

**FEASIBILITY STUDY
ON OPIUM LICENSING IN AFGHANISTAN**

**FOR THE PRODUCTION OF MORPHINE AND OTHER ESSENTIAL
MEDICINES**

مطالعه امکانات جواز دهی تریاک در افغانستان برای تولید مورفین و
سایر ادویه ضروری

**Impact Assessment of Crop Eradication
in Afghanistan and
Lessons Learned from Latin America
and South East Asia**

*Contributions to
The Kabul International Winter Symposium on Drug Policy
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The Senlis Council

The Senlis Council is an international drug policy think tank which gathers expertise and facilitates new initiatives on global drug policy. The Council convenes politicians, high profile academics, independent experts and Non-Governmental Organisations. It aims to work as the dialogue partner with senior policy-makers at both the national and international level in order to foster high-level exchanges and new ideas on integrated drug policies.



The Research and Monitoring Center on Drugs and Crime

The Research and Monitoring Center on Drugs and Crime is attached to the School of Economics at Universidad del Rosario, Colombia. Its main objective is to understand the dynamics of illicit drugs and crime to ultimately better comprehend the Colombian society. Further, it also aims to inform Colombia about the events that happen around the world and the international community about the main events related to illicit drugs and crime happening in Colombia.

The International Institute for Environment and Development (IIED)

The International Institute for Environment and Development (IIED) is an international policy research institute and non governmental body working for more sustainable and equitable global development. Based in London, IIED works globally through a wide range of long-standing relationships with partners across the developing world. The Institute acts as a catalyst, broker and facilitator and helps vulnerable groups find their voice and ensure their interests are heard in decision-making.

Department of Economics, Umeå University

The Department of Economics is a part of the Faculty of Social Sciences at Umeå University as well as the Umeå School of Business and Economics at Umeå University. Undergraduate teaching in economics has been pursued since 1964. The first professorship was established in 1965 and since then research and graduate education has been carried out at the department. The first theses were presented in 1972 and up to now 73 Licentiate's- and PhD theses have been produced at the department. Today, there are more than 300 students each year and the number of PhD students exceeds 30.

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Professor Francisco Thoumi studied economics at the University of Los Andes in Colombia and received a PhD from the University of Minnesota in 1973. He currently works as professor of economics and is founding director of the Research and Monitoring Center on Drugs and Crime within the University of Rosario in Bogotá. Professor Thoumi has a wide experience in the field of drug policy, working inter alia for the United Nations Office on Drugs and Crime and the United Nations Development Programme. He has worked as a professor at California State University and The George Washington University and is the author of several groundbreaking publications on the illegal drug economy.

Background to the Feasibility Study on Opium Licensing in Afghanistan

In light of Afghanistan's drug crisis and in response to the urgent need to significantly reduce the country's illegal opium trade, The Senlis Council launched its *Feasibility Study on Opium Licensing in Afghanistan for the Production of Morphine and other Essential Medicines* in March 2005. The objective of the study, to which more than 30 international experts and scholars contributed, was to investigate the possibility that opium poppy crops in Afghanistan could be used to produce opium-based medicines such as morphine and codeine.

Currently, there is a world shortage of these essential medicines, which is particularly acute in developing countries. The World Health Organisation has estimated that by the year 2015 there will be 10 million cancer cases per year in the developing world. Moreover, according to the International Narcotics Control Board (INCB) only seven countries - the United States, United Kingdom, France, Spain, Italy, Australia and Japan - consume 77% of the world's supply of morphine. These figures underline the urgent need for additional supplies of opium-based medicines.

Though a number of countries, including France, India and Turkey, produce opium for medicinal purposes under a strict licensing scheme controlled by the INCB, the market price of opium-based drugs has been kept artificially high. The initial findings of the Senlis Council's Study, released at a high-level international symposium in Kabul, September 2005, indicate that the establishment of an opium-based medicines industry in Afghanistan could provide a solution to the severe global deficit in these medicines.

The findings also concluded that such a system could make an effective and wide-ranging contribution to Afghanistan's development and significantly help to extricate it from its drug crisis. In particular, it has been shown that an opium licensing system could play a significant role in the development of a secure and licit economy. Analysis has also shown that an opium licensing system would strengthen the rule of law by providing the antecedent conditions necessary for the development of an effective legal system.

Currently, the crippling effect of the illegal opium economy in Afghanistan severely hinders economic development in the country: 52 percent of the country's Gross Domestic Product (GDP) is directly or indirectly derived from the illegal opium trade. An opium licensing system

would reduce the amount of opium flowing into the illegal market and into the pockets of insurgents who benefit from the drug trade. It would also help to promote stability by providing sustainable and legitimate incomes to rural populations — including farming communities and itinerant wage labourers — and by reintegrating these groups into a legal economic system.

A licensing scheme would function as a bridge between development and stability; the two central pillars of the current reconstruction effort in Afghanistan.

Following the initial findings of the Feasibility Study, The Senlis Council launched a second phase of academic research to explore a wide-range of recommendations and address key areas of further investigation. Through a series of research papers, Phase II of the Study will examine how the results of the initial research may be practically applied, and will provide further insight into the methods and implications of an opium licensing system in Afghanistan.

This Phase II paper, the *Impact Assessment of Crop Eradication in Afghanistan and Lessons Learned from Latin America and South East Asia*, is the first in this series. The paper aims to assess the impact of current and future eradication efforts in Afghanistan and draws on the South East Asian (Laos, Myanmar and Thailand) and Latin American (Colombia and Bolivia) experiences with eradication.

Other areas of further research concerning an opium licensing system in Afghanistan will focus on agronomic aspects, the economic implementation of such a system, international law in relation to opium export, aspects of governance, the design of an Amnesty scheme for those involved in the drug trade, health care and research on alternate methods of eradication.

Political Recommendations

Recommendation One

Prohibit the forced eradication of opium poppy

Eradication interventions, including aerial spraying, are crude policy instruments that fail to resolve the root causes of opium cultivation in Afghanistan. The rationale for eradication interventions turns on a simplistic model according to which law enforcement agents must sanction law-breakers. However, this model breaks down because the law-breaking activity – opium cultivation – is deeply embedded in the social, economic and political fabric of Afghanistan. Opium cultivation must therefore be conceived of as being far broader than simply a drug policy challenge. Failure to do so will, as eradication interventions in Latin America and South East Asia have shown, blur distinctions between development and repression, and escalate social tensions as livelihoods are destroyed.

Recommendation Two

Give priority to the economic wellbeing of poor farmers in the formulation of responses to the opium crisis.

The social, economic and political structures that create and maintain poverty in Afghanistan are the same structures that have created and maintained opium cultivation. Thus although the illegal opium economy provides subsistence livelihoods for many Afghans, it enriches very few. For most Afghans involved in opium cultivation, opium is virtually the only means by which they can gain access to credit and land for farming. Yet the first casualties of current opium eradication responses are the farming communities: the impact of eradication is felt most acutely by the most impoverished elements in Afghan society, namely, resource-poor farmers and labourers. Opium poppy eradication cannot therefore succeed where so many poor farmers are dependent on its cultivation and where no viable economic alternatives exist as a means for their survival.

Recommendation Three

Promote the provision of alternative livelihoods for those directly and indirectly involved in the illicit opium trade

Alternative livelihoods, which by definition includes opium licensing, must be promoted in order to create economically sustainable opportunities and hence incentives for stakeholders to move away from the illicit trade. Alternative development programmes must adopt a pro-poor approach if they are to empower those communities they purport to assist. They must therefore incorporate high levels of community-level participation at all stages of planning, implementation and evaluation. Crucially, they must not be integrated into eradication or interdiction strategies. Communities must not be asked to prove their willingness to substitute opium cultivation for other crops.

Rather the Afghan government must prove the viability of alternatives, before demanding that communities place the foundations of their survival economy at risk.

Most alternative development strategies which centre on crop substitution are, by their nature, medium to long-term interventions. Opium licensing, however, should be viewed and endorsed as a measure that is able to achieve a much faster response to the current crisis, since it seeks to utilise existing agrarian skills and expertise.

Recommendation Four

The international donor community must give full recognition to the interconnectedness of all elements of development assistance

International donor assistance is organised according to a rationale by which each lead-nation country is tasked with pursuing a distinct portfolio. However, by failing to give due recognition to the centrality of the opium crisis to all aspects of Afghanistan's reconstruction, this approach has artificially fragmented the reconstruction process. The international community must re-orientate its activities towards the formulation of a coordinated and integrated development agenda. At its core, this agenda must recognise that security and development are inescapably linked and must be pursued in strict parallel.

Recommendation Five

The international donor community should seek to prioritise Afghan ownership, responsibility and control of Afghanistan's reconstruction

International donor assistance must recognise that it is not possible to *impose* alternative development upon actors in Afghanistan's opium economy, through such tools as conditional aid. Although international expertise should play a key role in the formulation of effective alternative development strategies, the Afghan government must be granted overall ownership, responsibility and control. Only once such strategies are free from foreign policy demands and from the political agendas of Afghanistan's donor nations, can they begin to effectively address rural development, by improving relations with poppy farmers and farmer communities, thereby creating the conditions for the establishment of the rule of law.



Part One

Opium Poppy Eradication in Afghanistan: An Ill-Conceived Threat to Development

Jorrit Kamminga

The Senlis Council

Executive Summary

Opium Poppy Eradication in Afghanistan: An Ill-Conceived Threat to Development

Opium eradication's aims are clear: to decrease the total amount of cultivated opium poppy and thereby increase the drug's market price as well as the price of its derivatives such as heroin. It is then hoped that this increased price will consequently reduce the number of drug users.

In reality, forced eradication has the adverse effect: it drives up the value of opium-producing land, thereby creating strong incentives for farmers to continue cultivating opium. As well, government-directed eradication is dependent on the willingness of local officials to carry it out, and in a country with a weak rule of law like Afghanistan, officials lack the power to effectively influence farmers' behaviour.

Ultimately, because of the many variables that affect the cultivation of opium crops each year, the results of eradication can easily be offset by unforeseen factors.

Afghanistan's Experience with Opium Bans: Authoritarian vs. Ineffective

In 2000, the Taliban enforced a total ban on opium cultivation which led to a sudden and enormous increase in the market price of opium. Observers of the ban suggest that it was nothing more than a way to increase the profits the Taliban received from their tax on the drug trade.

The subsequent ban imposed by President Karzai's interim government in 2002 after the fall of the Taliban was ineffective, as the central government did not have the authority to carry it out. Along with the ban, the government mounted an eradication campaign. However, the measures introduced were based on compensation and failed in the face of mounting social protests and the government's inability to satisfy the demands of poor farmers. In the following years, the cultivation of opium steadily increased until 2005.

The Afghan Opium Economy and the Socioeconomic Damage of Eradication

In Afghanistan, the centrality of the opium industry to the country's economy makes it ill-suited to eradication. Forced eradication creates a deep conflict between the central government and rural communities that are dependent on poppy cultivation to survive. In addition, in areas where eradication is not fully carried out, local officials and community elders often overstate the area eradicated and direct eradication programs only to the poorest and most powerless farmers – a solution that only exacerbates the programs' ill effects.

Aside from the social damage it can cause, eradication programs also immediately ratchet up the market price of opium and farm-gate prices, which makes the cultivation of opium even more lucrative for farmers. This also causes a net transfer of income from opium growers to drug traffickers, who then profit from the increased value of their existing opium stocks at the expense of farmers.

Another consequence of forced eradication is the “balloon effect”; that is, the dispersion of drug crops to other regions. This phenomenon has been observed in Colombia and the surrounding Andean region and in the Golden Triangle. In Afghanistan, the balloon effect has been made easier by the destruction of irrigation networks and other infrastructure necessary for the cultivation of licit crops.

Eradication's Destructive Effect on Development in Afghanistan and Colombia

Eradication, while touted as a crucial part of the international community's reconstruction work in Afghanistan, is in fact an impediment to reconstruction in the country. Development work relies to a large extent on the twin pillars of rural development and stability, and any policy option that undermines these two pillars risks further destabilisation of the country. Social protest, political unrest, insurgency, warlordism and internal migration are the result. Forced eradication has the potential to undo the reconstruction work of Afghans and the international community in Afghanistan.

In Colombia, years of forced aerial eradication have brought about very little reduction in the amount of coca-cultivating land and have in fact been accompanied by a falling street price for cocaine. Eradication in that country has devastated the environment, caused widespread violence and insurgency, and helped create and propagate a civil war.

Aerial Spraying in Afghanistan: Unofficial Reality, Real Threat

Widespread aerial eradication has not been carried out in Afghanistan, though pressure from the international community and the US in particular has forced President Karzai's government to speculate on its possible use in the near future. But an investigation of various US government dossiers reveals that the US is keen to expand the use of forced eradication in the country.

Moreover, though forced eradication in Afghanistan is not an official policy option, a number of reports in Nangarhar province suggest that aerial spraying was carried out over a period of three years, from 2002-2005. Use of the practice was widely condemned by affected communities and President Karzai's government. However, these protests achieved little, as the US and UK denied any involvement in aerial spraying.

Forced eradication in Afghanistan has the potential to devastate the country's environment and lead to serious consequences for those communities dependent on illegal crops for their livelihoods. Opium production in Afghanistan can only be reduced by the long-term application of alternative livelihood programs. Aerial eradication in Afghanistan would result in social unrest and a deepening of rural poverty. Furthermore, it would irreparably damage the stability and legitimacy of the Afghan government. In short, forced eradication has the potential to devastate all aspects of Afghan society and doom the country and region to decades of turmoil.

Opium Poppy Eradication in Afghanistan: An Ill-Conceived Threat to Development

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The Senlis Council

Introduction

Opium poppy cultivation is ubiquitous throughout Afghanistan, cultivated in each of its provinces. According to the most recent figures published by the UNODC, it accounts for an estimated 52 percent of the country's GDP. The opium trade constitutes the lion's share (80 to 90 percent) of Afghanistan's massive black-market economy, an economy whose total annual opium exports are estimated at US\$2.7 billion.¹ An estimated 2 million Afghans are also indirectly or directly dependent on opium cultivation for their every-day needs.²

Although in 2005 the UNODC found that the area of opium poppy cultivation in Afghanistan decreased by approximately 21 percent from 2004,³ it also found that potential opium production decreased by a mere two percent owing to favourable weather conditions and an excellent harvest in 2005. Afghanistan therefore remained the world's largest supplier of opium, producing 87 percent of the global supply.⁴

Afghan farmers illegally grow opium poppy because of its “*double comparative advantage*”. First, there is its comparative advantage vis-à-vis other crops; opium poppy can be grown almost everywhere in Afghanistan and is a relatively low-weight/high-value product that is easy to transport and has a guaranteed market. Opium is non-perishable, and so farmers can stock hold this crop for many years. The second comparative advantage is related to Afghanistan's unique political and environmental conditions. A weak security environment, weak government

¹ UNODC, Afghanistan Opium Survey (Vienna 2005), iii.

² Ibid., 1. Given the fact that the illegal opium economy has a huge influence on the general economy of Afghanistan, the author's assumption is that many more Afghans are indirectly dependent on the overall opium economy.

³ Afghanistan Opium Survey, 3.

⁴ Afghanistan Opium Survey, 5.

institutions and a lack of rule of law make Afghanistan an ideal place to grow a crop that is both hardy and highly profitable.⁵

The opium crisis is the key threat to further stabilisation, reconstruction and economic and social development in Afghanistan. The new national Parliament of Afghanistan was inaugurated in December 2005, and is faced with a grave dilemma. On the one hand, President Hamid Karzai's government is trying to rid the country of illegal poppy cultivation while simultaneously decreasing Afghanistan's economic dependence on the illegal opium industry. On the other hand, many farmers, field labourers and their families are wholly dependent on the illicit cultivation and production for their daily survival.⁶ At present, there are few if any alternative livelihood options available that would grant farmers and labourers economically sustainable opportunities and hence incentives to move away from the illicit trade. Most alternative development strategies which centre on crop substitution are, by their nature, medium to long-term interventions, requiring between five to ten years before becoming sustainable. They also demand a broad-based, multi-sectoral effort over a number of years, a commitment that is difficult for aid donors to maintain.⁷ Moreover, they are dependent on a secure environment having been laid, a key element of which is an increase in the central government's effective control over its territory.

This paper will address one of the key counter-narcotic strategies currently invoked in Afghanistan: the eradication of opium poppy cultivation by the government or by farmers themselves. It will be argued that eradication should never be undertaken unless and until economically viable alternative livelihoods have been secured. This view is consistent with that of the World Bank, which observes that:

“[a]brupt shrinkage of the opium economy or falling opium prices without new means of livelihood would significantly worsen rural poverty.”⁸

This paper will also argue that aerial chemical spraying of poppy crops should be avoided at all costs. The negative effects of aerial spraying on human health, livestock, the environment, as well as on the relationship between farming communities and the government would be a grave

⁵ The World Bank, Afghanistan – State Building, Sustaining Growth, and Reducing Poverty (Washington 2005), 113.

⁶ Jorrit Kamminga, “Agricultural aspects of Afghanistan's opium economy” in: D. Spivack (ed), Feasibility Study on Opium Licensing in Afghanistan for the Production of Morphine and Other Essential Medicines (Kabul 2005), 251.

⁷ AREU, “The Opium Economy and Livelihoods”, Daily Outlook Afghanistan (8 December 2005).

⁸ Afghanistan – State Building, Sustaining Growth, and Reducing Poverty, 119.

setback to Afghanistan's nascent economy and government. Lastly, the paper calls on the newly-installed Parliament to introduce a law preventing the Afghan government and international community from initiating eradication and especially aerial spraying campaigns upon Afghanistan and its people. It argues that Afghanistan would suffer disproportionately if aerial spraying campaigns were imposed on impoverished rural communities that still depend fully on poppy cultivation for their survival.

1. Eradication: An assessment

Crop eradication is a strategy with four sequential main objectives which lead, in theory, to a reduction of the supply of illegal drugs and consequently of illegal drug demand. Eradication aims to:

1. Decrease the total amount of cultivated opium poppy;
2. Increase the price of raw opium as a result of reduced cultivation combined with an increased risk for farmers who grow illegal crops;⁹
3. Drive up retail prices for opium derivatives such as heroin, as a direct consequence of the lower availability of opium on the market;
4. Decrease illegal drug consumption as a result of less availability and higher prices for drug users.

