib (3 hectares) of land were not dependent on opium poppy cultivation.

Large-scale investments in drug crop cultivation areas could have a critical impact on the access to land of small-holder farmers where land rights are not secured, as these initiatives are mostly based on financial incentives for large agribusiness rather than on financial support for national and local...
The land-drugs nexus: how illicit drug crop cultivation is related to access to land

This aspect needs further consideration, for instance, in the context of opium poppy cultivation in South-East Asia in the case of large-scale substitution programmes for opium poppy, where mainly private sector investments in rubber are implemented as an alternative to the production of illicit drug crops. The impact of increased investment on small-scale farmers’ livelihoods, among other places, in Myanmar’s regions bordering China, which is the main drug crop cultivation area in Myanmar, still needs to be determined. In this regard, land governance plays a crucial role.

During its more than 60 years of internal conflict, Myanmar did not have a codified set of land laws. In March 2012, two new laws were passed: the Farmland Law and the Vacant, Fallow and Virgin Lands Management Law. The Farmland Law sets forth that land can be exchanged on a market of individual land use certificates. The Vacant, Fallow and Virgin Lands Management Law provides the Government with the authority to allocate the lands of individual farmers and communities to national and international investors. This includes fields used for shifting cultivation in the highlands, and fields in the lowlands for which farmers do not hold any title. In the highlands, particularly, most farmers practice shifting cultivation, although only a few hold formal land titles for that purpose. Traditional and communal resource law is dominant in those areas. In 2016, a new National Land Use Policy was approved to harmonize existing land laws. While research on the impact of the new laws is still lacking, the implementation of those laws will have important implications for small-scale farmers and the impact of investment in rural areas on customary land tenure and food security.

Land governance in the context of alternative development

Households with secure access to agricultural means of production, especially land, access to legal sales markets, and additional non-agricultural

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111 Stephen Mccarthy, “Land tenure security and policy tensions in Myanmar (Burma)”, Asia Pacific Issues, No. 127 (Honolulu, East-West Center, October 2016).

sources of income seem to have the best chance of managing the transition to legal livelihoods. In that regard, access to land is a valuable asset for farmers for a transition to licit crops and therefore a crucial aspect for alternative development. A study on the impact of the opium ban in the Afghan province Nangarhar, for instance, shows the effects of the sudden loss of income from opium cultivation. While farmers with more land were able to draw on their already existing licit cultivation, the farmers who were most dependent on opium poppy were less able to maintain their livelihoods by shifting to wheat cultivation. On the contrary, the coping strategies applied by poorer farmers with less access to land rather increase the risk of not being able to abandon illicit cultivation in the long term. Some of the negative consequences have been the inability to access new loans or pay off debts, severe food shortage and the inability to provide for the education of their children. Regarding the Forest Ranger family programme in Colombia, UNODC states that “the promotion of access to rural property forms a fundamental part of the alternative development programmes, as the rooting of the land contributes to the farmers remaining removed from illicit crop cultivation and enables them to develop productive projects in the long term”.

Some alternative development projects, therefore, have relied on land registry and titling as a strategic component of strengthening licit agriculture. While there are several examples where land titling has been successfully integrated into alternative development, the cases of Bolivia (Plurinational State of) and Peru are given, drawing on the insights of German and European Union development cooperation projects.

In some alternative development projects in Peru, legal uncertainty regarding land ownership and land use often prevails due to the migratory nature of the target population, as for instance in the case of a project in the areas of the Alto Huallaga and Ucayali where only 18 per cent of the target population were born in the projects’ districts, while 30 per cent came from other districts in the same region and 52 per cent originated in other regions of the country. Generally, this migratory nature of the population poses obstacles for mid- and long-term investments, such as those necessary for growing coffee and cocoa, which requires several years before beginning to bear fruit. A project financed

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113 Mansfield, “Pariah or poverty?...”.
114 Ibid.
115 UNODC and Colombia, Colombia: Coca Cultivation Survey 2013 (Bogotá, June 2014), p. 81.
117 Reports of 2012, 2014 and 2016 by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on UNODC project PER/U87, “Sustainable agricultural development to reduce poverty through environmentally sustainable approaches and gender empowerment”, implemented in Alto Huallaga (Huánuco region) and Aguaytia (Ucayali region), Peru.
within the context of debt conversion agreements with Germany has therefore promoted land titling as a prerequisite for sustainable rural development in areas where drug crops are grown. In the San Martin region, between 2002 to 2007, the “Programme for alternative development: Tocache-Uchiza I” (PRODATU I) supported the formalization of around 12,000 property titles, benefitting about 15,000 households, accounting for 87 per cent of the province’s families and increasing the value of the lots.\textsuperscript{118} Furthermore, the project has supported the regional and local governments of Tocache in participatory land use planning, the promotion of sustainable land use, orderly settlement and well-informed decision-making by social, economic and political actors. Using all available sources (including a cadastre) and in consultation with a wide range of actors, including present and former coca growers, civil society groups, political actors and representatives of the private sector, a land use plan was developed for the province, defining specific zones for the cultivation of various alternative crops and forestry products.\textsuperscript{119}

Overall, social and economic indicators for San Martin have improved, and coca cultivation has almost completely disappeared in the region. Nevertheless, the transition to legal sources of income has been a rather difficult process for many farmers.\textsuperscript{120} While the land registration programme is acknowledged to be one of the main incentives for smallholder farmers to switch to alternative crops, the parcels of land in the region were often too small to ensure enough income for farmers growing coffee or cacao in the short term.\textsuperscript{121} Most of the coca fields ranged from just 0.25 to 3 hectares, while only a few farmers owned fields covering up to 7 hectares.\textsuperscript{122} This aspect of the situation shows that not only formalization of land titles but also access to arable land has important implications.

A key factor for successful implementation of land registry and formalization in local projects is the integration into national or regional processes. While in the past only a few farmers in the remote coca cultivation areas were able to receive ownership titles through the national land registration programme, the “Special land titling and cadastre project” (PETT), today, land titling is a fundamental pillar of the Government’s alternative development strategy. In this context, it was anticipated that between 2014 and

\textsuperscript{118}Gerhard Redecker, “Experiencias del KfW Entwicklungsbank (Banco Alemán de Desarrollo) con los proyectos de inversión pública financiados en el Perú”, presentation at the Encuentro de los Sistemas Nacionales de Inversión Pública de América Latina y Caribe, Lima, 16 October 2009.
\textsuperscript{119}Instituto de Investigaciones de la Amazonía Peruana, “Tocache: hacia el desarrollo sostenible—zonificación ecológica y económica” (Tocache, PRODATU, 2006).
\textsuperscript{120}Hugo Cabieses, “El ‘milagro de San Martín’ y los síndrome del ‘desarrollo alternativo’ en el Perú”, informe sobre políticas de drogas No. 34, 22 November 2010. Available at www.tni.org.
\textsuperscript{121}Mirella van Dun, Hugo Cabieses and Pien Metaal, “Between reality and abstraction: guiding principles and developing alternatives for illicit crop producing regions in Peru”, Drug Policy Briefing, Nr. 39 (Amsterdam, Transnational Institute, January 2013).
\textsuperscript{122}Ibid.
2016, 51,000 land titles were to be delivered to farmers participating in alternative development projects of the Peruvian National Commission for Development and Life without Drugs (DEVIDA). About 17,000 land titles had already been issued between 2011 and 2013.\(^{123}\)

The correlation between formalization of land rights in rural areas through PETT and the development of agricultural investments was the subject of a study conducted for a conference of the World Bank Group on land policy challenges.\(^{124}\) According to the study, there is a significant correlation between assuring land titles and people’s readiness to invest in the land. This correlation is particularly evident for parcels of land that were characterized by insecure land rights prior to the registration process. In most cases, the observed increase in agricultural investment, however, can only be traced back to the greater readiness of landowners to invest, and not to their improved access to credit. Greater access to formal loans, however, was observed, in particular among wealthy farmers who already had comparatively secure land rights prior to the registration of their land.\(^{125}\)

On the other hand, another study showed that land registration in Peru created better access to loans in particular for those who would have probably seen their loan applications denied in the absence of a land title, or who would not have tried to secure a loan in the first place due to the lack of a land title.\(^{126}\) It was observed that within this group there was an increase in income (including per hectare income and non-agricultural income) and an increase in investment in permanent crops.\(^{127}\) Both studies were in agreement that secure land rights in Peru have had a positive impact on agricultural investment.\(^{128}\)

Similarly, in the Plurinational State of Bolivia, land reform has had an important impact on alternative development.\(^{129}\) The 2006 renovation of a 1996 land reform law provided the foundation for more equal access to lands and improved gender equality. By March 2016, 165,000 land titles had been issued in the department of La Paz and 265,000 in the department

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\(^{123}\)DEVIDA, *Compendio Normativo sobre Tráfico Ilícito de Drogas y Desarrollo Alternativo* (Lima, 2016).