Eradication can take place in one of two ways: (1) voluntarily – by farmers themselves, or (2) forcibly – by law enforcement officials. Voluntary eradication usually involves offering farmers incentives such as subsidies, technical assistance or agricultural inputs (i.e. seeds and fertiliser), in order to persuade them to stop growing opium poppy and shift instead to legal alternatives. Even without these incentives, there is evidence of Afghan opium farmers having ceased cultivating poppy if they can be motivated to do so through religious or moral entreaties.¹⁰

In contrast, forced eradication refers to the destruction of opium poppy cultivation by police, counter narcotics teams or local government officials. This is a more problematic approach to the drug problem as it can escalate repression and social tension, as well as blur distinctions

⁹ It is not clear whether a higher farm-gate price is a real objective of eradication efforts or rather a negative side-effect. Higher prices paid to farmers create strong incentives for farmers to continue cultivating opium poppy and attract newcomers to the industry.

¹⁰ A government could, for example, declare opium poppy cultivation against the country's norms, moral behaviour or the state's religion.

between development and repression. In turn, this can create a widening of the gap between local government and farmers' communities, hindering the establishment of the rule of law.

Eradication has three main weaknesses. First, without sustainable and competitive alternatives already in place, eradication is not a feasible economic solution for those reliant on opium cultivation. Second, eradication tends to drive up farm-gate prices, which in turn creates strong incentives for farmers to continue cultivating opium poppy whilst also attracting newcomers to the industry. Third, the (short-term) success of eradication in terms of its ability to decrease quantities of opium cultivated, depends heavily on local government and other local power structures. Yet, in Afghanistan these power structures either have no real interest in eradication because of indirect or direct linkages with the illegal opium economy, or because they lack the requisite credibility, influence and control to effectively influence farmers' communities and farmers' behaviour.

Three key factors make it extremely difficult to judge the effects of eradication in the medium and longer term, even following government claims that eradication efforts have yielded short term results:

1. Yearly changes in the average yield of opium poppy per hectare;
2. "The balloon effect" – the displacement of cultivation and production to other regions and countries;
3. Opium stockholding, which causes a time lag between implementation of eradication programmes and concrete results in terms of reduced availability.

Claimed short-term reductions in cultivation can thus easily be masked by unforeseen factors. This underscores the need for a comprehensive assessment of all conditions in place before any eradication campaign is started.

2. Eradication in Afghanistan

Eradication of opium poppy in Afghanistan ostensibly began in the early 1990s, although more concerted eradication interventions commenced in 2000. In that same year, the Taliban enforced a ban on opium production, which led to an enormous decrease in both poppy cultivation and opium production in Taliban-controlled areas of Afghanistan.¹¹ Poor indebted farmers suffered

¹¹ ODCCP, *Global Illicit Drug Trends* (New York 2002), 6.

extensively from the ban, as they had no credit, stocks or alternatives to fall back on. However, the near-total eradication of poppy cultivation was short-lived. The following year saw the September 11th attacks, which in turn provoked a US-led war that toppled the Taliban regime.

Following the removal of the Taliban, the interim government imposed a similar ban on cultivation, production, abuse and trafficking of drugs, and embarked in 2002 on an eradication campaign carried out on 17,500 hectares of opium poppy.¹² This eradication policy was largely based upon compensation agreements. The UK and Afghan government offered farmers between US\$ 250 and US\$ 350 for each acre (0.40 hectares) of poppy eradicated, but were faced with social protest and difficulties in satisfying the demands of the farmers' communities.¹³ Moreover, eradication policies mainly targeted the poorer and more vulnerable poppy farmers and failed to tackle cultivation by resource-rich and influential farmers.¹⁴ Overall cultivation increased to 74,000 hectares compared to 8,000 under the Taliban.¹⁵ In 2003, it was claimed that more than 21,000 hectares of poppy were eradicated. However, in the same period total cultivation actually increased by 8 percent to 80,000 hectares.¹⁶ The 2004 eradication campaign again attempted to cut opium poppy cultivation by 25,000 hectares but failed utterly; the total area under cultivation increased to a post-Taliban high of 131,000 hectares.¹⁷

The US and the UK actively support eradication. For the year 2005, Washington initially allocated funds for eradication totalling more than twice the amount earmarked for alternative livelihood creation (US\$ 313 million compared to US\$ 120 million).¹⁸ The total amount the US planned to spend on counter narcotics operations in Afghanistan in 2005 amounted to US\$ 774 million, which suggests that an astonishing 40 percent of the total budget is set aside for eradication.¹⁹

The Afghan 1384 (2005) Counter Narcotics Implementation Plan stipulates that there would be a *“credible, targeted and verified eradication campaign in 1383-84 (2004-2005) led by the new*

¹² Afghanistan – State Building, Sustaining Growth, and Reducing Poverty, 121, 122.

¹³ Barnett R. Rubin, *Road to Ruin: Afghanistan's Booming Opium Industry* (New York 2004), 15.

¹⁴ *Ibid.*

¹⁵ Afghanistan Opium Survey, 3.

¹⁶ *Ibid.*

¹⁷ Claudio Franco, “Afghanistan's anti-poppy drive off to shaky start”, *Eurasia Insight* (6 March 2004)

¹⁸ Netherlands Institute of International Relations Clingendael, *Afghanistan 2005 and Beyond. Prospects for Improved Stability Reference Document* (The Hague 2005), 64.

¹⁹ “U.S. drops Afghanistan opium spraying plans. Karzai: Aerial spraying of heroin component may harm villagers”, *The Associated Press* (25 January 2005).

*Afghan government.*²⁰ President Karzai's interim government launched its first eradication campaign in April 2002 after banning opium production in January 2002. The initial focus was on offering poppy farmers compensation for abandoning poppy cultivation, but this strategy was soon withdrawn in the face of negative and counterproductive results.²¹ Antonio Maria Costa, Executive Director of The United Nations Office on Drugs and Crime (UNODC) commented on the initial failure of eradication policy in Afghanistan by stating that eradication of poppy needed to reach a threshold of credibility in order to be effective.²²

UNODC data shows that total production (both in metric tons and in total amount of hectares under cultivation) increased substantially from 2003 to 2004 and only started to decrease from 2004 to 2005.²³ However, even the 21 percent decrease in opium poppy cultivation witnessed in 2005 cannot be fully attributed to the success of eradication; with only 5,100 hectares eradicated that year and with an overall decrease of 27,000, 81 percent of the fall in poppy cultivation is attributable to other factors.²⁴ Moreover, UNODC estimates that 72 percent of eradication took place in the provinces of Nangarhar (eastern Afghanistan) and Helmand (south), which means that these eradication efforts were not only small in size, but geographically quite concentrated.

Eradication campaigns in Afghanistan are run by a special-purpose Central Poppy Eradication Force (CPEF) and the Afghan National Police (ANP). Most eradication efforts are led by provincial governors or district leaders. UNODC aided the Ministry of Afghan Counter Narcotics (MCN) in 2005 to implement a survey to verify the results of its opium poppy eradication programme.²⁵ The UN Office does not, however, play any direct role in eradication efforts in the country. Its Country Director for Afghanistan, Ms. Doris Buddenberg, claimed in an interview that:

“Eradication usually does not bring about a sustainable reduction of poppy crop, it is a one-time short-term effort. Also eradication usually pushes the prices up. As we have seen from the Taliban period, the one-year ban on opium

²⁰ Islamic Republic of Afghanistan, 1384 (2005) Counter Narcotics Implementation Plan. See the website of the Canadian Embassy in Afghanistan:

http://www.afghanistanembassy.ca/en/counter_narcotics/indez.php.

²¹ Jorrit Kamminga, “Agricultural aspects of Afghanistan’s opium economy”, 259.

²² IRIN, Bitter-Sweet Harvest: Afghanistan’s New War. Poppy Eradication: The issues, the players and the strategies. <http://irinnews.org/webspecials/Opium/erapop.asp>.

²³ UNODC, The Opium Situation in Afghanistan (29 August 2005), 2, 3.

²⁴ Jorrit Kamminga, “Agricultural aspects of Afghanistan’s opium economy”, 260.

²⁵ This so-called “Support to the Verification Process of Opium Poppy Eradication” verified the eradication of around 4,000 hectares of opium poppy in 2005.

poppy cultivation increased prices enormously the following year and it became extremely attractive for farmers to cultivate poppy.”²⁶

As mentioned above, in the 2004/2005 growing season, it is claimed that a total of 5,100 hectares were eradicated. This represents around five percent of the total area under poppy cultivation in 2005.²⁷ Eradication was manual and delivered both forcibly and voluntarily.

The UK is the coordinator of the drug policy dossier on behalf of the international community, and continues to assist the Afghan government in building the capacity to eradicate 20,000 hectares (or 15 percent of total poppy cultivation per annum) despite equivocal international support.²⁸ The ultimate goal is to decrease total opium poppy cultivation in Afghanistan to 10,000 hectares by 2013.

3. The impact of opium poppy eradication in Afghanistan

3.1 Social tension

Given the degree of economic dependence on opium by farmers and farming communities, eradication will in the short-term destroy many livelihoods and incomes in rural areas. It is beyond doubt that the economies of many rural communities hinge on poppy cultivation. Eradication forces these communities to place the foundations of their survival economy at risk, creating a major source of social tension. In Afghanistan, that has been borne in fierce protests in past years. In the Maiwand district (southern province of Kandahar), eradication campaigns were suspended after clashes between farmers and the Central Poppy Eradication Force (CPEF).²⁹ The protesters blocked the main road between Kandahar and Herat and dozens of villagers reportedly threw stones and fired shots at the Eradication Force. In the district of Kama (southern province of Nangarhar), 3,000 farmers took to the streets to demonstrate against the destruction of their livelihoods.³⁰

²⁶ Interview with IRIN (Integrated Regional Information Networks), part of the UN Office for the Coordination of Humanitarian Affairs (30 November 2004).

²⁷ Afghanistan Opium Survey, 9.

²⁸ UK government, Foreign and Commonwealth Office, Country dossier Afghanistan. Chapter “Counter Narcotics” (2005).

²⁹ IRIN, Afghanistan: Protest against opium eradication (14 April 2005).[online] Available at: <http://irinnews.org/report.asp?ReportID=46645&SelectRegion=Asia&Asia&SelectCountry=AFGHANISTAN>.

³⁰ Claudio Franco, “Afghanistan’s anti-poppy drive off to shaky start”, Eurasia Insight (6 March 2004)

In general, many opium farmers claim that despite initiating eradication programmes, the Afghan government has not delivered on its promise to provide assistance, compensation and alternative livelihoods.³¹ Without this assistance, farmers cannot reasonably be expected to escape from the vicious cycle of ever-increasing indebtedness to individuals and organisations operating in the opium trade.

At the other end of the spectrum are provincial governors, district and village chiefs and local police officers who are under extreme pressure from the central government to come up with quick-fix solutions and to eradicate large amounts of hectares, either by force or by motivating farmers to voluntarily abandon poppy cultivation. In general, resource-poor farmers with small plots of land have been the targets of these programmes. Local leaders have shown themselves to be far more willing to eradicate crops belonging to small, powerless farmers rather than those belonging to powerful and wealthy farmers and landowners.

In this environment, farmers are left with no alternative but to fight to defend their livelihood and (often) sole source of income. In response to opposition, local leaders tend to overstate the amount of hectares eradicated in their reporting or alternately do everything in their power to destroy poppy fields or force farmers to eradicate their own crops. These frictions serve to worsen rural poverty as well as to widen the gap between local communities and local and central government. This, in turn, undermines the establishment of the rule of law and thus any real prospects of long-term rural economic development.

Ironically, local commanders, insurgent groups and remnants of the Taliban movement could easily benefit from a post-eradication environment and even adapt their strategies to suit the new situation. It should be remembered that the Taliban movement arose in Afghanistan because of generalised instability, the lack of an effective central government and dire economic circumstances.³²

3.2 The self-fulfilling prophecy of eradication: Higher prices and higher profits for traffickers

The mere announcement of future eradication campaigns can impact the behaviour of actors involved in the Afghan opium economy. The expectation of a smaller harvest will, in turn,

³¹ Protest against opium eradication (14 April 2005).

³² Graham Farrell and John Thorne, "Where have all the flowers gone?: evaluation of the Taliban crackdown against opium poppy cultivation in Afghanistan, *The International Journal of Drug Policy* 16 (2005) 81-91.

generate the expectation that opium prices and expected farm-gate prices will rise. Resource-rich farmers, traders, shop-keepers and traffickers then store opium stocks and wait for the peak moment in time in which to sell it. The effect of this is twofold. First, it decreases the effectiveness of the eradication strategy in terms of decreasing future availability of opium. Second, it causes a net transfer of income from opium growers to drug traffickers who are able to profit from the increased value of opium stocks.³³ Poor farmers, on the other hand, will only benefit from the inflated farm-gate price if eradication campaigns are announced but not implemented, leaving them to harvest the normal amount of opium.

3.3 Shifting opium cultivation

A further unintended consequence of eradication is often described as the “*balloon effect*”, involving the displacement of illegal production to more remote areas, where it is more difficult to extirpate. This presents a clear danger in Afghanistan, where only three percent of the country’s irrigated land is used for opium cultivation and much of the country is suited to opium poppy cultivation.³⁴ Furthermore, large numbers of itinerant land labourers and harvesters can easily be mobilised.³⁵

The “*balloon effect*” and other unintended consequences of eradication efforts preclude the sustainable success of eradication as a supply reduction tool. Successful eradication requires a nationwide, comprehensive eradication programme, carried out for a significant number of years. It also necessitates increased control of the central government over the main opium-growing areas of Afghanistan. Given Afghanistan’s rugged terrain, poor infrastructure, limited resources and current political realities, such an operation would be extremely difficult to realise. Moreover, even if a comprehensive, long-term eradication programme could indeed be implemented, the ongoing success of such a programme would depend on parallel stability, economic growth and job creation, over a number of years. As noted at a recent meeting of experts on Afghanistan’s opium economy, aerial spraying is not only an inappropriate response, it is not even technically feasible in Afghanistan.³⁶

³³ Barnett Rubin in: Sonni Efron, “U.S. Backs Away From Afghan Aerial Spraying”, LA Times (23 January 2005).

³⁴ UNDCP, Afghanistan. Strategic Study #4. Access to Labour: The Role of Opium in the Livelihood Strategies of Itinerant Harvesters Working in Helmand Province, Afghanistan (Islamabad 1999), 26,27

³⁵ Ibid.

³⁶ Discussion at the Century Foundation and Friedrich Ebert Foundation Roundtable Lunch “Afghanistan at a Crossroads” 7 December, 2005, New York.

3.4 Eradication as an impediment to Afghanistan's reconstruction

One of the common elements of the abovementioned problems associated with crop eradication is that they instil uncertainty and instability in farming communities. The reconstruction effort in Afghanistan relies to a large extent on the twin pillars of rural development and security. Since the opium crisis lies at the heart of this reconstruction nexus, eradication of the farmer's sole livelihood raises the possibility of further destabilising the country through social protest, political unrest, insurgency, *warlordism* and internal migration.

Thus although the illegal opium economy provides subsistence livelihoods for many Afghans, it enriches very few. For most Afghans involved in opium cultivation, opium is virtually the only means by which they can gain access to credit and land for farming. The impact of eradication is felt most acutely by those most impoverished elements in Afghan society: resource-poor farmers and labourers. Opium poppy eradication cannot therefore succeed where so many poor farmers are dependent on its cultivation and where no viable economic alternatives exist as a means for their survival.

The root problem of crop eradication interventions is that they fail to acknowledge the fact that the social, economic and political structures that create and maintain poverty in Afghanistan are the same structures that have created and maintained opium cultivation. Even where crop eradication interventions are integrated with other strategies such as the provision of alternative livelihoods, they can never create the conditions for sustained development. Recent security reports from the United Nations in Afghanistan indicate that eradication programmes are directly responsible for instability in several provinces; stakeholders in the opium economy (farmers, landowners, traders and traffickers) currently face the loss of incomes and livelihoods. The situation for some farmers is particularly serious. Aside from eradication, should they refuse to cultivate opium poppy or if they respond to the government order to destroy their poppy crops, farmers in the north of Afghanistan have been threatened with death by the remnants of the Taliban.

4. Aerial spraying of opium poppy cultivation

Until recently, forced eradication by aerial spraying of chemicals was not a policy option for the Afghan government. The United States (US) and the United Kingdom (UK), which coordinate the drug policy dossier in Afghanistan and are at the forefront of the international community's reconstruction efforts in the country, have also not expressed official support for eradication. This is in line with the 1384 (2005) Counter Narcotics Implementation Plan, which explicitly states that "*the Afghan government has a no aerial eradication policy.*"³⁷

President Karzai has also so far condemned aerial spraying as a counter narcotic option and has instead focused on other eradication methods like slashing and burning fields.

Nevertheless, Karzai seems recently to have succumbed to heavy foreign pressure. In November 2005, he called on farmers to stop growing poppies, threatening that continued cultivation would embolden the international community to use all means available—including aerial spraying—to eradicate the drug problem at its source.³⁸ It is clear, then, that US pressure on Karzai has influenced his policy making³⁹, and that Afghan resistance to eradication has only stemmed the tide.

An analysis of US budgetary shows clearly that the US has only postponed aerial spraying. Robert Charles, State Department Assistant Secretary for the Bureau for International Narcotics and Law Enforcement Affairs, stated that US\$ 152 million of the total US\$313 million was earmarked for eradication in 2005, and would have been used had Karzai indicated that current counter narcotics policies had failed.⁴⁰ US Secretary of State Condoleezza Rice also stated that "*At this point, manual [eradication] is all we can do, but we'll see whether aerial [eradication] is needed.*"⁴¹

Beyond announcements hinting at the possibility of eradication, the US government is actively seeking personnel to work in Afghanistan on eradication. Recent job postings by the US Department of State's Bureau of International Narcotics and Law Enforcement Affairs include a call for an Aviation Eradication Ops and Safety Advisor and an Aviation Maintenance Advisor

³⁷ Islamic Republic of Afghanistan, 1384 (2005) Counter Narcotics Implementation Plan. See the website of the Canadian Embassy in Afghanistan:

http://www.afghanistanembassy.ca/en/counter_narcotics/index.php.

³⁸ "Karzai warns Afghan poppy farmers of world backlash", Agence France Presse (29 November 2005).

³⁹ "U.S. drops Afghanistan opium spraying plans. Karzai: Aerial spraying of heroin component may harm villagers", The Associated Press (25 January 2005).

⁴⁰ Ibid.

⁴¹ Sonni Efron, "U.S. Backs Away From Afghan Aerial Spraying", LA Times (23 January 2005).

for operations in Afghanistan. The Aviation Eradication Ops and Safety Advisor is offered a contract until December 2006 and his job would be to conduct aerial spraying of poppy crops:

“The end game of the CN [Counter Narcotics] aviation program in Afghanistan is the curtailment of the supply (...) through aerial and airmobile eradication of drug crops (...). [The Aviation Eradication Ops should A]ssist the Deputy Aviation Advisor and the Senior Aviation Advisor in directing and coordinating aircraft and personnel deployments within Afghanistan for the purpose of destroying opium poppy crops through aerial eradication.”⁴²

The Aviation Maintenance Advisor’s contract states that the contract runs until December 2006 and that this position is in support of US aerial eradication. The job description also mentions that the candidate should:

“Provide general direction and guidance to the contractor and host nation aviation maintenance and logistics activities and personnel for the purpose of providing adequate assets in support of destroying opium poppy, and interdicting the flow of the finished narcotics products into the United States.”⁴³

These two job descriptions hold a clear message for the Afghan poppy farmers, the Afghan government and the international community with the UK at the helm: Aerial spraying in Afghanistan is not a distant plan but a short-term probability.

The dire results of applying this policy option in Colombia will be addressed in the following section. However, an analysis of the current social and economic situation in Afghanistan suggests potential parallels with the Colombia’s experience with eradication. In poor and isolated areas of Afghanistan, the environmental and economic damage caused by eradication—including detrimental effects on public health, degradation of the environment and the destruction of livestock and other food and cash-crops—could further destabilise rural communities and create increased tension between communities and the central government. Coupled with a growing militarised insurgency operating in many opium-poppy cultivating areas, eradication could create the necessary conditions for civil war.

⁴² US Department of State, Bureau of International Narcotics and Law Enforcement Affairs, Solicitation Number: PSC-06-002 (INL), issued on 17 October 2005.

⁴³ US Department of State, Bureau of International Narcotics and Law Enforcement Affairs, Solicitation Number: PSC-06-003-A (INL), issued on 22 November 2005.

5. An international example: Colombia

In Colombia, eradication campaigns, both aerial and manual, have failed to deliver a substantial structural reduction of coca cultivation. In 2004, coca cultivation decreased by 6,000 hectares (from 86,000 to 80,000 hectares), a decrease of approximately 7%.⁴⁴ However, to obtain this modest reduction, an astonishing 139,161 hectares were eradicated that year—more than the total amount of hectares devoted to opium poppy in Afghanistan in 2004. Moreover, 98% of these hectares were sprayed with chemicals⁴⁵, with the remaining 2% manually eradicated by the Colombian Army. Most significantly, however, the drop of 7% of Colombia’s coca-cultivating area was more than offset by a corresponding increase in cultivation in other parts of the Andean region—specifically, there were significant increases in area devoted to coca cultivation in Peru (14% increase) and Bolivia (17% increase), a clear example of the “balloon effect”. This casts serious doubt on the effectiveness of eradication as an anti-narcotic policy option.

The US Government Accountability Office (GAO), which supports the American Congress in meeting its Constitutional responsibilities, released a report in December 2005 that verified that Colombian eradication measures had failed to impact the supply of cocaine on the US market, the main market for Colombian cocaine.⁴⁶ The GAO went on to criticise the US government’s evaluation of the success of its Colombian counter-narcotic program and cited the fact that the number of cocaine users in the US remains stable.

Instead of the expected rise in cocaine prices, consumer prices of cocaine have experienced a downward trend following eradication.⁴⁷ While crop eradication is measured on its success in decreasing the supply and purity level of illegal drugs on the market, availability and purity levels of cocaine have remained stable.

Apart from the manifest failure of eradication as a counter narcotic measure, aerial spraying in Colombia has had several devastating environmental, social, and political drawbacks. It is clear that aerial spraying has affected far more than just coca plantings.⁴⁸ Herbicides are sprayed over

⁴⁴ UNODC, World Drug Report 2005 (Vienna 2005), 12.

⁴⁵ Ibid, 62.

⁴⁶ “Contraloría del Congreso de Estados Unidos cuestiona informe sobre éxito del Plan Colombia”, El Tiempo (9 December 2005).

⁴⁷ WOLA, Special report on Drugs and Democracy in Latin America: The Impact of U.S. Policy (Washington 2004), 1

⁴⁸ Eduardo Cifuentes, the Colombian ombudsman stated in 2002 that he had received more than 6,500 complaints of aerial spraying planes fumigating food crops, leaving farmers without a livelihood, seriously harming the people’s—especially children’s—health and causing serious damage to the already

nearby food crops, fishing ponds and in national parks (where coca is widely grown).⁴⁹ Reports have documented the damage caused by spraying to the subsistence crops and livelihoods of poor farmers.⁵⁰ When corresponding adequate alternative livelihood programs were not in place, evidence shows that aerial spraying directly led to an increase in social unrest, instability and violence.⁵¹

6. A domestic case-study: The province of Nangarhar

In 2004, President Karzai was deeply concerned about reports from the eastern province of Nangarhar which included reports that aerial spraying had been carried out in several areas by special planes.⁵² At least four districts in Nangarhar have produced corroborating reports detailing spraying of opium poppy crops prior to the harvest season: The Shewar district (northwestern Nangarhar), Shinwar (east), Khogyani (southwest) and the Achin district (south). Most reports stem from the Khogyani district and while evidence is scarce, an analysis of the reports suggests that spraying was most probably carried out at a low intensity as test runs to gauge the impact of future spraying campaigns in Afghanistan.

Witness reports collected by the author dating from April 2004 to the present include descriptions of the effects, intended and unintended, of spraying in rural areas. The following six reports detail various accounts of suspected aerial eradication measures taken in Afghanistan. Although it is not clear to what extent these reports can be validated, the frequency and the undeniable similarities of the reports command attention and require further investigation.



sensitive eco-system of the Amazon region. Jeremy McDermott, “Colombia drug spraying ‘hits weakest’”, BBC News (10 October 2002).

⁴⁹ Yadira Ferrer, “Colombia: Anti-Drug Herbicide to Be Sprayed Again in Nature Reserve”, International Press Service, (20 May 2005).

⁵⁰ Elinor Shields, “US weighs costs of Plan Colombia”, BBC News (5 July 2005).

⁵¹ WOLA, *Drugs and Democracy in Latin America: The Impact of US Policy* (2004). Executive Summary, p.12.

⁵² “Karzai: Don’t Spray Our Poppies”, AP (19 November 2004).

In the village of Nakakhil in Khogyani district, aerial spraying was allegedly carried out in early 2004, causing children to suffer from eye problems, diarrhoea and other skin irritations.⁵³ Symptoms included white skin patches on the faces of children. The chemicals reportedly damaged wheat, tomato plants and other crops. Villagers refused to eat the remaining vegetables and did not drink from the village wells, afraid of becoming ill. Livestock was reported to have been affected even two weeks after spraying. The Afghan Islamic Press Agency (AIP) reported that the chemicals were in the form of small black granules and resembled fertiliser.

In Kuz Kunar district (northwestern Nangarhar, known locally as the Shewar district) in the spring of 2004, farmers saw planes arrive around midnight and spray a yellow type of chemical resembling dew over their fields. This dew remained in a layer on all affected crops for approximately 10 hours. It destroyed the farmers' wheat, vegetables and tomatoes. In this case, no one became ill, but chickens and cattle died.

In April 2004, in the area around the Shekhmarkhell village in the Achin district, farmers reported that the earth had been barren for a year, suggesting that spraying took place prior to the opium harvest of 2003. Farmers also stated that several fields had been sprayed at night by what eyewitnesses described as "black aeroplanes" that could barely be seen against the night sky.

Alleged spraying took place in Hakimabad and its neighbouring villages (in the Khogyani district) in early November 2004. Dr. Mohammed Rafi Safi told AFP that he personally treated 30 Afghan farmers with illnesses such as eye and respiratory problems and aching body parts.⁵⁴ Farmers from Hakimabad village reportedly became ill after touching the chemicals or affected vegetables. Opium poppy crops were destroyed, along with food crops such as onions, spinach and wheat. The chemicals used were described as a snow-like, sticky substance, slightly lighter in colour than the earth around seedlings.⁵⁵ The former Nangarhar provincial governor Haji Din Mohammed, now governor of Kabul, stated that there was no doubt that aerial spraying had taken place.⁵⁶ In a second village, Nimla, it was alleged that "dark planes" sprayed chemicals on houses, orchards and fields, resulting in the yellowing of poppy seedlings.⁵⁷

⁵³ Report of the Afghan Islamic Press news agency, "Chemicals sprayed on Afghan poppy fields now causing "skin patches" (4 November 2004). Reproduced by the BBC Monitoring Service via COMTEX.

⁵⁴ "Afghan opium farmers say crops spraying made them sick", AFP (27 November 2004).

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Carlotta Gall, "Afghan Poppy Farmers Say Mystery Spraying Killed Crops", New York Times (5 December 2004).

In October 2005, farmers in Khogyani claimed that spraying had taken place the previous February, prior to the 2005 harvest. These farmers also recalled hearing aeroplanes at night. The day after the alleged spraying, one farmer noticed a thin film of a red substance on the windscreen of his car, which he compared to a layer of seed-like or fertiliser-like pellets. Farmers in the area reported that the sprayed chemicals were very fast-working. In the gullies and valleys (which are relatively cold and do not receive much direct sunlight), all of the poppy crops died within one day. On the open grounds of the plateaus, however, it took about two days before the effects of the chemicals became visible. Most food and cash-crops were destroyed (including wheat, tomatoes, marrows and other fruits). The farmers described the fruits as looking burnt on the outside. Only potatoes, growing underground, were reportedly unaffected. Chickens that ate from the ground died almost immediately and within two to three days, villagers—especially children and elders—developed flu-like symptoms including running noses, coughs, burning eyes and sore throats.

These and other reports detailing similar incidents in the Khogyani district led President Karzai to publicly condemn aerial eradication in no uncertain terms. The Afghan Chief of State then summoned both the US and UK ambassador to provide an explanation for the alleged sprayings, but both countries denied any involvement.⁵⁸ A government delegation was then dispatched by the Ministry of Agriculture to the Khogyani and Sherzad districts to confirm whether non-poppy crops such as wheat had been affected and to investigate the effect of spraying on humans and livestock.⁵⁹ Samples of the chemicals used were also taken to Kabul and subsequently the head of the delegation, Mr. Nasrollah Bakhtiana, told the Bakhtar Information Agency that the delegation had concluded that herbicide had been sprayed.⁶⁰ Analyses of the different types of chemicals reportedly used suggest that the sprayings constituted several different test runs carried out in an attempt to identify the herbicide best suited to poppy eradication in Afghanistan.

At the end of November 2004 a final Afghan government report on the Khogyani and Shinwar district sprayings was drafted, jointly prepared by the Ministry of Public Health and the Ministry of Agriculture.⁶¹ The report concluded that the spraying of herbicides had had profound negative effects on the environment, had contaminated water and had caused asthma

⁵⁸ “Afghan Poppy Farmers Say Mystery Spraying Killed Crops”.

⁵⁹ Report of the Afghan Islamic Press news agency, “Afghan government delegation to probe aerial spraying of opium poppy crops” (4 November 2004). Reproduced by the BBC Monitoring Service via COMTEX.

⁶⁰ Report of Radio Afghanistan, “Afghan delegation confirms use of chemical spray to destroy poppy crops” (21 November 2004). Reproduced by the BBC Monitoring Service via COMTEX.

⁶¹ Report of Radio Afghanistan, “Afghan cabinet expresses disapproval of spraying poppy fields (29 November 2004), Reproduced by the BBC Monitoring Service via COMTEX.

and diarrhoea with villagers. A Declaration of the National Unity and Development Association of Kogianies (NUDAK) subsequently prepared a report on the sprayings, which alleged that the spraying had resulted in the deaths of children. A translated version of the “NUDAK Declaration” can be found in Appendix I.

The NUDAK Declaration’s allegations were later corroborated in meetings with the Afghanistan Human Rights Organisation (AHRO), which confirmed that five children had been killed by chemical spraying.⁶² An AHRO document delivered to the author states that:

“In the Holy month of Ramadan 1383 (2004), the spraying with the help of aeroplanes not only destroyed poppy plants but also destroyed other crops like wheat and other vegetables and killed one boy in the Aziz Khel village of Khogyani and killed two others also. It similarly killed hundreds of livestock and in some villages of the Shirzad and Khogyani districts, it caused dysentery, vomiting, nausea, sore throats and allergies in human beings.”⁶³

In all of the reports cited in this paper, farmers were never informed beforehand of upcoming spraying campaigns, nor were they compensated afterwards. As well, spraying only took place under cover of darkness. Importantly, communities affected by eradication believed that President Karzai’s government had approved the action under instruction from the US.

Although no government has claimed responsibility for the sprayings or the deaths and devastation that they caused, numerous Afghan farmers, government officials, and international personnel hold the belief that since the US controls the entire airspace of Afghanistan, it is highly improbable that aerial spraying took place without the consent or involvement of US forces.

⁶² Meetings held between The Senlis Council and the Afghanistan Human Rights Organization (AHRO) in December 2005.

⁶³ AHRO document addressed to and translated by The Senlis Council (10 December 2005). Available on request.

Conclusion – A first parliamentary challenge

This conclusion will summarise the three key lessons that should guide the Afghan government and the international community's consideration of future counter narcotics policies in Afghanistan, specifically with regard to eradication. The **first** key lesson of this paper can be summarised by quoting The World Bank:

“[E]radication alone will not work and is likely to be counterproductive, resulting in perverse incentives for farmers to grow more drugs (...), displacement of production to more remote areas, and fuelling of violence and insecurity (...), which in several cases forced the eradication policy to be reversed and led to adverse political assistance work (...). [W]ithout alternative livelihoods already in place, premature eradication damages the environment for rural development.”⁶⁴

Eradication interventions in Afghanistan will not be successful in the short or medium-term because of the lack of sustainable alternatives to opium cultivation. Moreover, as has been shown in Colombia, eradication has the potential to devastate a country both socially and environmentally, and can lead to serious consequences for those dependent on drug crops for their livelihoods.

The **second** key lesson is that opium production in Afghanistan can only be reduced in the long run by also reducing poverty and creating jobs and providing alternative livelihood programs in rural areas. The government and the international community must deliver when it comes to providing these incentives before forcing the eradication of a crop that provides income to millions of Afghans.

The **third** key lesson is that aerial eradication in general, and chemical spraying in particular, will result in social unrest and increased rural poverty. Further, it will damage the stability and legitimacy of the Afghan government by creating a deep conflict between the farming communities that depend on opium crops to survive and a government that is—or appears to be—intent on destroying these crops and as a result, the livelihoods of the people the government claims to represent.

⁶⁴ Afghanistan – State Building, Sustaining Growth, and Reducing Poverty, 120.

The international community, the Afghan government and especially the newly-formed national Parliament have to face up to the huge challenge of confronting the opium production crisis, without prioritising short-term quick-fix solutions that could ruin the very fabric of Afghan society and its economy. Eradication is a drug policy tool that should only be applied in countries that are sufficiently stable, uphold the rule of law, and have a central government powerful enough to absorb the fallout from the destruction of livelihoods that is caused by eradication policies. In Afghanistan, the use of eradication as a drug policy option constitutes a dangerous gamble that could doom the country for decades to come. Eradication will further widen the gulf between the central government and rural communities, cause widespread social unrest, increase the power of insurgents, and contribute to a further breakdown in the rule of law.

In short, eradication as a policy option could destroy the nascent democratic state of Afghanistan and cause it to slide back into the violence and lawlessness from which it has only recently emerged. The opium problem lies at the heart of reconstruction efforts in Afghanistan, which are based on the twin pillars of economic development and stability. The solutions to Afghanistan's opium problem cannot be divorced from this reality.

Appendix to Part One

Declaration of the National Unity and Development Association of Khogianies (NUDAK)⁶⁵

Declaration and demands by NUDAK about the aerial spray of the poppy fields in Khogiani and Shinwar area (5 December 2004)

In a situation where the Afghan oppressed nation, after two and a half decades of fighting and conflicts, has been able to elect a national leader for its destroyed country and besides this had decided to work shoulder to shoulder with brothers and sisters and prevent anything which would be deleterious to this country and nation, we should with sadness state that poisonous aerial spraying was performed against this committed nation in our districts which not only eliminated and destroyed poppy but also killed human beings and animals, and destroyed fruit trees and other plants. [This has been done], while the people of this area are busy finding ways of elimination opium poppy with the help of their leaders and [already] have started eradication [of poppies] in some areas.

Based on the above facts, (NUDAK) wants to inform the related authorities of the Afghanistan Transitional Islamic State, and the national and international relief organizations.

1. We request the Public Health Ministry of the Transitional Islamic State of Afghanistan and the health sector organisations to come to our area and diagnose the illnesses caused to the human beings and the livestock and treat and prevent them. Because the catastrophes of diarrhoea, dysentery, vomiting and skin diseases are increasing day by day in the areas sprayed, [it is important] that illnesses and deaths are prevented in other human beings, animals and plants and also [it is necessary] to prevent further contamination. According to the information furnished by the people of the region, till date, more than five persons and tens of animals have lost their lives.
2. The Ministry of Agriculture of the Transitional Islamic state of Afghanistan and the related organisations are requested to go to these areas and help the cultivators in the process of rehabilitation of their fields.

⁶⁵ Translated from Pashto into English by The Senlis Council. The accuracy is the sole responsibility of The Senlis Council.

3. Though it is not possible to compensate human injuries and deaths, the damages to the animals and plants should be paid to the people affected, by those, who were the committers of this act.

4. Such unilateral acts should be prevented in the future and the elimination of poppy should be done [only] after consultations with the elders, [district] councils and the government authorities. This will in addition to eradication of poppy create the support of the people and will bring security and stability to this region.

Thank you,

National Unity and Development Association of Khogianies (NUDAK)

Glossary

Aerial spraying: The spraying of pesticides on agricultural land by aeroplanes in order to destroy opium poppy crops.