\(^{125}\)Ibid.


\(^{127}\)Ibid.

\(^{128}\)On the impacts of land registration in Peru, also compare with the information of the Ministry of Agriculture and Irrigation (www.minagri.gob.pe/portal).

\(^{129}\)The Programme to Support Community Coca Leaf Control (PACS). Further information available at www.controlsocial.bo.
of Cochabamba, the two departments where the country’s coca-cultivation areas are located.\textsuperscript{130}

In recent years, the Plurinational State of Bolivia has successfully reduced the area under coca cultivation while maintaining low levels of social conflict related to the reduction measures. Regarding the success of its alternative development programmes for that country, the European Commission has found that social inclusion, in terms of access to basic public services and land titling, is strategically relevant.\textsuperscript{131} Within that development cooperation, it is considered that the Programme to Support Community Coca Leaf Control (PACS) has substantially contributed to the stabilization of coca cultivation in the Trópico de Cochabamba.\textsuperscript{132} In the Plurinational State of Bolivia, a turnaround was accomplished in 2010, when the area under cultivation started to decline steadily, continuing to decrease until 2015.\textsuperscript{133} Since 2006, the country’s drug policy has focused on economic development and, among other things, specifically on land registry and titling as a fundamental pillar of its strategy to reduce coca cultivation.\textsuperscript{134} As described in greater detail in the article authored by Grisaffi, Farthing and Ledebur in this issue of the \textit{Bulletin on Narcotics}, this is combined with participation of coca farmers’ federations to ensure the adherence of communities to the cato agreement, which permits farmers in the Chapare and Yungas de la Paz regions to grow coca on 0.16 hectares and 0.25 hectares of land, respectively, for traditional purposes. The policy involves biometric registration of the coca farmers and the promotion of land titling in the course of the national registration process and the consolidation of land laws in the La Paz and Cochabamba coca production areas. This allows for satellite surveillance of coca plots, and the registration of parcels with the coca grower federations.\textsuperscript{135}

Various international cooperation projects have supported the registration of coca production areas in the Plurinational State of Bolivia within alternative development initiatives. The European Union first set out on this new path of alternative development with the programme to support the alternative development strategy in the Chapare (PRAEDAC), implemented between 1998 and 2006, and based on strengthening local institutions and

\textsuperscript{130}National Institute for Agrarian Reform (INRA). Further information available at www.inra.gob.bo.
\textsuperscript{131}“Estudio de la intervención de la Unión Europea en la política sectorial de desarrollo integral y de coca en Bolivia (1998-2010)”.
\textsuperscript{132}Ibid.
\textsuperscript{133}Estado Plurinacional de Bolivia: Monitoreo de Cultivos de Coca 2014.
\textsuperscript{134}Estado Plurinacional de Bolivia, “Plan Nacional de Desarrollo Integral con Coca 2006-2010” (La Paz, 2006).
promoting secure land rights.\textsuperscript{136} With the project’s assistance, 11,600 families received land titles.\textsuperscript{137} The European Union-financed PACS programme, implemented between 2007 and 2013, also included land titling as a fundamental pillar. PACS promoted the systematization of coca production monitoring through a geo-referenced system, the land registration process, supporting biometric registration of coca farmers and monitoring of the registered cultivation areas. The coca fields are usually monitored multiple times each year, using satellite and aerial imagery and site visits.\textsuperscript{138}

As part of the programme, the information system SYSCOCA generates thematic maps or lists of producers, and is available to coca farmer unions as a basis for their social control-related activities. It allows them to determine who owns the coca crops in a certain area, whether the farmers are adhering to the limits on coca production and how the total area under cultivation in certain areas changes over time. For the most part, this process has been conducted together with the issuing of corresponding land titles.\textsuperscript{139}

\textbf{Conclusion}

While in the past land issues often did not receive enough attention in alternative development, the 2013 United Nations Guiding Principles on Alternative Development explicitly emphasized the importance of land rights for the success and sustainability of alternative development efforts.\textsuperscript{140} In April 2016, the importance of this issue was also manifested at the special session of the General Assembly on the world drug problem held in 2016, which acknowledged the role that land rights play in alternative development.

Guidance on the implementation of effective land governance is provided by international guidelines that promote secure access to land, such as the Committee on World Food Security Voluntary Guidelines on Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security and the Principles for Responsible Investment in Agriculture and Food Systems (the RAI principles).

\textsuperscript{136}Villamil, “Informe de consultoría: descripción y análisis de la situación actual del sector de desarrollo integral con coca en Bolivia”.
\textsuperscript{137}Further information available at www.controlsocial.bo.
\textsuperscript{139}Further information available at www.controlsocial.bo.
\textsuperscript{140}General Assembly resolution 68/196, annex.
In the light of the political momentum and the guidance provided by international guidelines, the findings of this article are not intended to establish a conceptual approach that is applicable in every context, but, rather, to underscore the urgent need for more detailed and practical research. The findings show the relevance of land issues in the context of drug crop cultivation areas and, therefore, their central importance for alternative development. The article shows that the rural population’s insufficient access to land is conducive to the cultivation of drug crops. Lack of secured access to land incentivizes short-term economic activities and impedes access to credit. As a consequence, it hinders the sustainable transformation of illicit economies into legal economic systems.

When effectively integrated into alternative development programmes, the promotion of access to land and land tenure security can support the transition to legal economies. Land rights can facilitate security over means of production and livelihoods and enhance access to credit, thereby enabling investment in licit agricultural activities. A functioning land administration system (e.g., cadastre and land registration) not only increases control over illicit drug crop cultivation but is also conducive to alternative development measures. Secure access to land may not only provide a necessary condition for access to credit in many drug crop cultivation areas but also can serve as an incentive for sustainable agriculture and land use. In the context of alternative development, land registry can help to build trust and promote long-term engagement with projects that help to facilitate the transition to legal income activities, while at the same time strengthening the relationship between the community and local authorities.

Alternative development programmes need to consider the specific conditions in drug crop cultivating areas including the prevailing livelihood systems of the local population in regard to access to land and land tenure security. Where lack of access to land and land tenure insecurity prove to be a contributing factor to the illicit cultivation of drug crops, adequate land policies need to complement alternative development programmes. In many cases, alternative development projects, in turn, have proved to be effective in promoting the implementation of land policies via land use planning, land registration and a functioning land cadastre system.

A key factor for successful implementation of land registry and formalization in local projects is the integration into national or regional processes, as shown in the examples of the Plurinational State of Bolivia and Peru. This requires close coordination between the different actors responsible for the implementation of land policy and alternative development programmes. Local institutional capacities often need to be strengthened in order to promote the formalization and implementation of land rights and safeguards with regards to local communities, and gender aspects need to be established
in accordance with the Committee on World Food Security *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*.

Lastly, special attention is needed for women who often suffer disproportionately from structural disadvantages concerning their access to land. In general, landless people often benefit less from alternative development projects that aim at facilitating this transition. Lack of access to land can be further exacerbated by fragile institutions and land tenure insecurity stemming from conflict and migration that can either be a cause or consequence of the illicit drug economy. These findings are even more important in the light of the special session of the General Assembly on the world drug problem, held in 2016, which confirmed the relevance of land issues for alternative development.
Building resilience to opium poppy cultivation by strengthening the design of alternative development interventions: evidence from Afghanistan

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ABSTRACT
The present article evaluates farmer and community characteristics that promote resilience to opium poppy cultivation in Afghanistan. In general, resilience-building can be associated with measures to manage changes in contexts of long-lasting or recurring crisis, as opposed to measures aimed at controlling changes in stable systems. Afghanistan is a country in a state of constant, protracted crisis. As expected, the evidence gathered in the field suggests that farmers need sources of income that are not only profitable but also sustainable over time in order to keep them from cultivating opium poppy. The evidence also suggests that improvements in public services and governability are needed to turn opium poppy-growing communities into opium poppy-free communities and to keep communities free from opium poppy for longer periods of time. Other important factors that increase resilience include improvements in the adaptive capabilities of farmers, such as performing a large number of income-generating activities, cultivating a large number of crops and receiving awareness-raising information aimed at reducing opium poppy cultivation. Conversely, focusing on one-sided solutions, such as the sole provision of wheat as a crop substitute for opium poppy, or off-farm jobs, decreases resilience to opium poppy cultivation. Therefore, designers of evidence-based interventions need to invest time in understanding local conditions before designing such interventions, and fully consider and integrate farmer livelihood strategies, vulnerabilities and uncertainty with broad-based rural development in order to achieve sustainable reductions in opium poppy cultivation. The price of not doing so is high, as poorly designed interventions generate perverse incentives that are likely to lead to overall increases in opium poppy cultivation.

Keywords: farmer resilience, adaptive capability, illicit crop cultivation, drug-control policy, Afghanistan.