Alternative livelihoods: Legal on-farm, off-farm and non-farm activities that are promoted as sustainable alternatives to illegal opium poppy cultivation, such as the cultivation and production of wheat, raisins, fruits, rose oil, nuts and saffron.

Central Poppy Eradication Force (CPEF): The CPEF, created in 2004, is supported by the US State Department through funding, personnel and equipment. The Force, divided in several teams across Afghanistan, is responsible for the physical eradication of poppies in selected areas. At the beginning of 2005, the CPEF employed 700 officers. By the end of that year, the CPEF would grow to 2,300 officers.

Counter Narcotics Police: Specialised counter narcotic branch of the Afghan National Police (ANP), involved in interdiction and eradication efforts.

Eradication: All activities, regardless of scale or manner of delivery, aimed at the partial or complete destruction of opium poppy crops.

Ministry of Counter Narcotics (MCN): The Ministry of Counter Narcotics takes the lead role in the development, monitoring and evaluation of the Afghan Government's counter narcotics strategy. The institutional development of MCN is supported by the UK, the US and UNODC.

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Part Two

Winning Battles and Losing Wars: Illicit crop eradication experiences in Bolivia and Colombia

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Executive Summary

Winning Battles and Losing Wars: Illicit Crop Eradication Experiences in Bolivia and Colombia

For several decades, the forced eradication of illicit crops has been a key policy choice in the fight against illegal drugs in Bolivia and Colombia. However, the complexity of the illegal drugs phenomenon has shown that governments cannot succeed in achieving long term solutions through forcible eradication.

Since 2001, the eradication of coca crops in Colombia via aerial spraying has been applied with extreme aggression, and with each passing year it impacts more of Colombia's territory. However, eradication has failed in its key objective of reducing levels of coca cultivation. Instead, the so-called "balloon effect" displaced cultivation to more remote areas that are beyond the reach of law enforcement agencies. But most importantly, aerial spraying has resulted in the widespread displacement of peoples. The massive human, social and economic effects of this phenomenon have ruptured the country.

Colombian Eradication and the Growth of Paramilitaries

Cutting funding to left and right wing terrorist groups has been a main goal of the eradication program. However, eradication's success in increasing the street price of cocaine has only increased terrorist groups' illegal drug revenues.

Aerial spraying generates significant unintended consequences: it displaces people in a country already facing a refugee crisis, increases the supply of fighters for illegal armed groups, displaces cultivation, adversely affects the environment and undermines relations between the State and the rural communities. When taken together, these factors seriously hamper the long-term sustainability of this repressive policy.

The growth of drug cultivation and the effect of governmental policies on the illicit drug industry have resulted in a dramatic change in the political structure of the country. After the destruction of the two large cartels that dominated trafficking until the mid-1990s, a number of small trafficking groups emerged, which were dependent on right and left wing guerrillas. These guerrilla groups gained control over large chunks of national territory as well as multiple aspects of the cocaine industry. Disturbingly, in elections slated for March 2006, they are expected to gain at least one third of the seats in Congress and to dominate several key departmental governments.

Bolivia and the Rise of the *Cocaleros*

Eradication in Bolivia, which has a tradition of coca use, began in the 1980s and while it has prevented the expansion of coca plantings, it has not produced significant reductions. Nor has it always been peaceful.

Peasants have often complained of abuses by military and other government agencies involved in eradication and have at times responded with large marches and protests. These marches and protests have transformed coca growers – known as *cocaleros* - into the most powerful political force in the country.

After a bitter confrontation in Congress because of his opposition to forced eradication, Evo Morales, the main *cocalero* leader, was expelled from Congress in 2002. He responded by running for president in 2002 and came in second, though in all, peasant based groups that opposed eradication obtained about 40% of Bolivia's congressional seats.

The following three years saw the confrontation between the country's old political mainstream and the *cocaleros* force the resignation of two presidents, and in an early election in December 2005 Evo Morales obtained over 50% of the vote. He took office on January 18, 2006.

The Future of Bolivia: The Success of Political Opposition to Eradication

The agenda of the new government includes a sharp differentiation between coca and cocaine and promises to legalise coca while keeping cocaine illegal. Other elements of the government's platform are: an opposition to pro-market and globalization policies, strict control of foreign investment.

Unlike Colombia, where eradication helped to create and is still perpetuating a civil war, Bolivia's opposition to eradication has resulted in the election of a pro-coca president. If Afghanistan is to avoid another civil war or a future as a narco-state, the lessons of Bolivia and Colombia's experiences with eradication must be heeded.

Winning Battles and Losing Wars: Illicit crop eradication experiences in Bolivia and Colombia

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Introduction

Illicit crop eradication has been a long-standing technique used to combat the cultivation of illegal drug crops. The logic behind crop eradication is elementary: there is no doubt that if there were no illicit crops, cocaine, heroin, marijuana and other illegal plants, mind altering drugs could not be produced. Crop eradication, however, is a simplistic response to complex issues. As a one-dimensional policy option, eradication cannot address the causality that leads to the development of illicit crops.

The causal relationships that lead to a country to embark on illicit drug production are complex and not easily understood. In most countries with an illicit crop-producing industry, the conventional wisdom is that demand necessitates supply. In other words, as long as a profitable market exists, production will take place. However, in many countries where the main drug problem is on the consumption side, the supply side of the market is emphasised: when supply is plentiful and cheap, someone will buy and use illicit drugs. Both positions are true but ignore the set of problems central to the drug trade. It is a truism that if nobody consumed illicit drugs, nobody would produce them, and vice-versa. The problem is that a simplistic demand and supply analysis is poorly-suited to explain the complex issues at the heart of illicit drugs markets. .

⁶⁶ The authors thank Alain Labrousse for his comments on an earlier version of this essay. The opinions expressed here are the authors who take full responsibility for them.

Illicit drugs' markets have important characteristics that require a broad and multi-faceted method of analysis to explain. On the supply side, it is found that despite high profitability levels, most countries that can produce illicit drugs or can grow illicit crops do not. Indeed, supply is highly concentrated in a few countries. Data on drug use are weaker than on plant based illicit drug production but they also show a significant level of concentration in consumption. If profitability was the only driver of production and if availability was the only driver of consumption, the markets for illicit drugs would be much less concentrated and spread on a much larger number of countries.

Most anti-drug policies are formulated disregarding the complex causality of drug production and consumption. Illicit crop eradication, for example, is formulated without understanding why illicit crops are concentrated in few countries. Indeed, during the last few years Colombia has produced over 60% of the illicit coca and cocaine and Afghanistan over 80% of the illicit poppy and heroin of the world.⁶⁷ Eradication policies have responded to a simple police model in which law enforcement agents have to sanction law-breakers. This model is valid when law-breakers are in reality deviants whose behaviour is socially rejected but it fails when a high proportion of law breaking activities are the result of complex institutional and historical developments. In this case, law enforcement agents are not fighting a small group of social deviants but other strong social forces that many of them misunderstand or disregard. The history and experience of illicit crop eradication reflects this. It has been applied for several decades, has taken various forms, at times it has had short-term successes, but its long term results are disappointing and it has generated significant unintended consequences that have contributed to significant changes in the political spectrum of Bolivia and Colombia.

The United Nations, the United States, the European Community, Japan and other members of the international community have supported crop eradication programs in Bolivia and Colombia. These have frequently been linked to Alternative Development (AD) projects. The United States, as a rule, has required eradication to precede AD projects while other donors have been more prone to start AD programs before eradication takes place.

Bolivia and Colombia are the two countries in the Western Hemisphere that have had the most aggressive eradication programs. Despite continued eradication efforts along with AD projects promoted by national and foreign governments, the United Nations and International Development Agencies, illegal coca acreage has remained relatively stable in the Andean region

⁶⁷ Thoumi (2005a) presents a detailed comparison of Colombia and Afghanistan highlighting the similar institutional weaknesses of the two countries.

until the last couple of years when it has appeared to have declined somewhat. At the same time, however, opium poppy planting intended for the American market has developed, principally in Colombia. Revenues derived from this activity have been channelled into the activities of illegal armed groups. In Colombia, there are clear links between the strength of illegal armed groups and the extent of their control in coca and poppy growing regions.

In Bolivia, Law 1008 of 1988 allows for legal coca cultivation for traditional uses, mainly coca chewing, a traditional practice in many native communities. In Bolivia there are 12,000 hectares of licit coca although the government does not properly control legal coca markets. Indeed, there is significant leakage from the licit coca market to illicit uses (Thoumi, 2005b). In Colombia there is no legal provision for coca cultivation or an extensive indigenous traditional use of this plant. Some Indian communities, however, have recently begun to use coca as a principal ingredient in some products including tea and soda. Coca cultivation for these uses has been permitted under a Constitutional provision that guarantees respect for traditional customs of minority social groups.

A Eradication in Colombia

1. The early experiences from the 1970s through the 1990s⁶⁸

Eradication of illicit crops in Colombia has existed for almost thirty years. During the mid 1970s the United States promoted aerial spraying of marijuana fields with Paraquat in both Mexico (Operation Condor) and Jamaica (Operation Buccaneer). Paraquat is a well known carcinogenic that had been used extensively in Vietnam as a defoliant and herbicide. Commercially, it is known as Gramoxone. These eradication efforts were instrumental in the displacement of marijuana crops to Santa Marta's Snow Sierra (Sierra Nevada de Santa Marta) in Colombia. By the late 1970s Colombia had become the largest marijuana supplier to the United States. In 1978 the American government, under the Carter administration, began to press the Colombian government, presided over by Julio César Turbay, to implement a program involving the aerial spraying of marijuana. The Colombian government resisted and in late 1978

⁶⁸ Tokatlian, Botero and Obregón (1989) present an excellent analysis of these developments in the 1970s and 1980s.

implemented a manual eradication program as part of a comprehensive anti-drug program using approximately 10,000 soldiers.

This program produced mixed results. “By 1979, the results of this strategy were ambiguous. On the one hand, figures were eloquent: 3,500 tons of marijuana, 97 airplanes, 78 boats had been seized and over 10,000 hectares of marijuana plantings had been destroyed and hundreds of people had been arrested. On the other hand, the corruptive capacitive of drug-trafficking groups over military and civilians increased; complex social problems derived from the partial disruption of the marijuana trade appeared in the Atlantic region; and strong criticisms of military excesses and doubts about the policy consistency appeared” (Tokatlian, Botero and Obregón, 1989: 296-297). The shift of military activity from anti-subversive to anti-drug actions was another issue raised. Despite the positive results obtained, the United States continued to pressure in favor of aerial spraying, pointing to the successes in Mexico and Jamaica. The Colombian government, however, resisted and appointed a scientific commission whose report opposed chemical eradication. Based on this report, the National Drug Council (CNE) that had been created in 1974 opposed aerial spraying and continued the manual eradication program.

The subsequent Colombian president, Belisario Betancur, faced continued pressure from the American executive and legislative branches to implement aerial spraying programs. He resisted until April 30, 1984 when Rodrigo Lara-Bonilla, his Minister of Justice, was assassinated following a bitter debate against drug traffickers in Congress. In order to protect the members of the CNE, its meetings became confidential. They agreed to a strong eradication program but left the decision to use chemicals to the Council of Ministers. On May 22, the Council approved the use of herbicides but prohibited the use of Paraquat. Instead, it approved the use of Glyphosate, a less toxic herbicide. Washington quickly endorsed the Colombian government’s decision and on June 1st the order to fumigate marijuana plantings was issued (Tokatlian, Botero and Obregón, 1989: 323-325).

The early results of the spraying program were positive as the marijuana crop was substantially reduced. Marijuana plantings, however, were displaced to other Colombian regions. In the Cauca Department new plantings proved to have much higher yields (Tokatlian, Botero and Obregón, 1989: 326). Plantings also developed in the Serranía de Perijá in the Northern Venezuelan border (Vargas, 1994).

Since the late 1970s the importance of marijuana in Colombia has declined. The reasons are two-fold. First, cocaine and heroin became the principal illegal drugs produced in and exported

from Colombia, and second, Colombia lost its competitive edge in the marijuana industry, following the development of the more powerful “sin semilla” variety which began to be produced in many homes and fields in areas near the main markets in developed countries (Thoumi, 2003a: 82-83). Marijuana production did not disappear entirely from Colombia, rather it became less important as an industry, and most of what is currently produced is consumed domestically.⁶⁹

Aerial spraying continued during the late 1980s. Coca and poppy plantings were targeted. Despite aerial spraying, coca plantings grew substantially. The effects of the eradication campaign are not easy to determine as data are at times conflicting. As shown in Table 1, the U.S. Department of State estimates show that coca acreage fluctuated around 40,000 hectares from 1990 through 1994. From that year on there was a sharp increase to 101,800 hectares in 1998, 122,500 in 1999, 136,200 in 2000, 169,800 in 2001, 144,450 in 2002 and about 115,000 in 2003 and 2004. These figures suggest that the growth of coca plantings in Colombia started in 1994. An independent study (Uribe, 1997) based on extensive fieldwork estimated that in 1994 coca plantings were between 70,000 and 83,500 hectares. The United Nations data are similar to those of the U.S. Department of State until 1998, but show a greater increase in 1999 to 160,100 and peak at 163,300 in 2000, falling to 144,800 in 2001 (when the U.S. Department data show a peak at 169,800), 102,000 in 2002, 86,000 in 2003 and 80,000 in 2004. The difference in estimates is most acute in the most recent years: the U.S. Department of State estimate for 2004 is 43% larger than that of the United Nations. However, aside from disputes over the accuracy of these figures, there is a broad consensus that Colombia became the largest world producer of coca somewhere in the late 1990s, perhaps in 1997 or 1998 and that coca acreage peaked in 2000 or 2001. Since then there has been a very large decline in the area under cultivation.

During the presidency of César Gaviria (1990-1994) eradication was not a high priority. Indeed, the United Nations does not report any figures for eradication during that government (UNODC, 2004: 238). The government of President Ernesto Samper (1994-1998) was very vulnerable to external pressures. Drug traffickers had provided extensive funding for his campaign and a political scandal ensued in which he was at risk of impeachment. Beginning in late 1994 he intensified aerial spraying in the main coca growing areas. Figures for coca acreage sprayed are: 3,900 in 1994, 23,900 in 1995, 18,500 in 1996, 41,900 in 1997 and 66,000 in 1998 (UNODC, 2005). The Guaviare Department, perhaps the largest coca producer was intensively

⁶⁹ Marijuana is still exported. Today one finds Colombian marijuana being sold in Dutch coffee shops where it has a low value by volume due to its relative weakness.

sprayed. This encouraged the displacement of coca plantings to Putumayo. Most peasants in Colombia do not have strong communities as in Bolivia. Aerial spraying in Guaviare and the announced spraying in Putumayo led to large peasant movements and marches to oppose it.⁷⁰ The Colombian press and government attributed those protests to guerrilla groups and drug traffickers that controlled many coca-growing regions.

Table 1: Size of coca plantings and sprayed hectares in Colombia 1990-2005

YEAR	UNITED NATIONS COCA ESTIMATES (hectares) *	UNITED STATES COCA ESTIMATES (hectares) **	COCA HECTARES SPRAYED ***
1990	40,100	40,100	
1991	37,500	37,500	
1992	37,100	37,100	
1993	39,700	39,700	
1994	44,700	45,000	3,900
1995	50,900	50,900	23,900
1996	67,200	67,200	18,500
1997	79,400	79,500	41,900
1998	101,800	101,800	66,000
1999	160,100	122,500	43,100
2000	163,300	136,200	58,100
2001	144,800	169,800	94,200
2002	102,000	144,450	130,400
2003	86,000		132,800
2004	80,000		136,600
2005			Over 130,000

Sources: * These figures are found in several issues of the annual World Drug Report that can be found in the UNODC website. ** These figures are obtained from various issues of the annual *International Narcotics Strategy Report* of the Department of State. The figures however are not the same in the different issues. They are modified in response to what the authors consider is better information. *** UNODC (2005a) except the figure for 2005 which is taken from a Colombian National Police Counternarcotics Directorate (DIRAN) announcement in November 2005.

⁷⁰ M. C. Ramírez (2001) is an excellent study of these marches summarized in English in M. C. Ramírez (2005).

2. The evolution towards a harder line and the emphasis on aerial spraying

2.1 The Pastrana Administration and Plan Colombia

The subsequent Andrés Pastrana (1998-2002) administration came to power on a peace platform and tried to establish a dialogue with FARC, the largest guerrilla group. To achieve this goal it granted the guerrilla control over a 40,000 Kms² of territory, known as the “demilitarised zone”. This area had significant coca plantings and was used by FARC to extend its involvement in the illicit drug trade. Simultaneously, President Pastrana, with the American Government’s help, established Plan Colombia. Its aim was to strengthen the armed forces, the judiciary, and to increase or establish real state presence in many regions of the country. After Plan Colombia started in 1999, the U.S. and Colombian governments have used the aerial spraying of illicit crops as their main mean to curtail illicit crop cultivation and reduce the flow of illicit drugs into the United States.

As shown in Table 1, coca spraying declined in 1999 to 43,100 hectares but increased sharply in the following years to 58,100 hectares in 2000, 94,200 hectares in 2001, and 130,400 in 2002. It is remarkable that since 2002, aerial coca spraying has exceeded the estimated size of coca plantings. This presents significant interpretation problems with regard to the validity of the estimates of the cultivated areas and the effectiveness of spraying.

Colombian opium poppy crop data are significantly weaker than that for coca. Poppy eradication has frequently exceeded estimates of poppy acreage. One problem found with these data has to do with the fact that it is annual while in Colombia there are normally two poppy crops per year. Therefore, it is possible to have some opium production even if more hectares are sprayed than those estimated to be cultivated.

2.2 Aerial eradication under the Uribe Administration

The Pastrana administration failed to advance in its attempts to negotiate peace with FARC and its efforts became extremely unpopular. Álvaro Uribe ran a campaign promising a strong hand against the guerrillas and was elected on a landslide in 2002. Since then he has continued and intensified the strong eradication campaign based mainly on aerial spraying started by Pastrana. This is a massive campaign that uses Roundup Ultra Herbicide plus the surfactant Cosmo flux 411 and water to spray from aircraft over coca and poppy crops. A mix with less glyphosate is

used in the eradication of poppy crops. Crops are previously identified through satellite imagery and flight inspections. The Colombian National Police Counternarcotics Directorate (DIRAN) with the support of the U.S. State Department conducts these spraying missions. The United States provides technical assistance, fuel, the herbicide, the aircraft used in the spraying missions and a small number of escort helicopters. Each aircraft has a computer system to identify the location of crops and the Colombia Government directly chooses the areas subject to spraying. Recent figures indicate that 132,800 hectares of coca were sprayed in 2003 and 136,600 in 2004. Manual eradication has also taken place but it has been marginal although in the past year it increased substantially: 1,700 hectares in 2001, 2,800 in 2002, 4,000 in 2003 and 2,600 in 2004 (UNODC, 2005). In late 2005 newspapers reported that DIRAN eradicated over 160,000 hectares of coca in 2005, 30,000 of which were done manually.

2.3 Difficulties in measuring the success of eradication

Eradication figures are the most common indicator of eradication policy success. But there are many problems that make it difficult to produce reliable estimates. First, crops have evolved mainly in response to eradication efforts. Second, there are different methodologies and technologies used to measure them. Coca and poppy crops and planting techniques, for example have changed through time. Plantings are now located in more remote areas, their size is reduced, plant density per hectare has increased in some cases and improved techniques are used to hide them. The interspersing of licit crops with illicit crops is also common and coca plantings have spread throughout the Colombian territory. These and other factors make it difficult to produce accurate figures. For example, a Government Accountability Office (GAO) (2003)⁷¹ report, examined the differences in methodology between the State Department's Office of Aviation and the ONDCP. It found that in one area both institutions differed in the identification of illicit crops by 79%. This contrast was explained on differences in definition of what should be considered as a coca field.

2.4 Discrepancies in US and UN eradication statistics

It is also important to note that figures reported by the United Nations and by the U.S. government differ significantly. The U.S. government reported a 16% decrease in cultivation between 2000 and 2004. Meanwhile, the U.N. Office on Drugs and Crime (UNODC) reported a 51% decline during the same period. Discrepancies are also found in the most recent data. In 2004 UNODC found a 7% reduction and the U.S. reported constant acreage.

⁷¹ Until recently known as Government Accounting Office.

2.5 The “Balloon Effect”

UNODC figures show that during each of the last four years the area sprayed has been larger than the area under cultivation. This is found for the last three years if one uses the U.S. government data. The difference between sprayed and cultivated hectares has been particularly large in the last couple of years. This difference is puzzling because coca plantings take about a year to become productive. If spraying would exceed plantings during three consecutive years, one should expect that virtually all current plantings are less than a couple of years old.⁷² This would be feasible only if there is a very strong “balloon effect” within the country, something that apparently has occurred. Another reason for the discrepancy may be the fact that very young plantings are not detected by the satellite images. Indeed, they require significant foliage to identify plantings. This, incidentally, is one reason why satellite imagery in Colombia is not very successful detecting poppy plots since poppy is a short cycle crop that grows in areas that have long periods of heavy cloud coverage. In any case, currently available data on the extent of coca plantings and aerial spraying raise significant questions about the effectiveness of eradication and spraying and on the systems used to estimate coca acreage.⁷³

The “balloon effect” has been one of the main arguments used to criticise the effectiveness of eradication activities: “Successful eradication in one area temporarily lowers the supply, thereby raising the price for the illicit crop and stimulating production elsewhere” (Marsh, 2004). Indeed, illicit crops declined in some departments like Guaviare and Putumayo where spraying was concentrated, but they increased in several others. The balloon effect is clearly acknowledged by the United Nations coca cultivation survey for Colombia. It argues that the decrease in cultivation in Guaviare between 2003 and 2004 was “matched” with a cultivation increase in the neighbouring Meta department (UNODC, 2005b). Some departments like Antioquia, Meta, Nariño and Vaupés, have faced an increase on the amount of illicit crops, despite the intensification of aerial spraying (Contraloría General de la República, 2004).

The balloon effect within the Colombian national territory has increased steadily, making eradication more challenging. When aerial eradication efforts started in Colombia most of the

⁷²Indeed, the last UN survey (UNODC, 2005b) reported that 60% of the crops in Colombia were new plantings. This is a very clear indicator of the peasants’ willingness to continue planting despite fumigation risks.

⁷³The UNODC office in Bogotá is aware of the data inconsistencies and it is currently undertaking a study that is expected to show that coca plantings have been more productive and that cocaine output has been significantly higher than what was estimated in the past.

coca crop was concentrated in the department of Putumayo and only 12 of the 32 departments had illicit crops. Twenty-three departments had illicit coca crops in 2004.

2.6 Purity and price levels

Other critics to the success of eradication efforts come from the fact that prices, purity and availability of drugs in the U.S. have remained stable, although some sources have recently reported changes. In November 2005 Mr. Walters, the head of ONDCP reported a 19% increase in cocaine prices and a significant decline in purity at the street level in U.S. markets. These data were presented as evidence of the success of the aerial spraying program in Colombia in decreasing availability in the United States. A closer look at these data shows a different picture. It is true that the data show a 19% retail price increase from a very low level of about April 2005. However, the data also show that retail prices had been falling during the last three years during which aerial spraying in Colombia had been intense. The 19% price increase simply restored retail prices to the same level it had been at in early 2003. Furthermore, although purity had declined since early 2003, it was still well within the range of values exhibited during the past 15 years.

Although eradication may have significant short-term effects on price levels, it's the long-term impact of this on demand is highly questionable: "Even if increased eradication forced coca prices to double, the retail price of cocaine would likely be negligible. Since the mid-1990s, coca leaf prices in the Andes have increased, while the retail price of cocaine has not." (Boyum and Reuter, 2005) This is simply the result of the very low share of retail prices represented by coca prices.

2.7 Negative impact on peasant incomes and livelihoods

The effects of eradication on peasant income and livelihood possibilities are also a concern: "The effects of aerial spraying are almost immediate, those of development (programs) will take longer to appreciate (...) these programs are the key to sustaining the recent reductions in cultivation." (UNODC, 2005b)

2.8 Financial costs of eradication

Other critics have highlighted the very high costs of aerial eradication activities in relation to the number of coca hectares reduced. The Center for International Policy estimates that for every hectare of coca reduced in 2004, 22.8 hectares of coca were sprayed, at a cost of \$14,273 per hectare.⁷⁴ Vargas (2005: 101) manipulated these figures and divided the costs of eradication into the number of coca hectares reduced minus the hectares manually eradicated and reaches a figure of almost \$28,000 per hectare reduced due to aerial spraying. This estimate is misleading because it implicitly assumes that the “balloon effect” is caused by the sprayed hectares and not by those manually eradicated. It is apparent that some of these analyses tend to use these figures to impact public opinion. A longer view at eradication and coca acreage shows a more complex picture. As shown above aerial spraying has been significant since 1994 but coca acreage actually increased dramatically until 2000 or 2001 depending on which series one takes. Aerial spraying became intensive in 2001 and has remained at extraordinary levels since then. What these data show is that aerial spraying has achieved reductions in coca acreage only when the number of hectares sprayed is similar or larger than the estimated hectares under production. This experience also indicates that this pressure should be maintained to prevent increases in coca plantings. Furthermore, the fact that during the last several years eradication has been intense substantially exceeding the estimated cultivated area and that in the last year the estimates of coca cultivation remained virtually unchanged, strongly suggests that aerial spraying might be reaching its limit in terms of its effectiveness. In other words, it is very likely that a continuation of massive spraying will not lead to further reductions in the area cultivated with coca.

Another concern refers to the inability of the Colombian government to continue eradication operations in the near future. The U.S. Government Accountability Office has reported that Colombia is not able to sustain the current program “without continued U.S. funding and contractor support for the foreseeable future” (GAO, 2003) Additionally, the lack of government control over the territory and the strength of illegal armed groups make eradication activities very difficult, but mostly, make its sustainability almost impossible, due to their almost immediate ability of replanting crops. Since the FY2000 \$3 billion have been spent on eradication programs in Colombia, Peru and Bolivia of which Colombia alone accounts for \$2,336 millions. (Veillette and Navarrete-Frías; 2005)

⁷⁴ This is found in (<http://ciponline.org/colombia/blog/>)

2.9 Limited impact of eradication on illegal armed groups' funding

The U.S. government believes that fumigation is curtailing the illegal armed groups' funding sources, denying them crucial revenues (The White House, 2005). Critics say that the finances of the illegal armed groups are not being undermined; paramilitary illegal assets are unaffected (International Crisis Group, 2005). Another important argument is that if the last illicit crops and cocaine production estimates of the United Nations (UNODC, 2005b) are valid, they do not generate large revenues for the guerrillas. These estimates assert that in 2004 the potential production of cocaine and heroin in Colombia were 390 tons and 5 tons respectively. That year 149.3 tons of cocaine and 773 kilos of heroin were seized. The average wholesale prices were \$1,713 for cocaine and \$7,600 for heroin. According to this data cocaine generated revenues at the wholesale level were $(390,000 - 149,300) \times 1,713 = \412.3 million for cocaine and $(5,000 - 773) \times 7,600 = \32.1 million for heroin producing a total of \$444.4 million. To this figure one should subtract the cost of the 1,865 labs destroyed and the cost of all the inputs used in growing and refining drugs. This suggests that the value added in Colombia to be distributed among peasants, drug traffickers, left and right wing armed groups (FARC, ELN and the Paramilitary), bribed police and other government officials should not exceed \$350 million. Given these figures it is not reasonable to expect that each armed group would receive over \$100 million a year, a figure that is well below the thousands of millions commonly alleged by the media to be generated by the trade. .

These data do not include income generated by processing cocaine from coca paste and cocaine base imported from Bolivia and Peru and then re-exporting it. Still, taking these into account, coca production in those countries would not allow for more than 50 tons of cocaine a year to be processed in Colombia with imported coca paste or cocaine base, which would not increase substantially the revenues of the illegal industry. The UN data also excludes profits from international trafficking of cocaine and heroin. It is likely that they significantly exceed the values estimated as generated domestically.

2.10 Summary

If the UN data are valid, these considerations lead to several conclusions. First, illicit crops do not generate large revenues for the illegal armed groups. Second, income generated by trafficking significantly exceeds income obtained from illicit crops. There is, however, no knowledge about the actual revenues of armed groups obtained in this phase of the business although it can be asserted that those revenues are much greater for the paramilitary than for the

FARC guerrillas. Third, anti-drug policies should focus on drug trafficking - the main illegal revenue source. Fourth, the government's fight against illegal armed groups should also focus on other revenue sources like extortion, corruption and kidnappings.

Finally, those who argue that illicit crops provide the main funding source for guerrilla and paramilitary groups will need to justify why the UN estimates significantly underestimate the extent of illegal crop acreage or productivity.

Unfortunately, current data on the extent of illicit crops, trafficking volume and illicit revenues are inconsistent with market realities such as the failure of the massive Colombian eradication campaign to generate large price increases in retail cocaine markets in the United States and Europe.

The relationship between eradication and the funding of armed groups is another thorny issue. Law enforcement agencies assert that lower coca supply leads to lower revenues for the illegal armed groups. This assertion is made without providing any evidence. Indeed, it appears that those agencies simply think that this is "obvious". Unfortunately, economic phenomena are frequently counter-intuitive and what appears obvious to most, is not in reality. The real issue here is whether lower cocaine supply that leads to higher retail prices lowers or increases the illegal industry's revenues. As short-term demand in places like the United States is concentrated in a small group of addicts (Boyum and Reuter, 2005) the demand would be inelastic, price increases overcompensate for the decline in quantity and total revenues would increase. Another issue would then be whether the increase in total revenues at the retail level would be translated to higher revenues at the wholesale level in Colombia, a very likely result. In conclusion, very successful eradication that increases retail cocaine world prices very likely will increase revenues for Colombian guerrillas and warlords!

Aerial spraying in Colombia takes place because the government does not have real presence and control over extensive parts of the country. If such presence and control were in place, either the government could implement successful manual eradication programs, or other policies such as disrupting trafficking networks and destroying labs, in order to reduce levels of illicit crop cultivation and production.

3. Environmental damage caused by aerial spraying

Despite the care taken by those in charge of aerial spraying, there can be mistakes made. There have been formal complaints about legal crops and alternative development projects affected by fumigation. The Colombian Ombudsman's Office reported many cases of legal crops such as corn, fruit trees and grasslands affected during spraying operations that took place in Putumayo in 2001 and 2002. These can result from mistakes during fumigation due to lack of coordination among agencies or sufficient information. There could be spray drift or in some cases food crops interspersed or mixed with illegal crops. The Colombian Law authorises aerial eradication in places where there are licit crops mixed with illicit crops. The State Department reports "that occasional errors are unavoidable, it argues that every effort is made to minimise human and mechanical mistakes" (Veillette and Navarrete-Frías; 2005) These mistakes put at risk the communities' food availability, creating undesirable risks, especially due to the difficulties faced by communities in accessing other food sources. They also increase the distrust within peasant communities toward the State, cause human displacements and in some AD cases, destroy years of work towards the achievement of licit economic means of survival.⁷⁵

There is a compensation system to respond to meritorious claims of food crops affected by aerial spraying. This system, run by the Colombian government, has received serious criticisms because of its ineffectiveness and the few cases that have been compensated so far. One problem raised by the Colombian Ombudsman's Office and the Comptroller General Office is the conflict of interest within the DIRAN that simultaneously is in charge of aerial fumigations and is also responsible for reviewing the compensation claims.

After a claim is filed, DIRAN first has to certify that aerial spraying took place in the area and day reported. Then it has to follow up with a field visit in the next ten days to evaluate the damages and the amount of compensation to be paid. According to DIRAN, the facts that aerial fumigation did not take place in the day reported by the peasants and that there were illicit crops mixed or interspersed with the food crops are the main causes why claims are rejected. DIRAN also reports the submission of false claims. The United States Department of State (2005) noted that of 5,500 complaints received since 2001 only 12 received compensation.

There is a strong possibility that current "hard hand" anti-drug policies will become even more extreme and will rely on biological means to eradicate illicit crops, without considering all the

⁷⁵ Recently an alternative development project funded by USAID and the United Nations was affected by aerial spraying. COSURCA an organic coffee project based in Cauca lost several coffee hectares, its organic coffee certification and many families were affected (Witness for Peace, 2005).

possible extreme negative effects that these options might have. The debate is still open in the American Congress between those who strongly support the current eradication program and still believe that it is the only way to attack illicit plantings and drug trafficking on the supply end and those who believe that it is not sufficiently effective.

3.1 The use of mycoherbicides

Mycoherbicides are natural pathogenic fungi used for weed control. They are a mutant strain of *Fusarium Oxysporum*, discovered back in 1988 on dying coca plants at a research station from the U.S. Department of Agriculture on Hawaii.

In the United States the House Government Reform Committee recently passed legislation on illegal drug crop reduction and instructed ONDCP to present Congress a plan of action to insure that an expedited, complete, and thorough peer review of the science of mycoherbicide as a means of illicit drug crop elimination is conducted by the appropriate government scientific research entity. It also proposes implementing a controlled scientific testing of mycoherbicide in a drug producing country.⁷⁶

The House Government Reform Committee also approved a measure (H.R. 2829) to authorise ONDCP to have more authority over its budget and activities for the next five years that specifically calls for the study of mycoherbicides.

The use of mycoherbicides has been considered at several points in past years. In 1998, Florida Congressman Bill McCollum proposed a \$23 million mycoherbicides study. In 1999, Agricultural Biological Control, a Montana based company, tried to sell mycoherbicides to eradicate marijuana in Florida, but the State's environmental officials were concerned the strain could mutate and attack other plants. The head of Florida's Environmental Protection Department expressed in 1999 that *Fusarium* species are capable of "evolving rapidly ... Mutagenicity is by far the most disturbing factor in attempting to use a *Fusarium Oxysporum* (...) it is difficult, if not impossible, to control the spread of *Fusarium* species. The mutated fungi can cause disease in a large number of crops (...) *Fusarium* species are more active in warm soils and can stay resident in the soil for years" (Transnational Institute, 2004). On 2000, plant pathology Professor Dave Sands of Montana State University, encouraged Colombian president Pastrana to fumigate coca fields with "Fusarium laden grass seed" to be supplied by

⁷⁶ This is the House of Representatives Office of National Drug Control Policy Reauthorization Act of 2005 of November 18. The bill is awaiting a vote on the house floor that should take place on or before February 3, 2006.

Agricultural Biological Control. So far, the Colombian government has refused to use mycoherbicides. Colombian scientists as well as other important actors strongly pledge the government to withhold its approval.

In 2000, the United States, the United Kingdom and the U.N. Office on Drugs and Crime (UNODC) expressed a public interest in using biological agents for the eradication of drug crops. Strong opposition stopped the program's implementation. Nevertheless, the U.S. funded research on biological agents was never suspended and was completed in 2002. From 2000 through 2001, international NGO's, the Transnational Institute, environmental organisations and Colombian civil society associations promoted a campaign against fungus use on coca crops in Colombia. Other Andean countries also reacted strongly against the Fusarium. In July 2000, the United Nations advised not to use of the fungus in Colombian coca crops. Some say this forced the former president Clinton administration to interrupt the plan, because the risk of unilateral use was too high.

Fear of mycoherbicides is not groundless. Opponents say that many plants are susceptible to infection by *Fusarium Oxysporum* strains. "There are hundreds of strains, and each one can infect one, or at most a handful, of plant species. But the fungus mutates easily, and a slight mutation could allow it to infect a different group of plants" (Kawell, 2001) Humans can also contract *Fusarium* infections, which are difficult to treat, recurrently fatal, especially for people with damaged immune systems. This should be a concern, especially when the use of this fungus would take place in regions where people have poor access to health care services. Critics refer to the *Fusarium* program as "biological warfare", because it violates international law using biological agents as weapons of war. Further, is also illegal to "introduce pathogens to an environment where they don't occur naturally."(Ibidem)

According to Howard Stead, head of UNODC's scientific section, although to date there is no evidence that the fungus can harm the environment, the possibility of such harm is a cause for concern and further study is recommended prior to its widespread use. On the other hand, the British government indicated that it will halt research if it is found that the biological agents cause environmental damage.

To conclude, it is clear that despite touted successes in aerial spraying, results have been frustrating and policy makers, mainly in the United States want to try different and stronger coca and poppy eradication methods that could have detrimental consequences.

In October 2003 the U.S. Department of State requested the Colombian government to promote research and development for the use of mycoherbicides on both coca and poppy crops. President Uribe showed interest and requested training on this matter for Colombian Agriculture Institute experts.