Introduction
Afghanistan dominates the world market for opiates, with an estimated 201,000 hectares of cultivated opium poppy and an estimated potential opium production of 4,800 metric tons in 2016 [1]. Opiates contribute
substantially to the Afghan economy and continue to be Afghanistan’s largest export [2]. However, opium poppy cultivation represents an unsustainable livelihood strategy. It fuels corruption, undermines the rule of law, provides financial support to insurgents and places people outside the legal system, making them vulnerable to violence and intimidation by non-State actors [2, 3].

Despite the great importance of the debate on opium poppy cultivation, its polemic nature has served to undermine efforts to present a more comprehensive understanding of those involved in opium poppy cultivation in Afghanistan and to develop drug control policies that better reflect the reality in the field [4]. To some extent, distance from and lack of exposure to the realities of the farmers involved in opium poppy cultivation have allowed policies to be built on articles of faith rather than on evidence from the field. Furthermore, the debate is often led by individuals with strong ideological or institutional positions and interests [4].

Therefore, the challenge still facing policymakers, strategists and the international community is, first, to be able to objectively identify the determinants of opium poppy cultivation, and then to design alternative development interventions that can structurally change the conditions that lead farmers to grow opium poppy [2]. At its special session on the world drug problem, the General Assembly clearly pointed out the need to “promote research by States, including through cooperation with the United Nations Office on Drugs and Crime and other relevant United Nations entities and international and regional organizations, academic institutions and civil society, to better understand factors contributing to illicit crop cultivation, taking into account local and regional specificities” [5].

Local and international organizations need greater support in developing a better understanding of the diverse circumstances and motives that influence illicit crop cultivation [6]. Such cultivation has been linked primarily with poverty issues; nevertheless, farmers’ motivations for cultivating illicit crops are diverse and many poppy growers are not actually poor [7]. It is unclear whether many non-poor poppy growers are motivated only by greed or whether vulnerability to poverty is also a factor motivating them to cultivate poppy to reduce their overall economic risk, as markets for the crop are relatively stable. In addition, recent research has shown that, although most poppy-growing farmers cultivate poppy every year, many do so only every other year [7]. Under such circumstances, it is important to analyse which conditions influence farmer and community resilience to opium poppy cultivation. Broadly speaking, such resilience refers to the capacity of farmers and communities to withstand stresses and shocks, or to their ability to endure in an uncertain world, without resorting to poppy cultivation. This definition also suggests that resilience is a dynamic concept.
The dynamic aspect of resilience has been generally overlooked in the context of alternative development interventions. The short-term investments often associated with alternative development do little to build farmers’ confidence that the necessary support required for the permanent transition from opium poppy cultivation to more diverse livelihoods will be available over the long term. The present article argues that alternative development interventions need to be framed as resilience-based interventions that are suitable under protracted crisis conditions; and Afghanistan can be regarded as a country in a state of constant, protracted crisis to which many farmers have showed limited capacity to respond without resorting to opium poppy cultivation. The adoption of resilience as a criterion for alternative development policy design shifts the focus of policies away from the aspiration to control change in systems assumed to be stable towards managing the capacity of socioeconomic systems to cope with, adapt to and shape change. The objective of resilience analysis is to improve the capacity of households and communities to respond to shocks and stress factors in a constructive and adaptive way.

Correspondingly, the present article aims to identify the major causes of resilience to opium poppy cultivation, categorizing such resilience in three ways:

- Resilience of farmers and communities to initiating poppy cultivation
- Resilience to increases in the scale of opium poppy cultivation, measured in terms of the size of individual farmers’ poppy-growing areas and the number of poppy farmers within a given community
- Resilience to opium poppy-growing recidivism

Specifically, the present article addresses the following questions:

- What conditions are likely to promote resilience of farmers and communities to initiating opium poppy cultivation?
- What conditions help to constrain the scale of opium poppy cultivation (i.e., the size of individual farmers’ poppy-growing areas and the number of poppy growers within given communities)?
- Given that many poppy farmers and poppy-growing communities are transient (taking up and abandoning poppy growing periodically), what conditions are associated with longer periods of time in which individual farmers and communities overall do not cultivate poppy?

The present article seeks to provide evidence of the drivers of opium poppy cultivation in order to help local policymakers and practitioners and the international community design and implement more effective alternative development interventions that are based on evidence.
Vulnerability and resilience to opium poppy cultivation

With respect to opium poppy cultivation, vulnerability is defined in terms of the following three critical dimensions:

(a) Vulnerability to an outcome (e.g., poppy cultivation);
(b) Vulnerability resulting from a variety of risk and stress factors;
(c) Vulnerability resulting from an inability to manage those risks in any other way.

Therefore, vulnerability to opium poppy cultivation could be defined as the inability of some households and communities to cope with internal and external shocks and stresses to which they are exposed without resorting to opium poppy cultivation. The phrase “living on the edge” provides a good description of what it means to be vulnerable in such contexts; it metaphorically conveys the idea that even a small push can be enough to send farmers “over the brink”. Vulnerability increases when farmers are pushed closer to “the edge” by factors that are mostly outside their control. Vulnerability, uncertainty and resilience are closely related, as the measurement of vulnerability seeks to identify and quantify the susceptibility of people to damage due to adverse events with a frequently unknown likelihood of occurrence, and the measurement of resilience—the capacity of farmers and communities to withstand stress factors and shocks—looks at the root causes of household vulnerability.

Resilience-oriented approaches to alternative development intervention focus on identifying the strategies adopted by households to earn a living and on understanding how those livelihood strategies could withstand future risks and stresses and adapt in order to retain essentially the same function and identity. In the end, the ability to withstand and adapt in this context depends on the available livelihood options and on how well households are able to handle risks.

Factors influencing resilience to opium poppy cultivation and research hypotheses pertaining to them

The factors influencing resilience to opium poppy cultivation at any given time are not directly observable. Therefore, they need to be estimated on the basis of other observable variables. The quantitative techniques available at present are based on the idea that the resilience of a farmer or community at a given point in time depends primarily on the options available to them, such as:

- Adaptive capacity
- Access to assets
- The institutional context
• Basic services
• Safety nets

These five elements and the research hypotheses corresponding to them are detailed below.

**Adaptive capacity linked to diversity of income sources and awareness**

Diversification of income sources is often regarded as a strategy for reducing risk. Diversification usually leads to a more regular income over a given year, and therefore to income smoothing. For example, combining high-value cash crops with on-farm and off-farm labour opportunities not only has the potential to generate a higher return for farmers but can also offer greater security than simply cultivating opium poppy. In addition, adaptive capacity is enhanced if farmers have knowledge of the negative effects of poppy cultivation, as well as an understanding of the potentially available alternative sources of income. As such, the adaptive capacity of farmers is also influenced by exposure to awareness-raising campaigns. In particular, low exposure to awareness-raising campaigns has been associated with high levels of opium poppy cultivation [7]. Therefore, in the present article it is hypothesized that resilience to opium poppy cultivation is characteristic of farmers who perform a large number of income-generating activities and cultivate a large number of crops, as well as of communities with access to off-farm employment opportunities, awareness-raising campaigns and high daily wages for licit crop farming (e.g., wheat harvesting).

**Access to land and food**

Households with smaller than average areas of cultivated land tend to cultivate relatively large areas of opium poppy [8]. Nevertheless, a substantial share of opium poppy in Afghanistan is also grown on medium- to large-scale landholdings [2]. In addition, farmers adopt a balanced farming system, with staple crops such as wheat to meet their food requirements and crops such as poppy to meet their cash needs [9]. Therefore, wheat remains an important crop even in those regions where opium poppy dominates [3]. Despite relatively high opium prices, households will favour wheat cultivation if they fear they will not be able to purchase wheat on the open market [10]. Importantly, wheat and opium poppy cultivation compete for the same agricultural land, and the area dedicated to one of these crops cannot be increased indefinitely without reducing the area dedicated to the other crop. That being the case, it is hypothesized that there is a correlation between the size of agricultural areas, wheat cultivation and resilience to opium poppy cultivation (although the direction of influence is unknown).
Institutional context related to governability and security issues, such as the presence of other illicit crops or insurgents

While there is considerable debate in the academic literature about the causal relationship between poor governance and opium poppy cultivation, there is little disagreement regarding the high level of coincidence between these factors in Afghanistan [11]. Legal livelihoods can be sustained only under conditions of good governance and security that allow the development of licit markets, the accumulation of assets and the growth of normal economic activities and relations [12]. The presence of other illicit crops such as cannabis constrain the development of legal livelihoods. Cannabis and opiate markets are closely interrelated, and many farmers who cultivate opium poppy also cultivate cannabis as a complement to it. Additionally, some farmers refrain from opium poppy cultivation for a period of years and cultivate cannabis instead, only to resume opium poppy cultivation after conditions constraining its cultivation have changed [1]. The hypothesis of this research is that the communities governed by insurgents, rather than by the State, and the presence of other illicit crops, such as cannabis, are associated with lower resilience to opium poppy cultivation.