4. The costs of eradication

The costs of eradication have been high. “Since 2000 the Andean region has received a significant amount of funds from the United States to fight drug trafficking. In FY2000 the U.S. Congress approved \$1.3 billion in assistance for the Andean countries. “From FY2000 through FY2005, the United States has provided a total of about \$4.3 billion from the Andean Counterdrug Initiative (ACI) account” (Veillette and Navarrete-Frías, 2005) For FY2006 the ACI funding requested by the administration was approved by Congress and reached \$734.5 million. From FY2000 through FY2005 the Department of Defense “has spent approximately \$1.2 billion from its counternarcotics account, managed by the U.S. Army Southern Command” (Ibidem)

The State Department’s International Narcotics Control and Law Enforcement Bureau (INL) manages the ACI account. The ACI covers Brazil, Venezuela, Ecuador, Panama, Bolivia, Colombia and Peru. Nevertheless, the latter three received most of the funding.

The funds provided under the ACI support eradication and interdiction activities and AD along with programs that support democracy. Eradication and interdiction personnel get training and support to military and police forces, supply intelligence systems and communications and also the operation and maintenance of the aircraft used in aerial eradication. They also promote improvements in the counternarcotics infrastructure. AD support includes technical assistance and marketing for licit products plus regional infrastructure. They also provide assistance for internally displaced people and the strengthening of judicial system capabilities and the rule of law.

Although funds support various programs, the amount of funding allocated to each programs varies significantly. For example, from FY2000 through FY2006 Colombia received a total of \$2,336.1 millions for eradication. By contrast during the same period Colombia received \$982.6 millions for AD. The figures for Peru and Bolivia are more balanced. Funding for eradication

reached \$397.3 millions in Peru and \$326.8 in Bolivia. AD received \$340.7 in Peru and \$322.8 in Bolivia (Veillette and Navarrete-Frías, 2005).

The Foreign Military Financing (FMF) program and the International Military Education and Training (IMET) program also provide funds to the Andean region. FMF grants funds to foreign countries to be able to “purchase U.S. defence equipment, services, and training” (Ibidem). Its goal in Bolivia, Colombia and Peru is to strengthen the Governments’ control and presence in remote areas. On the other hand, through the IMET program foreign militaries are trained.

5. Some unintended impacts of eradication: negative health, environmental and socio-political effects

Aerial eradication has frequently acted as a Damocle’s sword over small farmers to ensure their agreement to manual eradication and to participate in alternative development projects. This has forced peasants to join AD programs as a choice of last resort, and by no means guarantees their commitment to cultivating new licit crops and nor does it entail any understanding of what transforming their livelihoods means. Other, more sustainable means of motivating farmers to join alternative sources of income exist, such as educational programs and experiences of fellow farmers already participating in projects.

Aerial fumigation has produced significant social impacts. Fumigation has encouraged **human displacement** as a result of food insecurity and the coercion applied by armed groups on peasants to abandon their lands. Furthermore, the effects of displacement are severe as the culture of indigenous communities “is tied to territory and thus forced displacement from their land results in the **breakdown of cultural identity**” (Marsh, 2004). In addition, “the government considers that the displacements resulting from the Illicit Plantings’ Eradication Program (PECI) are not forced which prevents them from receiving aid from the National System of Integral Attention to Displaced Peoples” (Navarrete-Frías and Thoumi, 2005). This means that peasants who are displaced due to aerial spraying do not have access to official support networks for displaced peoples. Displacement also occurs because farmers are left without any options to survive. Migration may thus present itself as a means to grow coca or poppy in another region (with the added negative impact of **expanding deforestation**) or it may present itself as an opportunity to **join an illegal armed group** or organised criminal network.

The Human Rights and Displacement Consulting Office (CODHES) confirmed that aerial spraying has caused large displacements. In 2002, for example, close to 40,000 people were displaced. The department with the largest number was North Santander with 13,571 displaced people (Martínez-Vivas, 2004).

According to the Colombian Ombudsman's Office fumigations induce peasants to abandon or sell their lands to large landowners or drug traffickers after which they go and cut down more primary forest repeating a historical land tenancy cycle: peasants settle in the "empty lands", exploit them for a few years without legal titles after which powerful people with access to titles either purchase the peasants' "improvements" or just push them out. Peasants then go deeper into the forest and begin a new cycle. (Martínez-Vivas, 2004). The Ombudsman's Office also claims that the eradication program has "ignored the State's duty to provide special protection to marginalised groups (article 13 of the Constitution) (..) including peasants, settlers and Indians who have small land plots" (Navarrete-Frías and Thoumi, 2005)

The **damage caused to food crops** is a source of concern. Legal crops that surround illicit crops are affected on occasion and there are reported cases of AD projects affected by aerial fumigations (Witness for Peace, 2005). It is relevant to note that AD is a long term strategy that goes through extensive negotiation processes with communities to generate commitment, develop training programs and so on, and that it may take many years to produce results. Mistakes caused during eradication that affect these projects destroy long social processes that aim to develop licit livelihoods. These mistakes show that various agencies and programs are not coordinated. "Both the EPA and the State Department have acknowledged that unintentional spraying of legal crops and natural vegetation, due to spray drift, are likely to kill plants downwind of coca fields" (Veillette and Navarrete-Frías; 2005).

Fumigation errors "appear to have been in part the result of lack of compliance with Colombian Law as Article 102 of Decree 1843 (1991) requires pilots not to fly over populations, aqueducts, schools and other places that represent risks to humans, animals and vegetation" (Navarrete-Frías and Thoumi, 2005).

There is growing concern among various organisations and environmentalists over the possible aerial fumigation in Colombian National Parks. Due to the increase of illegal crops present in these National Parks, eradication is being considered in this area. U.S. Congress has directed "that spraying in national parks can only occur if it is consistent with Colombian law, and no other viable alternatives exist." Further, the State Department "has certified four times since

2002 that the herbicide mixture poses no unreasonable risk to health or the environment” (Veillette and Navarrete-Frías; 2005). Critics of an expanded spraying program that includes these natural reserves stated that it can cause harm to species found in the mountains and in the Amazon, many of which are endemic to this area.⁷⁷

The Inter-American Drug Abuse Commission (CICAD) of the Organisation of American States (OAS) undertook a scientific study to evaluate the environmental and human health effects of the use of glyphosate in aerial eradication in Colombia. It concluded that the eradication program did not pose a significant risk to human health. The environmental risks were minimal in most circumstances, but there was a risk to aquatic organisms in shallow or static water from the spray drift. It also concluded that glyphosate has less environmental effects than cocaine or poppy production. (OAS-CICAD, 2005) But the report recommended “further study to better understand the potential for adverse effects on human health or the environment.” The study also concluded that in “no instance did the U.S. embassy or the Colombian government determine that spraying caused harm to human health or wildlife.” (Veillette and Navarrete-Frías; 2005)

There are many national and international organisations, NGO’s and civil society organisations that have criticised this study and the position of the State Department. They believe that aerial fumigations have a negative environmental and human health impact in Colombia. There is a strong need to carry out a long-term sustained study on the Colombian territory and to gather information from Colombian sources and from Colombians.

Some health studies carried out in the Colombian-Ecuadorian border that tested blood samples have found evidence of genetic damage. (Maldonado, 2003) Another study conducted in France found that human placental cells are sensitive to Roundup even, surprisingly, at concentrations lower than those used in agriculture. (Richard, Moslemi, Sipahutar, Benachour and Seralini; 2005). Relyea’s (2005a and 2005b) study found that “Roundup (a commercial brand of Glyphosate) may be extremely lethal to amphibians. The researcher’s experiments with North American tadpoles produced high rates of mortality. Similarly, experiments with young adult frogs and toads indicated a potential for significant toxicity.”⁷⁸ Amphibians are only one of the large number of species that could be at risk in Colombia, a number only verifiable after more studies are carried out.

⁷⁷ In fairness to those advocating aerial spraying in National Parks it should be made clear that the National Parks in Colombia are different from those in most countries. In Colombia there have been significant settlements in National Parks and there are private farms within them.

⁷⁸ All references in this paragraph are cited by Veillette and Navarrete-Frías (2005).

Some studies implemented by local departmental health units in Colombia reported an **increase in dermatological, gastrointestinal and respiratory cases** following aerial fumigations in their regions. However, it is still difficult to verify findings with the sufficient scientific rigor, since many of the institutions lack the tools and training to gather and analyse information, and there is not an epidemiological surveillance system installed.

Another study sponsored by the Colombian and American Governments to evaluate the impact of aerial fumigations on human health found that the reported cases don't show toxicity but infections typical of those regions that cannot be directly attributed to fumigation. Since these populations are poor and vulnerable, with a high percentage of unsatisfied basic needs, fumigation could increase the probability of developing infectious diseases (Navarrete-Frías and Thoumi, 2005).

The Colombian Ombudsman's Office asserts that aerial fumigation contributes to the **destruction and emigration of the aquatic fauna and the contamination of water sources**. There is a problem in estimating the magnitude of these environmental impacts because the chemical products used by coca and cocaine producers have similar effects. Glyphosate is nonselective and affects water bodies and forests near coca and poppy plantings. "Fumigation contributes to a disastrous cycle of '**triple deforestation**': cutting jungle to plant, doing it again after the fumigation and the effects of the herbicide on the natural forest. These effects are particularly serious in high mountain forests that are the country's water factories" (Navarrete-Frías and Thoumi, 2005)

On the other hand, many official sources (CICAD, U.S. Embassy) stress the fact that the **environmental harm caused by illicit crops cultivation** and the refining of cocaine and heroin is more severe than the impact produced by aerial spraying.⁷⁹ Coca and poppy cultivation causes deforestation and the chemicals used to plant and process coca leaves and opium latex into cocaine and heroin are of high toxicity and contaminate water sources, creeks, rivers, and the soil. Farmers that manipulate those products are also at risk since they are extremely harmful to human health and farmers do not use any precautionary measures or equipment to manipulate them.

The National Drugs Directorate (DNE) claimed in 2002 that approximately 200,000 gallons of chemicals are used on illicit crops every year, which results in damage to ecosystems and

⁷⁹ See for example, OAS-CICAD (2005).

contamination of water sources. Further, from 1992 through 2001 damage to Colombian forests by coca cultivation reached 125,900 hectares (Navarrete-Frías; 2004). The United States Embassy in Colombia (2002) estimated that more than two tons of chemicals are dumped into the environment for every hectare of coca cultivated. Farmers also use pesticides to control weeds and diseases. Some of the chemicals used in Putumayo, Guaviare and Caquetá and their possible health effects are: Manzate (cancer); Tamarón (liver damage and cancer); and Sevin (paralysis).

6. The changing Colombian political spectrum and the evolution of the drug industry players from drug-lords to warlords.

After the elimination of the Medellín cartel and the capture of its leaders in the early 1990s, followed by the breakdown of the Cali cartel a few years later, the illegal drug industry experienced a drastic structural change. **The two main cartels lost their market dominance** and a large number of small cartels known as “cartelitos”, along with a few mid-sized ones, emerged. Their number is uncertain but several DEA documents suggest that there have been 200 to 300 smaller trafficking organisations. The growth of coca and poppy plantings was another development related to this structural market change, as small trafficking organisations have strong incentives to purchase opium, coca paste, cocaine base and cocaine locally. This was also a factor in the development of opium poppy plantings and the heroin trade.⁸⁰ There have been other important changes, such as **paramilitary warlords and left wing guerrillas becoming increasingly involved in the illicit industry**. These internal changes to the illegal drug industry have in turn had a dramatic impact on the political structure of the country.

It is important to highlight some of the characteristics of Colombia that make it very vulnerable to the growth of the illegal drugs industry.⁸¹ One has been the lack of a significant state presence in large parts of the country. It may be argued that this is a common characteristic of other Latin American countries. The difference in Colombia is that in areas with weak or no government control there are a lot more residents than, say, in Bolivia. The Colombian central state is also very poor. Until the 1920s the coffee boom had the lowest exports per capita of any Latin American and Caribbean country. This turned it into a very poor central state because of low taxes.

⁸⁰ This because heroin is a lot more valuable and profitable per kilo smuggled than cocaine.

⁸¹ Thoumi (2005a and 2005c) explain in detail why Colombia developed a competitive advantage in illegal drugs.

Unfortunately, Colombia also has a remarkable geography that makes communications and transportation very costly and risky. Indeed, the country was faced with the poorest central state and a great challenge to integrate many disparate markets to form a true nation. The result was a set of relatively isolated settlements with very little trade and communications among them. These were poor but quite autonomous from Bogotá.

During the second part of the 20th century, infrastructure developed and the country became more integrated. Still, the central state had great difficulty in providing a judicial system to solve conflicts and to guarantee property rights, particularly in many rural areas. During the 1940s and 1950s a conflict between the two traditional parties, the Liberal and the Conservative, known as “La Violencia”, became a civil war in which many local warlords emerged. Warring factions were driven partly by ideology though a main purpose of the war was to capture land and displace opponents. “La Violencia” coupled with a population explosion generated a significant peasant migration both to cities and other rural areas. For many years the rural frontier expanded as many peasants migrated to unsettled areas. Most of the rural-rural migration was spontaneous, unplanned and in most new settlements state presence was precarious. Many of these lands were distant and unconnected from the main markets.

After “La Violencia” some former left-leaning fighters settled in isolated areas and developed their own protection systems. These peasants formed the original Revolutionary Armed Forces of Colombia (FARC) core. Other guerrilla groups like the National Liberation Army (ELN), the April 19 Movement (M-19), and Popular Liberation Army (EPL) also developed and sought haven in areas with little or no state control.

The large eastern half of Colombia has been sparsely populated and quite unproductive. There are some oil wells and cattle ranches in the eastern prairies, but most of the land is unproductive and does not supply goods and services for the modern economy. The southeastern jungle areas are more difficult to exploit productively. The basic problem is that **for a poor state, establishing a strong presence in a large part of the country has a cost that exceeds what it can afford** and can collect from taxes in those areas. It is not surprising that throughout the last two centuries Colombia has tried to protect the territory through strict adherence to international treaties rather than the establishment and maintenance of a significant state presence in those territories.

The impossibility to have sustainable and profitable crops in many areas, and the difficulty to exploit other possible resources mean that those that control the central state have very little

incentive to invest in social and physical infrastructure in those regions. Indeed, if they were to do so, the state might end up spending a large amount of its resources in rather unproductive places. This is why FARC and other guerrilla groups survived unchallenged for many years in some isolated and distant areas.

The lack of permanent and meaningful state presence in many areas is not important as long as there is no population settled in them. When settlement occurs and the State makes only a meagre or token presence because of a lack of sufficient funds, a power vacuum develops that is filled by parastatal groups independent of the State. In Colombia this was done by left and right wing parastatal groups. Ironically, while legal production is unprofitable in many of these areas, illegal production is not. But the parastatal groups can exploit illegal activities while the State cannot.⁸² What happens then is that parastatal organisations have an absolute competitive advantage in those regions because they can benefit from illegal economic activities.

The large drug cartels that dominated drug exports had to develop armed branches for protection against law enforcement agencies, competitors and possible extortionists, to intimidate politicians, to prevent newcomers to gain market share and to protect their own investments, particularly rural land. The **drug-lords developed a small army of assassins for hire (sicarios), bodyguards and guards for their manufacturing processes and investments.** The breakdown of the two large cartels altered this situation. The new “cartelitos” kept a low profile to avoid the fate of the large traffickers, and therefore did not have the resources or the will to develop armed protection networks similar to those of their larger intercessors.

The expansion of illegal crops provided an opportunity for FARC and other guerrillas to protect and extort peasants and traffickers. Once the Pastrana administration gave FARC de-facto control in 1998 over a large part of a coca growing area, they first established minimum coca prices to gain the peasants’ allegiance. But they soon eliminated coca gatherers, processors and other intermediaries between peasants and drug traffickers. FARC and parts of ELN guerrillas had been charging “taxes” on coca plantings, coca paste, cocaine base and cocaine exports from the areas they controlled. Once they actually had territorial control over a drug producing region, they became increasingly involved in the illegal business.⁸³

⁸² It may be argued that state officials may participate in drug trafficking and other illicit activities. When this happens, they profit individually, while the state does not get any revenues. In the case of parastatal organizations they do benefit institutionally from illegal economic activities.

⁸³ Cubides (2005), Duncan (2005), Garzón (2005) and W. Ramirez (2005) present detailed analyses of the links of guerrillas and paramilitary with the illicit drug industry and the way in which those groups have gained territorial and local power in large parts of the Country.

The paramilitary started as a self-defence force against FARC, ELN and common criminals. The large drug traffickers' had extensive rural property interests and their own military branches. This meant that it was just a matter of time before they joined the self-defence groups that became allies of the illegal drugs industry. Because of their opposition to left wing guerrillas, they also attracted many former military officers and soldiers with ties to the Colombian establishment. There is no question that paramilitary groups have been and are functional to some groups of the Colombian social and economic mainstream, particularly in regions where agriculture and husbandry are important.

Both left-wing guerrillas and paramilitary require territorial control to operate, even though their goals are radically different. FARC wants to overthrow the regime and establish a new government. While some of its commanders might have accumulated some capital from the illicit trade, most of the illegal profits go to support their armies and war machine. The paramilitary does not want to change the regime but to be accepted as part of it. Their leaders accumulated large fortunes that they need to protect and legalise. They have gained such a strong influence in Congress and in local politics in several Colombian regions that some of their leaders will run for Congress in the next elections on March 2006.

The 1991 Constitution provided a reward for those with territorial control over isolated and other areas where the State cannot exercise its sovereignty. Despite what has been touted as a neo-liberal reform, the size of the Colombian government today, measured by the share of government expenditure in GDP, doubled after the Constitution was approved. **Decentralisation is a goal of the Constitution** and those expenditures were decentralised and a mandated system to transfer funds from the central to local governments was established. This has resulted in large budgetary increases in many places with very weak bureaucracies, authoritarian traditions and absolutely no accountability. Not surprisingly, municipal budgets became the target of both guerrilla and paramilitary organisations which has resulted, ironically, in the central state now becoming a funding source for those groups. This decentralisation of funds also means that those groups now have stronger incentives to gain territorial control of areas of the country where they can exploit local budgets (Duncan, 2005, Cubides, 2005).