Basic services such as boys’ schools, girls’ schools and public electricity

Evidence from around the world shows that an absence of basic infrastructure creates conditions enabling the drug trade to flourish. For example, one of the major causes of opium poppy cultivation in Myanmar is the limited amount of infrastructure and services available in opium poppy-growing villages, which seems in many cases to perpetuate poverty and the need to rely on opium poppy income to make a living [13]. In addition, drug-related criminal organizations typically concentrate operations in remote regions where there is a lack of services. Therefore, it is hypothesized that communities with access to boys’ schools, girls’ schools and public electricity are more resilient to opium poppy cultivation than communities that do not have access to such services.

Safety nets such as agricultural assistance and access to credit and loans

Some factors that may influence resilience to opium poppy cultivation relate to safety nets, such as access to agricultural assistance,¹ credit and loans. In general, agricultural assistance should be aimed at providing support to

¹The term “agricultural assistance” includes previous alternative development projects implemented in the same region, as farmers do not distinguish between development projects and drug control-oriented (alternative development) projects. However, farmers tend to underreport assistance because they fear that being recognized as having received aid would constrain their opportunities to receive support in the future.
farmers in need; the provision of agricultural assistance may have played a role in the decision of farmers to discontinue opium poppy cultivation in 2015 [7]. Farmers who do not have access to credit may find it easier to cultivate poppy than legal crops, as traffickers in narcotics usually provide advance money to encourage opium poppy cultivation. The hypothesis put forth in the present article is that safety nets (availability of agricultural assistance, credit and loans) increase resilience to poppy cultivation.

**Methodologies**

The data supporting the present article were collected by the United Nations Office on Drugs and Crime (UNODC) Country Office in Afghanistan in 2015, as part of its annual socioeconomic monitoring survey, and represent 4,197 farmers and 1,399 communities. These two sources of data are complementary and allow the study of not only individual farmer needs, but also overall community priorities. The data collection methodology is described in the *Afghanistan Opium Survey 2015—Socio-economic Analysis*. The data were analysed for the present article using different regression models, depending on the particular type of question under evaluation. In general, regressions are used to quantify the relationship between one variable (e.g., resilience to poppy cultivation) and another variable that is thought to influence it (e.g., access to credit and loans), while holding the other variables constant (ceteris paribus).

**Resilience to initiating opium poppy cultivation: the logit model**

Logit regression is used to model a dichotomous outcome variable, for example, a farmer’s decision whether or not to grow poppy, or the presence or absence of opium poppy within a community.

**Resilience to increases in the size of opium poppy-growing areas among farmers: the Tobit model**

The Tobit model is applicable when the dependent variable of an otherwise linear regression (e.g., the size of an individual opium poppy-growing area)
is observed only over a given interval of its full support (e.g., where all values equal to or above zero account for the significant proportion of non-poppy farmers with, by definition, no poppy areas and poppy growers with a positive size of opium poppy-growing areas. In this case, negative values would not make sense and would not be allowed by the model) [14]. Under the Tobit model, the same set of variables with the same coefficients explain both the decision to grow poppy or not and the size of opium poppy-growing areas of those who cultivate poppy.

Resilience to increases in the number of opium poppy-growing households within the community: the (zero-inflated) Poisson model

The Poisson model helps to identify significant factors that influence count variables, such as the number of poppy growers within a particular community. An extension of the Poisson model, the zero-inflated Poisson (ZIP) model is applicable when there is a large number of zero-outcome responses (in this case, communities without poppy growers). The ZIP model assumes that there are two different processes: (a) If there is no poppy cultivation in the community, then the only outcome possible for the number of poppy-growing households is zero; and (b) If there is poppy cultivation, then the number of poppy farmers is a positive integer. The two parts of the zero-inflated model are therefore: (a) a binary model associated with an outcome of zero; and (b) a count model, in this case, a Poisson model, to represent the counting process.

Resilience to opium poppy-growing recidivism: the Cox proportional hazard model

Because of various factors and motivations, many opium poppy farmers do not grow poppy every year, but stop for a period of time, only to resume later on. The Cox proportional hazard model is relevant when trying to quantify variables influencing a periodic pattern of events, such as poppy cultivation (in particular, variables influencing the time between successive events, or gap time). This type of model is used to assess the relationship of relevant variables to the rate at which the events occur, allowing for multiple events per farmer.

Overall results

As expected, the overall evidence suggests that resilience to opium poppy cultivation (avoiding the initiation of poppy cultivation, decreasing the size of opium poppy-growing areas and the number of opium poppy farmers
within communities, and increasing the time between relapses into opium poppy cultivation) increases in a statistically significant way when the adaptive capabilities of farmers are also increased; such adaptive capabilities include performing a large number of income-generating activities, cultivating a large number of crops and receiving information through awareness-raising campaigns aimed at reducing opium poppy cultivation.

The evidence also indicates that the institutional context plays a role in opium poppy cultivation. For example, the presence of other illicit crops such as cannabis within a village and being governed by insurgents reduces resilience to opium poppy cultivation in a statistically significant way. Conversely, the availability of basic services such as boys’ schools and public electricity increases resilience to opium poppy cultivation in a statistically significant manner. However, the availability of girls’ schools does not per se influence resilience to opium poppy cultivation in a statistically significant way, as their presence or absence seem to be mostly associated with specific cultural issues and imposed prohibitions.

Possessing relevant assets, such as a large tract of agricultural land, results in a statistically significant increase in some types of resilience to opium poppy cultivation (e.g., avoiding the initiation of opium poppy cultivation and increasing the time between relapses into such cultivation), but does not seem to play a role in the overall scale of opium poppy cultivation (the total size of opium poppy-growing areas). This is in line with findings suggesting that, despite the fact that opium sales may generate over 90 per cent of on-farm cash income, opium poppy seems to always occupy, on average, a small proportion of the total cultivable land [3].

Safety nets, measured in terms of having accessed credit in the form of a loan, increase resilience to opium poppy cultivation in a statistically significant way. However, other safety nets, such as agricultural assistance, do not seem to influence resilience (for example, resilience to initiating opium poppy cultivation or to increasing the size of opium poppy-growing areas) in a statistically significant way, after controlling for the other explanatory variables (i.e., keeping them constant). Such findings may require a more detailed analysis in future studies. Given the low percentage of farmers indicating that they had received assistance, it could be that farmers provided strategic responses. Those who had actually received assistance may have indicated that they had not in the belief that they would be otherwise disqualified from receiving further assistance in the future.

Interestingly, cultivating wheat, which is related to farmers’ access to food, as well as the availability of other sources of income such as off-farm employment opportunities, decreases resilience to opium poppy cultivation in a statistically significant way, rather than increasing it, while the
daily wage for wheat harvesting does not have a statistically significant influence on resilience to opium poppy cultivation. One reason why cultivating wheat seems to decrease resilience to opium poppy cultivation may be related to food security needs. In some cases, poppy growers may try to focus on being self-sufficient, in comparison with non-poppy growers, owing to their high poverty level or long distance from markets. The evidence suggests that wheat was not used by farmers as a replacement for poppy cultivation, but rather to complement it, during the 2014-2015 growing season.

With regard to the availability of off-farm employment, farmers may not be secure in their ability to maintain such employment over the long term. Therefore, many farmers may have decided to complement their off-farm income with income from an activity with a secure market, such as opium poppy cultivation. Conversely, wages alone (after controlling for other variables) do not influence resilience to poppy cultivation, which is in line with findings suggesting that agricultural wages might need to more than quadruple to engender a shift from opium poppy to wheat cultivation [2].

**Detailed results and analysis**

The particular conditions that influence the types of resilience to opium poppy cultivation covered in the present study are presented in detail below, first as descriptive statistics, and then as statistical/econometric results.

**What particular conditions are likely to promote resilience of farmers and communities to initiating opium poppy cultivation?**

It does not seem to be widely acknowledged that within opium poppy-growing regions, poppy-growing and non-poppy-growing households coexist. In this respect, there is still a lot to learn about non-poppy-growing households located in those particular regions. Fully understanding what additional resources and opportunities non-poppy-growing households may have and what strategies they employ could help in formulating incentives for poppy growers to reproduce successful non-poppy-growing strategies.

**Descriptive statistical results**

Conditions that were different between non-poppy growers and poppy growers included the following:

- Non-poppy growers had, on average, larger total agricultural areas (2.3 ha) than poppy growers (2.0 ha).
• Non-poppy growers were engaged in more income-generating activities, excluding poppy growing (4.2 activities, in comparison with 4.0 activities by poppy farmers).

• A higher percentage of non-poppy growers had outstanding loans in comparison with poppy growers (45 per cent versus 42 per cent), which may reflect more access to credit on the part of non-poppy growers.

• A higher percentage of non-poppy growers than poppy growers indicated that they had received agricultural assistance (14 per cent versus 8 per cent).

• A higher percentage of non-poppy growers than poppy growers indicated that they had received information through awareness-raising campaigns (60 per cent versus 46 per cent).

Both groups cultivated the same total number of cash crops (3 crops), and the same percentage of poppy and non-poppy growers cultivated wheat (more than 94 per cent of all farmers).

Table 1. Descriptive statistics comparing opium poppy growers with non-opium poppy growers

<table>
<thead>
<tr>
<th></th>
<th>Opium poppy growers</th>
<th>Non-opium poppy growers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of opium poppy-growing area, in hectares (self-reported by the farmer)</td>
<td>0.59 (0.35)</td>
<td>0.0 (0.0)</td>
</tr>
<tr>
<td>Has outstanding loan (1 = farmer has outstanding loans, 0 otherwise)</td>
<td>0.42 (0.49)</td>
<td>0.45 (0.50)</td>
</tr>
<tr>
<td>Received agricultural assistance (1 = farmer has received agricultural assistance, 0 otherwise)</td>
<td>0.08 (0.28)</td>
<td>0.14 (0.35)</td>
</tr>
<tr>
<td>Exposure to awareness-raising campaigns (1 = farmer has received awareness-raising information on opium poppy cultivation, 0 otherwise)</td>
<td>0.46 (0.50)</td>
<td>0.60 (0.49)</td>
</tr>
<tr>
<td>Number of income-generating activities</td>
<td>4.51 (1.05)</td>
<td>4.24 (0.98)</td>
</tr>
<tr>
<td>Number of income-generating activities, excluding poppy cultivation</td>
<td>4.00 (1.05)</td>
<td>4.24 (0.98)</td>
</tr>
<tr>
<td>Number of crops cultivated</td>
<td>2.62 (1.20)</td>
<td>2.77 (1.46)</td>
</tr>
<tr>
<td>Number of crops cultivated, excluding poppy</td>
<td>2.11 (1.37)</td>
<td>2.77 (1.46)</td>
</tr>
<tr>
<td>Total crop area, in hectares</td>
<td>2.04 (2.55)</td>
<td>2.30 (2.95)</td>
</tr>
<tr>
<td>Total crop area, excluding poppy crop area, in hectares</td>
<td>1.74 (2.50)</td>
<td>2.30 (2.95)</td>
</tr>
</tbody>
</table>
At the community level, non-poppy-growing communities were considerably better off than poppy-growing communities. For example, in terms of access to educational services, a significantly larger number of non-poppy-growing communities had boys’ schools and girls’ schools (93 per cent and 68 per cent, respectively) than non-poppy-growing communities (73 per cent and 33 per cent, respectively).

A similar situation was observed in relation to access to public grid electricity. About 13 per cent of non-poppy-growing communities indicated that they had access to public electricity, in comparison with only 2 per cent of poppy-growing communities. Also, non-poppy-growing and poppy-growing communities differed significantly in the amount of daily wages received by farmers for wheat harvesting ($5.8 and $5.2, respectively), exposure to awareness-raising campaigns within the community (23 per cent and 7 per cent of communities, respectively), being governed by insurgents (7 per cent and 14 per cent of communities, respectively), and the presence of other illicit crops within the community, such as cannabis (10 per cent and 45 per cent, respectively).

However, a lower percentage of non-poppy-growing communities than poppy-growing communities reported the availability of off-farm employment opportunities (30 per cent and 56 per cent, respectively).

Table 2. Descriptive statistics comparing opium poppy-growing communities with non-opium poppy-growing communities

<table>
<thead>
<tr>
<th></th>
<th>Opium poppy-growing communities</th>
<th>Non-opium poppy-growing communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of opium poppy-growing families within the community (reported by the community leader)</td>
<td>28.29 (0.48)</td>
<td>0.0 (0.0)</td>
</tr>
<tr>
<td>Boys’ school in the community (1 = the community has a boys’ school, 0 otherwise)</td>
<td>0.73 (0.44)</td>
<td>0.93 (0.25)</td>
</tr>
</tbody>
</table>
Building resilience to opium poppy cultivation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls’ school in the community (^a)</td>
<td>0.33</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1 = the community has a girls’ school, 0 otherwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of public electricity (^a)</td>
<td>0.02</td>
<td>0.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1 = the community has public electricity, 0 otherwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off-farm employment opportunities (^a)</td>
<td>0.56</td>
<td>0.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1 = availability of off-farm employment within the community, 0 otherwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily wage for wheat harvesting, in US(^a)</td>
<td>5.20</td>
<td>5.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1 = the community has public electricity, 0 otherwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exposure to awareness-raising campaigns (^a)</td>
<td>0.07</td>
<td>0.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1 = presence of awareness-raising campaigns on opium poppy cultivation within the community, 0 otherwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governed by insurgents (^a)</td>
<td>0.14</td>
<td>0.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1 = community governed by insurgents, 0 otherwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cannabis cultivation (^a)</td>
<td>0.45</td>
<td>0.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1 = cannabis cultivation within the community, 0 otherwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of observations</td>
<td>514</td>
<td>885</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Values in parentheses are standard deviations.

\(^a\)The means between poppy-growing and non-poppy-growing communities are statistically different at the 0.05 level (t-test).

Regression model results

The results of the regression (logit) model to evaluate individual farmers’ probability of growing poppy indicated that, on average, farmers:

- With outstanding loans were 4 per cent less likely to cultivate poppy than farmers without such loans
- Who received information from awareness-raising campaigns were 3 per cent less likely to cultivate poppy than farmers who did not
- Were 2 per cent less likely to cultivate poppy with each additional income-generating activity that they performed
- Were 7 per cent less likely to cultivate poppy with each additional crop that they cultivated
- Were 1 per cent less likely to cultivate poppy with each additional hectare of land that they owned
- Who did not cultivate wheat were 4 per cent less likely to cultivate opium poppy than farmers who cultivated wheat
Table 3. Factors influencing a farmer’s decision to grow opium poppy in Afghanistan

<table>
<thead>
<tr>
<th>Factor</th>
<th>Marginal effect</th>
<th>Robust standard error</th>
<th>Confidence interval (95 per cent)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has an outstanding loan</td>
<td>−0.0358</td>
<td>0.0060</td>
<td>−0.0476 −0.0240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received agricultural assistance</td>
<td>−0.0226</td>
<td>0.0088</td>
<td>−0.0399 −0.0053</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exposure to awareness-raising campaigns</td>
<td>−0.0325</td>
<td>0.0072</td>
<td>−0.0466 −0.0184</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of non-poppy-growing activities</td>
<td>−0.0152</td>
<td>0.0034</td>
<td>−0.0218 −0.0086</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of non-poppy crops</td>
<td>−0.0745</td>
<td>0.0042</td>
<td>−0.0828 −0.0662</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total cultivated area, excluding poppy</td>
<td>−0.0101</td>
<td>0.0025</td>
<td>−0.0149 −0.0053</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultivated wheat</td>
<td>0.0363</td>
<td>0.0055</td>
<td>0.0256 0.0470</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Derived using the logit model; dependent variable = farmer cultivates poppy (1 = farmer cultivates poppy, 0 otherwise); pseudo R squared = 0.24. The marginal effect indicates the shift in the probability of growing poppy when the variable changes by one unit (for continuous variables) or when the variable changes from present to absent (for non-continuous or discrete variables). The confidence interval indicates the range of values with 95 per cent probability that the value of the variable lies within it.

Significant at the 0.01 level.