Today the illegal armed group's territorial control has several goals: protection of illicit plantings and refining labs, control over trafficking corridors, airports and ports, control over local budgets and other sources of funds (protection and extortion). This has been so important that in some departments and municipalities the paramilitary threatened all candidates that did

not have their approval and in two departments there was only one candidate for governor in the last elections. In guerrilla controlled areas they also veto candidates they do not approve of.

The Colombian central government has been making strong efforts to control the territory and has made significant advances in some regions. These efforts however, have been mostly on the military front and aspects such as providing social and physical infrastructure have been advancing quite slowly. Again, the State is confronting a shortage of funds and excessive needs. While these efforts should be acknowledged and encouraged, the magnitude of the task is so great that there are serious questions about the possibility of lasting success.

One unintended consequence of the destruction of the large trafficking organisations and the growth of illegal crop plantings in Colombia has been **the empowerment of warlords and guerrillas at the expense of drug traffickers** in large parts of the country. Some argue that drug traffickers are now subordinated to warlords and guerrillas (Duncan, 2005) while other may argue that a symbiosis has developed between them. In any case, the illegal drugs industry evolved from traditional trafficking groups with an interest in drug profits and a need to influence politicians in order to protect investments and avoid prosecution, to organisations that now seek territorial control, have strong armed groups and profit from several illegal activities including corruption.

B. The eradication experience in Bolivia

1. The history of eradication

The situation in Bolivia is very different from that of Colombia. Native communities in Bolivia have used coca from immemorial times and it has widespread social uses. Other important differences are the degree of **social organisation of coca growing peasants** and the level of violence associated with the illegal drugs industry. In contrast with Colombia, Bolivian peasants are mainly ethnic Native Americans and have strong cultural traditions. In Bolivia, coca growing peasants are highly organised in unions that form federations and confederations. These have strong leadership and have been able to negotiate with the government and international donors. **Bolivian peasants culturally reject violence and seek peaceful conflict**

resolution methods. In that country the U.S. has been very active and influential in promoting legislation to control illicit crops and anti-drug policies for several decades.

Bolivia is the Andean country with the greater experience with AD projects and these had been closely related to coca eradication efforts. Coca plantings have a long tradition in Bolivia. Plantings in the Yungas region near La Paz have supplied traditional coca consumption for centuries. In the mid-20th Century there was a movement to settle Chapare, a tropical jungle region between Cochabamba and Santa Cruz. In this region coca plantings expanded substantially during the 1970's. Coca plantings also appeared in Beni Department. The history of AD in Bolivia goes back to 1974 when the U.S. Department of State committed \$5 million to the government of then dictator Hugo Banzer (1971-1978), which were used to develop pilot projects to identify substitute products to coca (Antezana, 1992). This project took a long time to carry out and the report was not produced until 1979. Then in 1980 General Luis García-Meza, a major drug trafficker, took power in a coup d'état and the project was paralysed. AD was revived in 1983 after the García-Meza government was overthrown and Hernán Siles-Zuazu was elected president. At that time, coca eradication was seen as a complement to AD and the government created the Regional Coca Directorate (DIRECO) in the Ministry of Peasant, Agricultural and Husbandry Affairs to handle eradication. Simultaneously, a special police branch, the Mobile Rural Patrol Unit (UMOPAR) was established to enforce anti-drug policies. In August 1983, under pressure from the United States government, the Bolivian government committed itself to eradicate 4,000 coca hectares. This program was formulated by DIRECO and implemented by UMOPAR, which received training and financial support from the American government (Malamud-Goti, 1994: 64).

At that time, drug trafficking in Bolivia involved members of the army, the police and the economic elite, mainly from Santa Cruz. Indeed, General's García-Meza short dictatorship (1980-1981) was known as a Narco-government. After García-Meza's fall on November 25, 1981 the government presided by Celso Torrelio enacted Decree-Law 18714 that allowed the use of chemicals in eradication. In April 1982 an eradication campaign using the herbicide 2-4 D was implemented in Yapacani (in the Chapare area close to Santa Cruz).⁸⁴ These first eradication attempts and the development of an anti-drug strategy led a few UMOPAR members to attempt an unsuccessful coup against Siles-Zuazu. Despite this event the U.S. government continued pressuring President Siles-Zuazu, who subsequently implemented "Chapare Operation", which ordered 1,500 soldiers and UMOPAR members to destroy labs and seize

⁸⁴ Alain Labrousse visited this region a year later and found fenced areas with signs: "danger, do not trespass". Peasants in the area claimed that cattle had died (Labrousse's personal communication to the authors, January 15, 2006)

drugs, airplanes and other materials used in the illicit traffic. However, members of their support networks warned drug traffickers in advance and no one was captured. Peasants believed that this operation was a precursor to eradication and 5,000 of them blocked highways, paralyzing communications between the highlands plateau and the east of the country.⁸⁵ Peasants also went on a hunger strike demanding the troops' withdrawal and a license to grow and sell coca. The government granted each peasant family the right to take 11 kilos of coca every week out of Chapare for their families' use. The government also agreed to buy and destroy all other coca (Malamud-Goti, 1994: 65-68 Bedregal and Viscarra, 1989: 128-139).

Eradication continued to be debated. The United States pressured the Bolivian government to set annual eradication goals. "One of the last acts of the Siles-Zuazu government was to pass a new law in May 1985, which introduced the concept of **traditional legal zones (to grow coca) and other zones subject to voluntary and forced eradication**" (Painter, 1994: 79). After Víctor Paz-Estensoro was elected president in 1985 the government negotiated the voluntary eradication of 1,000 hectares with coca leaders from Chapare and in 1986 formulated a three-year Plan ("Plan Trienal") to deal with coca plantings, "which had the ludicrously ambitious aim of attempting to eradicate 50,000 hectares of illicit coca by 1990, including half of the production in the Yungas" (Painter, 1994: 79).

In 1986 after President Ronald Reagan declared drug trafficking a threat to national security, the Bolivian government, with the participation of UMOPAR, U.S. military and DEA personnel undertook **Operation Blast Furnace** to destroy labs, seize drugs and capture traffickers in Chapare. Strong political opposition to the project arose since **the participation of foreign forces without Congress' approval was unconstitutional**. This exacerbated nationalist feelings as many Bolivians considered the country's sovereignty violated.

Eradication continued under DIRECO and by 1988 its engineers were using herbicides in their efforts. Peasants argued that DIRECO personnel had been forced by DEA to use this method despite the government's promise not to use chemicals during eradication. This led to another strong peasants' movement to block highways, and a peasant's invasion of UMOPAR's headquarters in Villa Tunari on June 28 in which **official sources indicate that four peasants were killed and two disappeared**. Peasant leaders and other witnesses claim the actual figure of peasants killed exceeded 20 (Malamud-Goti, 1994: 80).

⁸⁵ It should be noted that the main Bolivian highway, which is also the Pan-American Highway goes through Chapare linking the cities of Cochabamba and Santa Cruz.

The Bolivian government worked on a comprehensive law to regulate coca markets and fight drug trafficking, the result of which was Law 1008, promulgated on June 22, 1988, which provided a comprehensive policy framework. It established **two areas for legal coca cultivation: Yungas of La Paz and the small Yungas of Vandiola**, which encompassed a total of 12,000 hectares. All other plantings were declared surplus (*excedentary*). Crops located in Chapare could benefit from compensated eradication and AD projects and all other coca was subject to eradication without compensation. The eradication goal in Chapare was 5,000 hectares per year, eventually increasing to 8,000. A compensation of \$2,000 per hectare was established and was funded by the United States.

Law 1008 explicitly prohibited the use of herbicides in eradication. This was considered a triumph by coca peasants and a failure for many Americans involved in antidrug activities. The Law also establishes a link between eradication and AD programs which peasants, government officials and foreign donors have interpreted differently. For many peasants, economic development is a prerequisite to eradication while for American and many Bolivian government officials this is not the case.

Eradication proceeded as international funds became available. The program's implementation was not perfect and there were complaints that those in charge of implementing the program were cheating peasants (for example, officials in charge of measuring coca plot sizes underestimated them). There were also cases of peasants cheating by pruning coca bushes rather than cutting them in the hope that officials would not come back to check final eradication. Further problems in the application of the law arose when peasants demanded compensation for the eradication of new coca planted after the law had been enacted. This was clearly prohibited in the law but in some cases a solution was negotiated with peasant organisations.

Whether this program was successful is open to debate. From one point of view, it was a failure since coca acreage did not fall. **Coca cultivation had been growing steadily since the mid-1960's** (Painter, 1994: 15). The U.S. State Department figures show 33,165 hectares under cultivation in 1985 and 48,925 in 1988. Their estimates remain relatively stable during the following 10 years, fluctuating between 52,900 in 1989 and 45,500 in 1992. In 1997 this figure was 45,800.⁸⁶ It is clear that coca cultivation did not decline significantly, but it did not increase either. Justiniano (1994: 14-18) lists the following policy's positive effects: coca acreage did not increase; there was relative social peace; there was **a change in social attitudes toward drug trafficking as society began to repudiate it**; there was a decline in the economic importance of

⁸⁶ See several issues of the State Department's annual International Narcotics Strategy Report.

coca and cocaine in Chapare and the national economy; there were advances in interdiction; and plantings were eliminated in some areas. The negative effects were: new plantings in new areas and re-plantings in some places that have been eradicated; during electoral periods there was no eradication; **coca peasant unions gained strength**; and there were negative environmental effects as new plantings took place and National Parks were invaded.

In 1994 Gonzalo Sánchez de Lozada was elected president. He was an upper class Bolivian who was raised and has lived most of his life abroad. In a way, he is a foreigner in his homeland. He chose a Native American as his vice-president, a first in Bolivian history. Frustrated with the failure to lower coca acreage under a law that allowed gradual eradication, he proceeded to formulate **the “Zero Option” plan**. This plan aimed to **massively eradicate coca, using force if necessary, while simultaneously provided AD options** to the peasantry. The policy was strongly opposed by peasants, who organised massive protests and other resistance actions. In March 1995 Bolivia was conditionally certified by the United States and required to eradicate 1,750 coca hectares. To do so, the Bolivian government declared a State of Siege in order to take exceptional actions in Chapare. Many coca peasants opposed the violent incursions of the State’s eradication forces, as coca employs a significant proportion of the rural labour pool in Bolivia which makes confrontations with coca growers very important.

The Zero Option plan was fruitless and at the end of Sánchez de Lozada’s period, the amount of hectares of illicit crops was similar to the one when his administration began. However, these events gave coca peasants great political power and contributed to the country’s political instability. Eradication strengthened rural organisations and since then they have expanded their agendas.

Former dictator Hugo Banzer was elected president in 1997. His government formulated **“Plan Dignidad”** to rid the country from the "scourge" of drugs (República de Bolivia, 1998).⁸⁷ The plan emphasised eradication, interdiction (mainly lab destruction), some actions against money laundering, and drug consumption treatment and prevention. **The plan’s implementation was quite aggressive** and concentrated on a very active forced eradication campaign with military involvement and strong support from the American government. “U.S. embassy’s Narcotics Affairs Section began funding **a paramilitary counterdrug force, the Expeditionary Task Force (ETF)**, in January 2001” (Ledebur, 2005: 155). This force operated 18 months and was directed by army officers though the rank and file were “hired hands” (Ibidem). This force was

⁸⁷ “Plan Dignidad” was the brainchild of Vice-president Jorge “Tuto” Quiroga, a member of a small party that joined the coalition formed by Banzer.

involved in significant human rights violations and was dissolved in mid-2002. Despite this change, the military continued being a key force in the implementation of Plan Dignidad, which was remarkably successful. The amount of coca crops in Bolivia fell from 45,800 hectares in 1997 to 14,600 hectares in 2000, leaving only 2,400 surplus or illegal hectares. However, in 2001 coca crops began to bounce back. The U.S. State Department and the United Nations estimates coincide, showing 24,400 hectares in 2002 and 23,600 in 2003. The United Nations and U.S. State Department's figure for 2004 was 27,700. **Nevertheless, other sources found that between 2003 and 2004 coca crops increased by 17%**, the biggest increase in coca cultivation since 1998 (UNODC, 2005c). Furthermore, there are reports that coca has spread to new areas (Thoumi, 2003b).

Eradication created social conflicts because the living standard of peasants in Chapare deteriorated as a result of its implementation. Further, the international fall of coffee prices affected some alternative development projects. **As eradication continued in 2000 it “generated large mobilisations of Chapare coccalero’s federations** that confronted the government and demanded the end of eradication policies and other anti-drug measures. After countless protests an agreement was reached in which the government committed itself to a series of measures that it could not possibly implement but that were instrumental in ending the confrontation” (Navarrete-Frías and Thoumi, 2005).

Protests and massive mobilisation of coca growers against eradication campaigns have been common and sometimes violent. Coccaleros have protested for the use “of combined military and police units of eradication; conflicts with growers resulted in 33 deaths of growers, and 27 police and military fatalities between 1998 and 2003.” (Veillette and Navarrete-Frías; 2005) The continuing political instability plus coccalero marches have also made it difficult to maintain a uniform counter-narcotics policy.

2. The changing political spectrum in Bolivia and the rise of coccalero power

Forced eradication contributed to a decline in the living standards of Chapare's peasants and led to social unrest and protests in that region. Some of these protests have been violent and have led to the deaths of several peasants and police personnel. “Plan Dignidad” has been remarkably successful within Chapare, but its social impact has been detrimental. The income decline in Chapare was also caused by important changes in external conditions. The Brazilian economic crisis, followed by a deep Argentinean crisis, coupled with the collapse of the international

coffee market as a consequence of the large increase in Vietnamese production resulted in lower prices for Chapare's AD products.

AD programs did not compensate for the decline in coca, and peasants became increasingly mobilised. **From April 2000 onward, the government has had to face frequent confrontations with coca grower federations in Chapare**, demanding an end to forced eradication and other counter narcotic measures. These have repeatedly led to agreements between the peasant organisations and the government, in which the latter promise measures that are impossible to implement. The main coca representatives in congress led an active political opposition to the forced eradication program. In early 2002, Evo Morales, the main coca leader, was expelled from congress.

Coca growers organised themselves and created a very strong political party, Movement Toward Socialism (MAS). Evo Morales, a cocalero leader, ran as their presidential candidate in the **2002 elections** and was runner up. "The Indian candidates obtained surprised results. The sum of votes for Evo Morales, Felipe Quispe and Felipe Flórez surpassed the vote for the traditional parties. **The alliance of Flórez and Morales gained control of almost 40% of Congress**" (Thoumi, 2003b). Not surprisingly, Morales claimed to "govern from the street".

Coca is not the only issue that moves peasants. In some regions of the country the lack of access to land is the main peasant grievance. Other issues such as education, health and access to utilities and the use of natural resources are also important. Yet coca is a main aspect and the one that is at the forefront of the debate agenda. Peasant pressures induced President Sánchez de Lozada to stop forced eradication and **in early 2003, to consider allowing every peasant family from coca growing regions to cultivate a small coca plot. The American embassy forcibly opposed this** measure and prevented its implementation. Peasant protests and confrontations with government forces continued and in September a government proposal to export gas to the United States through Chile triggered "widespread protests that ensued [and which] ultimately encompassed a large range of concerns. These included demands for better wages, reform of anti-drug legislation, rejection of a law imposing prison terms for people participating in road blockades, and repudiation of the proposed Free Trade Area of the Americas" (Ledebur, 2005: 161). The government tried to repress the protests with force and **after more than 60 people had been killed politicians withdrew their support of Sánchez de Lozada, who resigned on October 17.** Following the Constitution, Vice-president Carlos Mesa took over.

Mesa's government was marred by constant conflict. The hydrocarbon law became the main focus of contention. Peasant marches, road blockades and urban protests were organised to demand 50% royalty payments to the state, a much higher percentage than what is common in the industry. Ethnic and regional conflicts deepened as the oil and gas rich regions of the west, with very little or no Indian populations, demanded more autonomy in managing their resources. Mesa attempted to hold a binding referendum on the gas export plan and tried to rally the population behind his demands that Chile return a stretch of land Bolivia lost to Chile during the War of the Pacific in the 1880s. As well, he proposed to convene a Constitutional Assembly to "re-found" the country. After 20 frustrating months and several resignation threats, he resigned on June 7, 2005 after the presidents of the two chambers of Congress abdicated their constitutional right to the presidency in favour of the caretaker government of Eduardo Rodriguez, the chief justice of the Supreme Court. Elections were held again in December 2005 a year ahead of schedule.

Evo Morales won the December 2005 election with over 50% of the vote, eliminating the need to have Congress choose between the two candidates with the largest number of votes. After taking power in January 22, 2006, Morales, a coca peasant leader, is today the first Indian president in Bolivian history. Despite constitutional transfers of power, cocalero power has forced significant political changes. Morales' coca policy is based on differentiating coca from cocaine. Following Indian grievances, he will demand that coca be eliminated from Schedule I of the United Nations conventions, which allows only medical and research uses for coca and preclude many other possible licit uses. Morales also opposes fast globalisation and will seek to renegotiate contracts with multinational firms that exploit the country's most important natural resources, particularly gas.

In his pre-presidency world tour, Morales visited Cuba, Venezuela, Brazil, Argentina, several European countries, Japan, China and India. He has never been to the United States. There is no question that **he will not implement eradication policies** and that his government will focus on drug trafficking. The future of anti-drug policies in Bolivia and that country's relationship to the United States and UNODC will be interesting to study in the future.

Conclusions

Bolivia and Colombia are two countries that have had very aggressive eradication campaigns. **In Bolivia, eradication began in the 1980s** and continued throughout the 1990s. Eradication was at first negotiated and later compensated. Throughout, alternative development projects were supposed to accompany eradication. This gradual eradication process did not lead to a significant drop in coca cultivation. As a result, **in late 1997 the government began a strong forced manual eradication program that yielded clear reductions in cultivation but which antagonised peasant communities** and organisations. Furthermore, although the program reduced illicit crops from 33,800 hectares in 1997 to 2,400 in 2000, this level could not be sustained and illicit coca cultivation bounced back to 15,700 hectares in 2004. This figure is likely to have increased significantly again in 2005. The situation is made more complex by the election of a cocalero leader as president of Bolivia, thus raising serious questions about the future of illegal coca cultivation.