The results of applying the logit model to evaluate the probability of poppy cultivation in the communities studied indicated that, on average, communities with a lesser probability of having poppy growers were those with:

- A boys’ school (communities with boys’ schools were 29 per cent less likely to have poppy growers than those without such schools)
- Access to public electricity (21 per cent less likely)
- Exposure to awareness-raising campaigns aimed at reducing opium poppy cultivation (17 per cent less likely)

and those that did not have:

- Governance by insurgents (communities not governed by insurgents were 18 per cent less likely to have poppy growers than those governed by insurgents)
- Cannabis cultivation within the community (34 per cent less likely)

However, communities with availability of off-farm employment opportunities were on average 14 per cent more likely to have poppy growers within them. In relation to this result, it could be the case that off-farm employment opportunities were not stable enough and were therefore complemented with other less risky activities such as opium poppy cultivation, thus increasing such cultivation.
Factors such as farm wages for wheat harvesting and the availability of a girls’ school did not seem to influence the presence of opium poppy growers within the community, after controlling for the other explanatory variables.

| Table 4. Factors influencing the presence of opium poppy growers within communities in Afghanistan |
|-------------------------------------------------|-----------------|-----------------|-----------------|
|                                                  | Marginal effect | Robust standard error | Confidence interval (95 per cent) |
|                                                  |                 |                          | Minimum      | Maximum      |
| Boys’ school in the communitya                   | −0.2934         | 0.0492                   | −0.3898      | −0.1969      |
| Girls’ school in the community                   | −0.0706         | 0.0359                   | −0.1423      | −0.0012      |
| Availability of public electricitya              | −0.2105         | 0.0442                   | −0.2972      | −0.1238      |
| Off-farm employment opportunitiesa               | 0.1364          | 0.0344                   | 0.0690       | 0.2038       |
| Daily wage for wheat harvesting, in US$          | −0.0236         | 0.0103                   | −0.0439      | −0.0034      |
| Exposure to awareness-raising campaignsa         | −0.1697         | 0.0357                   | −0.2397      | −0.1000      |
| Governed by insurgentsa                          | 0.1819          | 0.0544                   | 0.0753       | 0.2884       |
| Cannabis cultivation within the communitya       | 0.3364          | 0.0413                   | 0.2556       | 0.4172       |

Note: Derived using the logit model; dependent variable = poppy cultivation within the village (1 = presence of poppy cultivation within the village, 0 otherwise); pseudo R squared = 0.22. The marginal effect indicates the shift in the probability of growing poppy when the variable changes by one unit (for continuous variables) or when the variable changes from present to absent (for non-continuous or discrete variables). The confidence interval indicates the range of values with 95 per cent probability that the value of the variable lies within it.

What particular conditions help to constrain the size of an individual farmer’s opium poppy-growing area and the number of opium poppy growers within a given community?\(^5\)

The results of applying the Tobit model suggest that, on average:

- Poppy growers with outstanding loans had 0.05 fewer hectares of opium poppy than those without such loans.\(^6\)

- Poppy growers who had received information through awareness-raising campaigns had 0.05 fewer hectares of poppy than poppy growers who had not.

\(^5\)The descriptive statistics addressing this question are not presented here; the descriptive statistics presented in table 4 also apply to this question.

\(^6\)The value 0.05 hectares represents 8 per cent of the average size of opium poppy-growing areas per individual farmer (0.59 ha).
• Each additional activity performed by poppy growers decreased the size of their poppy-growing area by 0.02 hectares.
• Each additional crop cultivated by poppy growers decreased the size of their opium poppy-growing area by 0.09 hectares.

On the other hand, farmers who cultivated wheat had on average 0.05 hectares more of opium poppy than their counterparts, which seems to reflect the complementary nature of wheat and poppy cultivation (farmers did not substitute poppy with wheat during the year under evaluation, 2015), as explained in a previous section. In addition, receiving assistance did not influence the size of individual poppy-growing areas in a statistically significant manner.

In general, the conditions that influenced the size of opium poppy-growing areas were similar to the conditions that influenced individual farmers’ decisions to grow poppy or not, with the exception of the farmers’ total agricultural areas, which did not significantly influence the size of their opium poppy-growing areas (although it did influence the farmers’ decisions to grow poppy or not).

Table 5. Factors influencing the size of an individual farmer’s opium poppy-growing area in Afghanistan

<table>
<thead>
<tr>
<th>Partial conditional effect on opium poppy cultivation</th>
<th>Robust standard error</th>
<th>Confidence interval (95 per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum</strong></td>
<td><strong>Maximum</strong></td>
<td></td>
</tr>
<tr>
<td>Has an outstanding loan</td>
<td>−0.0472</td>
<td>0.0087</td>
</tr>
<tr>
<td>Received agricultural assistance</td>
<td>−0.0249</td>
<td>0.0150</td>
</tr>
<tr>
<td>Exposure to awareness-raising campaigns</td>
<td>−0.0528</td>
<td>0.0100</td>
</tr>
<tr>
<td>Number of non-poppy-growing activities</td>
<td>−0.0239</td>
<td>0.0046</td>
</tr>
<tr>
<td>Number of non-poppy crops</td>
<td>−0.0921</td>
<td>0.0065</td>
</tr>
<tr>
<td>Total cultivated area, excluding poppy</td>
<td>−0.0047</td>
<td>0.0023</td>
</tr>
<tr>
<td>Cultivated wheat</td>
<td>0.0457</td>
<td>0.0148</td>
</tr>
</tbody>
</table>

Note: Derived using the Tobit model; pseudo R squared = 0.18; dependent variable = size of individual farmer’s opium poppy-growing area in hectares. The Tobit model is preferred over the truncated model (sigma is not significant, where p = 0.168, in the truncated model). The partial effect indicates the shift in the size in hectares of opium poppy-growing areas when the variable changes by one unit (for continuous variables) or when the variable changes from present to absent (for non-continuous or discrete variables). The confidence interval indicates the range of values with 95 per cent probability that the value of the variable lies within it.

*aSignificant at the 0.01 level.
Conversely, the results of the zero-inflated Poisson regression model suggest that conditions influencing the presence or absence of poppy growers (table 4) and their number in the community (table 6 below) were different. The only characteristic negatively influencing the number of poppy growers in the community was the presence of awareness-raising campaigns, which on average seemed to reduce by 39 per cent the number of poppy growers, in comparison with communities without such campaigns.\(^7\) This seems to corroborate related findings on the correspondence of awareness-raising campaigns with opium poppy cultivation. In particular, in 2015 about 60 per cent of farmers who ceased poppy cultivation had been exposed to awareness-raising campaigns, in contrast to 40 per cent of active poppy farmers [7].

### Table 6. Factors influencing the number of opium poppy growers within communities in Afghanistan

<table>
<thead>
<tr>
<th></th>
<th>Incidence rate ratio (IRR)</th>
<th>Robust standard error</th>
<th>Confidence interval (95 per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
<td></td>
</tr>
<tr>
<td>Boys’ school in the community</td>
<td>1.3195</td>
<td>0.2030</td>
<td>0.6279</td>
</tr>
<tr>
<td>Girls’ school in the community</td>
<td>1.3275</td>
<td>0.2386</td>
<td>0.7517</td>
</tr>
<tr>
<td>Availability of public electricity</td>
<td>1.0447</td>
<td>0.7008</td>
<td>0.0921</td>
</tr>
<tr>
<td>Off-farm employment opportunities</td>
<td>0.8110</td>
<td>0.1756</td>
<td>0.7204</td>
</tr>
<tr>
<td>Daily wage for wheat harvesting, in US$</td>
<td>1.0540</td>
<td>0.0533</td>
<td>0.8686</td>
</tr>
<tr>
<td>Exposure to awareness-raising campaigns(^a)</td>
<td>0.6078</td>
<td>0.1341</td>
<td>0.2127</td>
</tr>
<tr>
<td>Governed by insurgents</td>
<td>1.3908</td>
<td>0.3343</td>
<td>1.5368</td>
</tr>
<tr>
<td>Cannabis cultivation within the community</td>
<td>0.8271</td>
<td>0.1499</td>
<td>0.9998</td>
</tr>
</tbody>
</table>

\(^a\)Significant at the 0.01 level.

Note: Derived using the zero-inflated Poisson (ZIP) regression model; dependent variable = number of households cultivating opium poppy within the community; prob > chi\(^2\) = 0.0000. The Poisson model is preferred to negative binomial (lnalpha not significant, where \(z = -1.17\), prob = 0.243). The zero-inflated Poisson model was preferred to the standard Poisson model, where \(z = 15.98\), prob = 0.0000 (Vuong test of ZIP versus standard Poisson). Here, 1-IRR indicates the percentage change in the number of poppy growers when the variable changes by one unit (for continuous variables) or with the presence of the variable in comparison to the absence of the variable (for non-continuous or discrete variables). The confidence interval indicates the range of values with 95 per cent probability that the value of the variable lies within it.

\(^7\)However, this particular result needs further evaluation, as the assumption here is that awareness-raising campaigns are carried out in all communities with the same probability, and not mainly in non-opium poppy-growing communities. Nevertheless, no public data are currently available to corroborate this assumption.
What particular conditions promote farmers’ and communities’ resilience to opium poppy-growing recidivism?

One of the major implications of vulnerability and resilience is that farmers and communities overall may decide to refrain from poppy cultivation for different periods of time, only to resume later, depending on internal and external factors. The evidence suggests that farmers who avoided opium poppy cultivation for the longest periods of time (for more than one growing season during the period 2011-2015) were less vulnerable than farmers who grew poppy continuously or those who refrained from growing it for only one growing season.

Descriptive statistics

There were statistically significant differences between farmers, depending on the length of time for which they had decided to cultivate opium poppy. For example, farmers who had refrained from poppy cultivation for more than a year indicated that they:

- Had received agricultural assistance (11 per cent, versus 6-7 per cent of their counterparts, that is, farmers who did not cease poppy cultivation or farmers who refrained from such cultivation for only one year)
- Had received information through awareness-raising campaigns (52 per cent, versus 40-51 per cent of their counterparts)
- Had outstanding loans (43 per cent, versus 31-42 per cent of their counterparts), which may have been related to the availability of credit

In addition, opium poppy farmers who refrained from opium poppy cultivation for more than one year:

- Had cultivated a relatively small opium poppy-growing area (0.3 ha, versus 0.6 ha by their counterparts)
- Had performed a relatively high number of income-generating activities, excluding poppy growing (4.2 activities, versus 3.7-4.1 activities by their counterparts)
- Had cultivated a relatively large number of crops, excluding poppy (2.8 crops, versus 1.4-2.4 crops by their counterparts)
Table 7. Descriptive statistics on different types of farmers, according to the number of years for which they refrained from opium poppy cultivation during the period 2011-2015

<table>
<thead>
<tr>
<th></th>
<th>Opium poppy farmers who did not cease opium poppy cultivation</th>
<th>Opium poppy farmers who refrained from opium poppy cultivation for one year</th>
<th>Opium poppy farmers who refrained from opium poppy cultivation for more than one year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of opium poppy-growing area, in hectares (self-reported by the farmer)*</td>
<td>0.59 (0.51)</td>
<td>0.64 (0.82)</td>
<td>0.31 (0.07)</td>
</tr>
<tr>
<td>Has an outstanding loan (1 = farmer has outstanding loans, 0 otherwise)</td>
<td>0.42 (0.49)</td>
<td>0.31 (0.47)</td>
<td>0.43 (0.50)</td>
</tr>
<tr>
<td>Received agricultural assistance* (1 = farmer has received agricultural assistance, 0 otherwise)</td>
<td>0.07 (0.25)</td>
<td>0.06 (0.23)</td>
<td>0.11 (0.31)</td>
</tr>
<tr>
<td>Exposure to awareness-raising campaigns* (1 = farmer received awareness-raising information on poppy cultivation, 0 otherwise)</td>
<td>0.40 (0.49)</td>
<td>0.51 (0.50)</td>
<td>0.52 (0.50)</td>
</tr>
<tr>
<td>Number of income-generating activities*</td>
<td>4.69 (1.05)</td>
<td>4.72 (1.08)</td>
<td>4.28 (0.93)</td>
</tr>
<tr>
<td>Number of income-generating activities, excluding poppy cultivation*</td>
<td>3.70 (1.06)</td>
<td>4.12 (0.90)</td>
<td>4.23 (0.92)</td>
</tr>
<tr>
<td>Number of crops cultivated by the farmer*</td>
<td>2.40 (0.77)</td>
<td>2.72 (1.37)</td>
<td>2.84 (1.47)</td>
</tr>
<tr>
<td>Number of crops, excluding poppy (1 = farmer cultivated wheat, 0 otherwise)</td>
<td>1.40 (0.77)</td>
<td>2.43 (1.44)</td>
<td>2.81 (1.49)</td>
</tr>
<tr>
<td>Total crop area, in hectares*</td>
<td>1.91 (2.58)</td>
<td>2.91 (2.49)</td>
<td>2.39 (2.52)</td>
</tr>
<tr>
<td>Total crop area, excluding poppy area, in hectares*</td>
<td>1.32 (2.42)</td>
<td>2.27 (2.41)</td>
<td>2.08 (2.53)</td>
</tr>
<tr>
<td>Cultivated wheat*</td>
<td>0.90 (0.30)</td>
<td>0.97 (0.18)</td>
<td>0.97 (0.16)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>561</td>
<td>121</td>
<td>503</td>
</tr>
</tbody>
</table>

*Note: Values in parentheses are standard deviations.

*The means between different types of farmers are statistically different at the 0.05 level (ANOVA-test).

Conversely, the only significant differences between communities with continuous poppy cultivation and those with intermittent poppy cultivation during the period 2011-2015 were in the percentage of poppy growers in those communities (38 per cent versus 14 per cent, respectively) and in the percentage of those communities that were governed by insurgents (15 per cent and 0 per cent, respectively).
Table 8. Descriptive statistics on different types of communities, according to the number of years without opium poppy cultivation during the period 2011-2015

<table>
<thead>
<tr>
<th></th>
<th>Communities that cultivated opium poppy continuously</th>
<th>Communities that cultivated opium poppy intermittently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of poppy-growing households</td>
<td>29.51 (51.67)</td>
<td>12.34 (17.37)</td>
</tr>
<tr>
<td>within the community (self-reported by the community leaders)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of households within the community</td>
<td>78.55 (131.59)</td>
<td>91.03 (259.16)</td>
</tr>
<tr>
<td>Boys’ school in the community</td>
<td>0.73 (0.45)</td>
<td>0.75 (0.44)</td>
</tr>
<tr>
<td>(1 = the community has a boys’ school, 0 otherwise)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls’ school in the community</td>
<td>0.33 (0.47)</td>
<td>0.25 (0.44)</td>
</tr>
<tr>
<td>(1 = the community has a girls’ school, 0 otherwise)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of public electricity</td>
<td>0.02 (0.15)</td>
<td>0.03 (0.18)</td>
</tr>
<tr>
<td>(1 = the community has public electricity, 0 otherwise)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off-farm employment opportunities</td>
<td>0.56 (0.50)</td>
<td>0.53 (0.51)</td>
</tr>
<tr>
<td>(1 = availability off-farm jobs within the community, 0 otherwise)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily wage for wheat harvesting, in US$</td>
<td>5.21 (1.45)</td>
<td>5.09 (0.15)</td>
</tr>
<tr>
<td>Exposure to awareness-raising campaigns</td>
<td>0.07 (0.26)</td>
<td>0.06 (0.25)</td>
</tr>
<tr>
<td>(1 = presence of awareness-raising campaigns on poppy growing within the community, 0 otherwise)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governed by insurgents</td>
<td>0.15 (0.36)</td>
<td>0.00 (0.00)</td>
</tr>
<tr>
<td>(1 = community governed by insurgents, 0 otherwise)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cannabis cultivation</td>
<td>0.46 (0.50)</td>
<td>0.44 (0.50)</td>
</tr>
<tr>
<td>(1 = presence of cannabis cultivation within the community, 0 otherwise)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of observations</td>
<td>478</td>
<td>32</td>
</tr>
</tbody>
</table>

Note: Communities that cultivated opium poppy continuously = communities with the presence of poppy cultivation every year during the period 2011-2015. Communities that cultivated opium poppy intermittently = communities without the presence of poppy cultivation for at least one year during the period 2011-2015.

Values in parentheses are standard deviations.

*The means between communities that cultivated poppy continuously and those that did so intermittently are statistically different at the 0.05 level (t-test).

**Regression model results**

The results of the stratified Cox proportional hazards model suggest that the factors associated with an increased length of time without opium poppy cultivation were:

- The receipt of agricultural assistance (with an average increase of 25 per cent, in comparison to farmers who did not receive such assistance)
• The holding of an outstanding loan (26 per cent)
• The receipt of information from awareness-raising campaigns (31 per cent)
• That each additional activity performed by a farmer increased by 15 per cent the length of time without poppy cultivation
• That each additional crop cultivated by a farmer increased by 35 per cent the length of time without poppy cultivation
• That each additional hectare of total agricultural area increased by 9 per cent the length of time without poppy cultivation

The cultivation of wheat seems to have had the opposite effect, in that it reduced the amount of time between relapses into opium poppy cultivation (on average by 73 per cent, in comparison with the time between relapses observed among farmers who did not cultivate wheat).

Table 9. Factors influencing the duration of opium poppy cultivation among farmers in Afghanistan

<table>
<thead>
<tr>
<th>Hazard ratio</th>
<th>Robust standard error</th>
<th>Confidence interval (95 per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>Maximum</td>
<td></td>
</tr>
<tr>
<td>Has an outstanding loan⁴</td>
<td>0.7378</td>
<td>0.0381</td>
</tr>
<tr>
<td>Received agricultural assistance⁴</td>
<td>0.7486</td>
<td>0.0809</td>
</tr>
<tr>
<td>Exposure to awareness-raising campaigns⁴</td>
<td>0.6882</td>
<td>0.0362</td>
</tr>
<tr>
<td>Number of non-poppy-growing activities⁴</td>
<td>0.8493</td>
<td>0.0245</td>
</tr>
<tr>
<td>Number of non-poppy crops⁴</td>
<td>0.6517</td>
<td>0.0202</td>
</tr>
<tr>
<td>Total cultivated area, excluding poppy⁴</td>
<td>0.9109</td>
<td>0.0167</td>
</tr>
<tr>
<td>Cultivated wheat⁴</td>
<td>1.7257</td>
<td>0.1760</td>
</tr>
</tbody>
</table>

Note: Derived using the stratified Cox proportional hazards model, and the Breslow methods for ties; dependent variable = time until individual farmer (re-)starts growing poppy, based on recall data from the period 2011-2015; Prob > chi² = 0.0000; robust estimations are clustered by individual farmer; number of observations: 20,805. Number of individual farmers: 4,161. Here, 1-Hazard Ratio indicates the percentage of change in length of time without poppy cultivation when the variable changes by one unit (for continuous variables) or with the presence of the variable in comparison with the absence of the variable (for non-continuous or discrete variables). The confidence interval indicates the range of values with 95 per cent probability that the value of the variable lies within it.

⁴Significant at the 0.01 level.

In addition, the results of the stratified Cox proportional hazards model suggest that community characteristics that increased the period of time without poppy cultivation were:

• The presence of a boys’ school (with an average increase in duration of 34 per cent in comparison with communities without one)
• The presence of a girls’ school (27 per cent)
• The availability of public electricity (60 per cent)
• Exposure to awareness-raising campaigns (32 per cent)

On the contrary, factors associated with a decrease in the period of time without opium poppy cultivation within communities were:

• Being governed by insurgents (with a decrease of 47 per cent in comparison with communities not governed by insurgents)
• The cultivation of other illicit crops, such as cannabis (68 per cent)
• The availability of off-farm jobs (43 per cent)

The amount of daily agricultural wages (for wheat harvesting) did seem to influence opium poppy-growing recidivism.

Table 10. Factors influencing the duration of opium-poppy cultivation within communities in Afghanistan

<table>
<thead>
<tr>
<th>Hazard ratio</th>
<th>Robust standard error</th>
<th>Confidence interval (95 per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
</tr>
<tr>
<td>Boys’ school in the community&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.6479</td>
<td>0.0429</td>
</tr>
<tr>
<td>Girls’ school in the community&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.7342</td>
<td>0.0675</td>
</tr>
<tr>
<td>Availability of public electricity&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.399</td>
<td>0.1123</td>
</tr>
<tr>
<td>Off-farm employment opportunities&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.4308</td>
<td>0.1141</td>
</tr>
<tr>
<td>Daily wage for wheat harvesting, in US$</td>
<td>0.9382</td>
<td>0.0273</td>
</tr>
<tr>
<td>Exposure to awareness-raising campaigns&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.6752</td>
<td>0.0976</td>
</tr>
<tr>
<td>Governed by insurgents&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.4659</td>
<td>0.1359</td>
</tr>
<tr>
<td>Cannabis cultivated within the community&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.6778</td>
<td>0.1278</td>
</tr>
</tbody>
</table>

Note: Derived using the stratified Cox proportional hazards model, and the Breslow methods for ties; dependent variable = time until there is a (re-)start in poppy growing inside the community, based on recall data of annual poppy cultivation within the community during the period 2011-2015, as reported by the community leaders; robust estimations are clustered by individual community; Prob > chi2 = 0.0000; number of observations: 6,725; number of individual communities: 1,345. Here, 1-Hazard Ratio indicates the percentage of change in length of time without poppy cultivation when the variable changes by one unit (for continuous variables) or with the presence of the variable in comparison with the absence of the variable (for non-continuous or discrete variables). The confidence interval indicates the range of values with 95 per cent probability that the value of the variable lies within it.

<sup>a</sup>Significant at the 0.01 level.
Main limitation of the research

It was not possible to cover all the explanatory variables using only one model; they were therefore divided into two types of model, farmer-level models and community-level models. To be able to define the influence of one variable, after controlling for all the other variables, all the explanatory variables would need to be included in a single model. Furthermore, problems related to the potential presence of endogeneity and reverse causality could have been addressed using time series data from the same communities and farmers, but those data were not available at the time the present study was being conducted. However, the approach taken for the present research has nonetheless produced interesting findings that merit future refinements in similar research.

Conclusions

The quantitative (statistical/econometric) results partially support previous qualitative findings\(^8\) \[2, 3\] and other quantitative findings related to the determinants of illicit crop cultivation \[15, 16\]. All types of resilience to opium poppy cultivation are strengthened in a statistically significant way if the adaptive capacity, governability and access to basic services of farmers and communities are also strengthened. However, an issue mostly overlooked in the past is the fact that some types of alternative development intervention (for example, those targeting aspects that have been wrongly identified as motivations for opium poppy cultivation) would have the opposite effect: they would likely increase opium poppy cultivation.

For example, the evidence suggests that alternative development interventions targeting only the availability of off-farm employment opportunities or the cultivation of wheat as an alternative crop would have increased poppy cultivation during the period 2014-2015 in a statistically significant way. This serves as quantitative evidence that “quick fixes” in Afghanistan could eventually increase farmers’ vulnerability, which in turn could lead to opium poppy cultivation; however, evidence from other countries suggests that integrated rural development interventions are usually resilience-enhancing. In that regard, it is of foremost importance to avoid reductionist (overly simplistic) approaches, as they may fail to address the underlying causes and thereby contribute to the perpetuation of opium poppy cultivation.

\(^8\) Data can be collected for similar indicators using quantitative or qualitative methods. Qualitative data often has more explanatory power, allowing the focus to be on identifying causal relationships, and is particularly useful in planning at the local level. Quantitative data is generally cheaper to collect on a large scale and allows for the evaluation of statistical significance and thus for drawing general conclusions on more overarching questions.
Mostly on the basis of qualitative data, Mansfield (2016) has made a similar statement [6]:

In Afghanistan, it has not been unusual to hear the argument that any support to legal on-farm, off-farm and non-farm income will lead to a contraction of the illegal economy or at least provide an increased portfolio of legal options that farmers can pursue. In practice, both illicit drug crop cultivation and the legal economy can grow in parallel and it is not uncommon for investments in physical infrastructure, such as irrigation, and agricultural inputs, such as fertilizers, [to be] used to increase the amount of land under opium cultivation and its yields.

Opium production in Afghanistan is not a well-defined and well-structured problem with a specific solution that can be readily identified. It is evolving, and our understanding of it needs to evolve too [17]. There is still a need to conduct further research with a specific focus on risk and vulnerability assessments, which can provide an estimation of the most important shocks and hazards by location or farmer group in Afghanistan. This means that time needs to be invested in understanding local conditions before designing and implementing alternative development interventions, and results need to be continually monitored in order to adapt strategies. Nevertheless, the identification of appropriate indicators for measuring and monitoring uncertain, complex events, such as illicit crop cultivation, remains highly challenging. At a minimum, the following indicators need to be considered when designing and implementing alternative development interventions:

- Livelihood and community status indicators
- Indicators of the degree of exposure to risks
- Indicators of the ability to manage risks at different levels

It is essential to use reliable statistical data in order to make informed decisions that enable the design of efficient alternative development interventions, but such data is often unavailable. Therefore, there is also a need for more comprehensive time-series data in order to develop a deeper understanding of different types of resilience as well as the transition from illegal to legal livelihoods, and what tools are most likely to lead to sustained reductions in opium poppy cultivation. In that regard, the value of monitoring should be understood as part of a broader scientific learning enterprise in which evidence is gathered over time and across different contexts, thereby forming the basis for better policymaking and programme design [18].

References


4. David Mansfield, “Where have all the flowers gone? Assessing the sustainability of current reductions in opium production in Afghanistan” (Kabul, Afghanistan Research and Evaluation Unit, 2010).

5. General Assembly resolution S-30/1, annex, para. 7 (g).


11. David Mansfield, “Responding to risk and uncertainty: understanding the nature of change in the rural livelihoods of opium poppy growing households in the 2007/08 growing season”, report for the Afghan Drugs Inter Departmental Unit of the Government of the United Kingdom (July 2008).


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 Bolivia\(^1\) 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

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

\(^2\)Crop “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 millennia, 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, 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-

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[A 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. While coca has myriad traditional uses in indigenous Andean culture, 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 longstanding coca-grower demand, permitting one subsistence plot of coca leaf (known as a *cato*) per family in the Chapare. 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.

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. 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.

The United States, the world’s largest cocaine-consuming country, 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. 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” to supply the licit domestic market. The law slated coca cultivation in all other regions for eventual eradication.

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.

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4 There 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.

5 Coca’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.

6 Carlos 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.

7 The 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.

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

9 Law 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].

10 The 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. 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

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12 Email 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-accessed 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.\(^{13}\)

\(^{13}\)A 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 SYSCOA 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 UDESY 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. 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

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

15 Author 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], 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, 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, 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].

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17 Production costs account for approximately 20 per cent of this figure.
18 This 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.
19 A Government-funded indigenous university opened in the Chapare town of Chimoré 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 (EBOCOCOA) 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].

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\(^{20}\)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 needs 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].

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22This measurement refers to housing, education and health indicators.
Integrated development with coca in the Plurinational State of Bolivia

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.”

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.

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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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