In Colombia, despite spraying more coca hectares than the estimated cultivated area during the past three or four years (depending on the cultivated acreage estimate adopted), **coca continues to be planted and harvested and cocaine prices have not been altered significantly**. It appears that **massive aerial spraying has achieved its maximum possible results and that future intensive spraying will not reduce the area** cultivated with coca. Furthermore, Bolivia and Colombia are unlikely to sustain the current policies without the financial support of the United States. Although in Bolivia the funds invested in eradication and alternative development are relatively balanced with comparison to those of eradication, in Colombia the contrast is still very deep. It would be necessary to have different policies to lower coca plantings, such as improved governmental control over the territory and a refocusing of interdiction policies towards fighting organised crime and money laundering.

It is important to note that even if there is success in lowering production and increasing cocaine's retail prices, it could very likely lead to an "unintended" increase in revenues for Colombian guerrillas and warlords.

In both Bolivia and Colombia, coca eradication policies have been instrumental in changing the political spectrum. In Bolivia they have strengthened coca peasant organisations which subsequently achieved great political power to the point of electing a coca peasant president and achieving a majority in Congress. The effects of these events are yet to be seen. **In Colombia illicit coca plantings became a funding source for subversive and counter-subversive**

guerrilla groups which became extremely powerful. The illegal drugs industry also promoted a culture of illegality as well as widespread violence and social decomposition. **Bolivia's cultural and institutional background, however, prevented the emergence of any serious violence.** Although there are fundamental historical and political differences between both countries, it is interesting to note that **while Bolivian cocaleros organised political parties**, created strong organisations and frequently got involved in marches that at times turned violent, **in Colombia illegal armed groups use violence** as their main source of action, and resort to murdering Government manual eradication teams.

In Colombia, despite a strong governmental effort during the last 7 years, left wing guerrillas remain in control of large parts of the country while counter-subversive paramilitary groups have become a key political actor whose main goals are the legalisation of illegitimately accumulated wealth in the form of rural land holdings. There is no doubt that **the "symbiosis" between illegal trafficking and the guerrilla and paramilitaries groups in Colombia will remain** one of the country's main social and political challenges.

In both countries eradication has encouraged the "balloon effect" and displaced illicit crops; **in both cases recent evidence indicates that illicit plantings have moved to other regions of the country and/or other countries.** This displacement has in turn led to an increase in social and environmental damage even in regions where these plantings did not exist before. The fast displacement also reflects the will of peasants to struggle for their livelihood and continue planting, as well as the non-sustainability of eradication. **In Colombia aerial spraying is partly responsible for the large number of displaced persons** and families that are now one of the main social problems faced by the country.

If eradication is based on force, in order to succeed it is necessary for the government to be ready and able to apply force in all places where the illegal crop might be displaced. In countries like Bolivia and Colombia where there are ample uninhabited jungles with no state presence, this is a huge problem. Furthermore, at a global level it would be necessary that all countries where coca and poppy could grow be ready to control all locations where those plants can be cultivated. Otherwise success in one country would simply result in moving crops to other locations.

For eradication to succeed it is necessary to treat peasants as citizens and partners. It is also necessary to negotiate eradication with peasant organisations and communities. This negotiation must be such that all parties have the same understanding of what is agreed on, and

all parties must then comply with the agreement. If AD or alternative livelihoods programs are agreed upon, they must be implemented as expected by peasants. This is one reason why there must be a consensus about what eradication agreements mean. In other words, **there is a need for preventive actions to avoid the “balloon effect”** and alternative livelihoods must be provided to build up strong communities.

As a response of a simple police-based model of drug-related criminality, eradication has failed to take into account social processes and institutional frameworks that have evolved and now encourage the development of the illegal drugs industry in Bolivia and Colombia. There is no question that in both countries eradication has won many battles by causing a dramatic decline in the number of coca plantings, but there are no signs that it has been winning the war against illegal cultivation. Drug policy hawks argue that those who criticise forced eradication are being soft on drugs. In reality, those **hawks are themselves soft on drugs because they do not want to confront the real causes behind a country’s production of illegal crops**. Confronting those causes requires stronger policies and social reforms that are more difficult to formulate and implement and that require greater commitment than the simple application of force. They simply opt to define the “drug problem” as one that can be solved by applying force, particularly on poor peasants. Since this is not the real problem, it is not solvable by force. In this sense drug policy hawks are simply false hawks that do not want to confront difficult and unpleasant policy issues. Furthermore, as seen in Bolivia and Colombia, failed eradication programs have generated big social changes and have made the “drug problem” more complex and difficult to cope with.

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Part Three

Collateral Damage: Socio-Economic Impacts of Opium Eradication in South East Asia

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Executive Summary

Collateral Damage: The Destructive Social Effects of Eradication in the Golden Triangle

Myanmar, northern Thailand and the northern provinces of the Lao PDR have long been known collectively as the “Golden Triangle” of opium production. In the early 1970s, as much as 70% of the world’s illicit opium was produced here. More recently, although global production of illegal opium has been on the rise, opium poppy cultivation in the Triangle has been in steady decline since 1998. Today Lao PDR and Thailand are opium free, and Myanmar is working to eliminate opium production by 2014.

This dramatic change has been brought about through the use of eradication. But has this policy option hindered the region’s development? While relatively successful in terms of decreasing opium production, the opium eradication campaigns have also had worrying socio-economic impacts in some of the areas of opium cultivation. The success or failure of eradication policies in the Golden Triangle can only be judged by taking into consideration the impact that this policy has had on a variety of levels.

Eradication in the Golden Triangle: A Deepening of Poverty and Social Conflict

In the Golden Triangle, opium cultivation has largely been an activity undertaken by small-scale farmers because no other cash crops are economically viable in their region. This is due to poor infrastructure and lack of access to marketing channels for other crops. Policies that focus only on eradicating opium, without improving the conditions for growing other crops, thus remove the only viable cash crop in rural areas and can cause abject poverty. Governments’ decisions to eradicate opium production have led to massive social implications which have resulted from the removal of poor farmers’ and their communities’ access to the lucrative opium trade.

In Myanmar, rapid eradication campaigns have led to widespread famine and the forced migrations of entire communities from opium growing areas. These have, unsurprisingly, had disastrous, and long-lasting public health consequences. While Thailand has been relatively successful in coupling opium eradication with long term overall rural development strategies aimed at improving conditions for other types of agriculture, Laos, which had previously been more successful than Myanmar in linking eradication to rural development, rushed the final stages of its eradication campaigns. The result has been severe dramatic and negative social and economic consequences.

Lessons for Afghanistan: The Comparative Advantage of Opium Cultivation

Conditions for opium growing in Afghanistan resemble those in the Golden Triangle, and the experiences from this region should therefore be borne in mind when designing strategies aimed at decreasing opium production. In Afghanistan, as in the Golden Triangle, opium production is a farming activity that is undertaken because all other crops do not have the same comparative advantage: in terms of production costs, production possibilities, and marketing opportunities, opium trumps other livelihoods and will therefore be adopted by those individuals and communities mired in poverty and lacking in resources. In a case like Afghanistan, forcibly eradicating opium does not make other options more attractive – at the most, it only makes opium more difficult to cultivate.

The Impact of Eradication on Development: Varied Models, Varied Consequences

Building on social networks and on existing institutional infrastructure has proved to be a key aspect of successes in Laos and Thailand. This is likely to be equally important in Afghanistan. Quick fixes such as those chosen in Myanmar and (partly) in Laos may lead to temporary decreases in opium production, but research has shown that the socioeconomic impacts on already impoverished rural communities is often disastrous. The danger for Afghanistan — which has already begun to show itself — is a repeat of the Myanmar experience. In that country, the balloon effect has merely shifted opium cultivation from eradicated areas to other parts of the country, and has in fact expanded the scope of the entire industry.

In a large-scale opium producing country such as Afghanistan, a government that wishes to reduce opium production permanently without, at the same time, causing a humanitarian disaster in rural areas, will in all likelihood have to follow Thailand's model, which prioritized alternative livelihood programs over eradication, but which has, however, been marred by extra-

judicial activities. Thailand has been the most successful of the three in combining opium reduction with rural development, but the Thai strategy has taken decades to implement. In Afghanistan, the available timeline for success is much more limited. If it is to survive the massive opium trade and a violent insurgency, Afghanistan must embrace innovative reconstruction strategies, and must heed the lessons of the Golden Triangle.

Socio-Economic Impacts of Opium Eradication in South East Asia

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1. The Golden Triangle

Myanmar, the northern provinces of the Lao PDR, and northern Thailand together constitute the “Golden Triangle” of opium production. The high altitude and the warm climate make this isolated area ideal for opium poppy cultivation. In the early 1970s, as much as 70 % of the world’s illicit opium was produced here.

The cultivation of opium in this region is associated with a number of highland ethnic minorities; many of these emigrated from China in the nineteenth century. Opium has been an important cash crop or item of barter in the highlanders’ economic exchange, both within their own communities as well as with lowland villages. Contrary to many other crops, opium has the advantages of being resistant and/or immune to local pests, easy to store, simple to transport and enjoys a steady market. It has also been used in traditional medicine. However, all three countries have attempted to eradicate opium production. Whereas global production of illegal opium has been on the rise recently, due to increased cultivation in Afghanistan, opium poppy cultivation has decreased each year in South East Asia since 1998 (United Nations Office on Drugs and Crime, 2005d; see Table 1 and Table 2 for trends since the early 1990s).

Table 1. Opium production: Trends (hectares and metric tons), 1990 – 2004:

		1990	1995	2000	2004
Myanmar	hectares	150,100	154,070	108,700	44,200
	tonnes	1,621	1,664	1,087	370
Lao PDR	hectares	30,580	19,650	19,052	6,600
	tonnes	202	128	124	43
Thailand	hectares	1,782	168	890	0
	tonnes	20	2	8	0

Source: United Nations Office on Drugs and Crime (2005d): p. 47

Table 2. Reported poppy eradication in hectares, 1993 – 2004:

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Myanmar	160	1,041	3,310	3,093	3,093	3,172	9,824	1,643	9,317	7,469	638	2,820
Lao											4,134	3,556
Thailand	1,706	1,313	580	886	1,056	716	808	757	832	507	767	

Source: United Nations Office on Drugs and Crime (2005d): p. 53

Today the Lao PDR and Thailand have declared themselves to be opium free, and Myanmar is rapidly approaching its goal of eliminating opium production by 2014. However, while relatively successful in terms of decreasing opium production, the opium eradication campaigns have had worrying effects on the living conditions of people in the affected areas. This paper is a brief survey of different opium reduction efforts in the Golden Triangle, and their consequences.

2. Myanmar

Opium production in Myanmar has a long and complex history. During decades of armed conflicts in Myanmar, opium has often played a leading part; both as one of the main spoils of war and as a means of financing it.⁸⁸ Most of the Myanmar opium is produced in the Shan state, close to the border region with China, Laos and Thailand. Traditionally, the two major opium cultivation regions within this state have been the northern Wa and the Kokang.⁸⁹ Because of their historical record and the recent drastic changes in their opium policies, they will be the focus of this chapter.

The remoteness of these two regions has kept them on the periphery of Myanmar politics for centuries. When the British took control of Upper Burma in 1886, the Kokang still belonged to China. After negotiations, the Kokang region became a part of British Burma in 1897. The border of the northern Wa region was not delineated until late 1960s.⁹⁰

Attempts of various kinds to decrease opium production in these two regions began early, but with little success. For example, an attempt to replace opium with food crops started in 1939, but this was interrupted by World War II. Furthermore, in 1964, after the Government had signed the United Nations Single Convention on Narcotic Drugs, plans were designed to formulate a project to improve social economic conditions in the region in order to encourage farmers to grow alternative crops⁹¹. However, the uprisings against the central government which began at this time made it difficult for the government to enforce policies against opium production.

After decades of conflict, the rebel groups in both these regions signed peace agreements with the national government in 1989. The Kokang region was given the status of Special Region No. 1 under the control of an autonomous regional government, the Kokang Authority, and northern Wa was similarly given the status of Special Region No. 2 under the control of the Wa Authority. Although power struggles within the Kokang region in the 1990s gave the national government the opportunity to intervene militarily and thus gain some control and influence, Kokang and northern Wa, are still Special Regions with their own regional administrations and regional armies.⁹²

⁸⁸ Chouvy (2004)

⁸⁹ Transnational Institute (2005)

⁹⁰ Joint Kokang-Wa Humanitarian Needs Assessment Team (2003)

⁹¹ Ibid.

⁹² Joint Kokang-Wa Humanitarian Needs Assessment Team (2003)

In the negotiations preceding the peace agreements in 1989, both the Kokang and Wa authorities discussed plans for eliminating opium production with the national government. The Wa leaders agreed to set a goal of making their region opium free by 2005, and eventually the Kokang leaders agreed with the national government to strive for their region to be opium free by 2000. However, this target date was later postponed to 2002.⁹³

In both these regions, opium production is an activity primarily undertaken by small-scale farmers in order to earn cash income for expenses such as education. Thus, the average opium farmer is estimated to have earned an annual income of approximately 500 USD from opium cultivation, with opium traders (especially the foreign agents in the supply chain) apparently earning most of the profits from the trade.⁹⁴ The lack of realistic alternative cash crops proved an obstacle for the new regional authorities' attempts to decrease opium production.

The Wa authorities undertook a number of measures aimed at opium farmers. Some of these measures were voluntary; for example, the regional authorities strongly urged the local people to decrease the opium cultivation and attempted to encourage them to increase the cultivation of substitution crops. However, compulsion played an important part. Legislation entailing strict punishment for opium production was introduced, including rules which stipulated that four-time offenders would be sentenced to death. Moreover, the new laws also introduced death penalties for trafficking drugs across the border to China. Furthermore, in May 1995 the regional authorities announced publicly that measures would be taken to achieve the objective of total elimination of opium in the northern Wa region within 10 years.⁹⁵

The United Wa State Party was of the opinion that the Wa Special Region could not sustain the current population. Hence, 40,000 - 50,000 people were moved to another Wa enclave along the Thai border, southern Wa, where the valleys were more fertile and where other crops could be grown.⁹⁶ Part of the rationale for the relocation was the belief that, if populations were relocated to less remote areas where various rural development services could more easily be delivered, this would encourage farmers to switch to other cash crops.⁹⁷

In 1997, the United Nations Office on Drugs and Crime (UNODC) implemented the Wa Alternative Project with the objective to encourage production of alternative cash crops, through

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Central Committee for Abuse Control (undated homepage, b)

⁹⁶ Transnational International (2005) and Chouvy (2004)

⁹⁷ Joint Kokang-Wa Humanitarian Needs Assessment Team (2003)

the provision of substitute seeds and introduction of new farming techniques. The project also focused on other development activities such as education, health care and infrastructure.⁹⁸

In the Kokang area, the authorities acted in a similar manner to those in the northern Wa region, enacting a number of regulations and penalties, intended to suppress and prevent the production of opium.⁹⁹

To help the process of eliminating opium production in the Kokang region, the Japanese government funded the so-called Buckwheat Cultivation Project. As the name suggests, the project aimed at encouraging farmers to cease opium production and start growing buckwheat, which was to be sold in Japan.¹⁰⁰

At the same time as these regional policies were being carried out, new national policies against opium production were being implemented. In 1999 the Myanmar government declared that the country was to be opium free by 2014. The national 15-year plan to eliminate opium cultivation followed a twin strategy:

- a) To exert all-round efforts so as to accelerate anti-drug campaign as a national concern;
- b) To gradually eliminate the practice of opium poppy cultivation, while improving the economic and social welfare in the border areas.¹⁰¹

To implement these strategies three tactics were to be used; a) law enforcement; b) supply elimination; and c) demand elimination.¹⁰² In the strategy there is, at least in principle, recognition of the need for economic development in the opium-growing areas in order to encourage farmers to engage in other activities. Plans are laid for activities such as construction of roads and bridges, establishment of agricultural education stations and building of public awareness about the dangers of drug abuse¹⁰³

⁹⁸ United Nations Strategic Programme Framework (2002)

⁹⁹ Central Committee for Abuse Control (undated homepage, a)

¹⁰⁰ Joint Kokang-Wa Humanitarian Needs Assessment Team (2003)

¹⁰¹ Central Committee for Abuse Control (undated homepage, c)

¹⁰² Ibid.

¹⁰³ Ibid.

2.1 Consequences of eradication in Myanmar

Although Myanmar is still the world's second largest opium producer, the current estimated area under opium poppy cultivation has decreased by 73% since peak production levels in 1996, with a decline of 26% merely between 2004 and 2005.^{104,105} According to the United Nations opium survey carried out in 2005¹⁰⁶, no poppy fields could be found in Kokang; it thus appears that the regional government has achieved its objective of eradicating opium cultivation in the region completely. However, since the survey was conducted during the year 2005, before the ban was imposed in the northern Wa region, it is too early to say if that region's eradication objective was also being accomplished.¹⁰⁷ The survey concluded that the overall cultivation in the northern Wa region had decreased by 25% since the previous year; however, in some parts of the region the cultivation had actually increased. A possible explanation could be that people wanted to increase their opium stocks before the cultivation ban was imposed.

The reduction of opium cultivation in the northern Shan has had a considerable price effect; different studies give different estimates of the increase of the average farm gate price of opium in Myanmar in 2004 ranging from 22% (UNODC) to 82% (Chouvy (2005)). The price effect makes opium growing more attractive in those parts of the country where no effective ban has been implemented.¹⁰⁸ It appears that the reduction of the opium acreage in the northern Shan State has, to a considerable extent, been offset by an increased production in the southern Shan State. Partly, this is due to increased acreage, but the increased production has largely been caused by increased productivity. Opium production in the southern Shan has nearly doubled in recent years.¹⁰⁹ Antonio Maria Costa, executive director of the United Nations Office on Drugs and Crime, concludes that:

“This is in part due to additional rains, however, and more disquieting, also due to improved cultivation practices. The latter in turn, is an indication of more sophisticatedly criminal activity, transcending poverty, and not dissimilar to the trends witnessed with ATS¹¹⁰ production: cross-border networking and transfer of new and improved techniques.”¹¹¹

¹⁰⁴ United Nations Office on Drugs and Crime (2005c)

¹⁰⁵ The accuracy of these figures has been questioned as carried out in conjecture with Yangon's Central Committee for Drug Abuse Control, Chouvy (2004)

¹⁰⁶ United Nations Office on Drugs and Crime (2005c)

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Amphetamine Type Stimulants

¹¹¹ United Nations Office on Drugs and Crime (2005c)

Although part of the decrease in opium production has thus been offset by increased opium cultivation in other parts of the country, there is little doubt that overall production has declined in Myanmar as a result of the eradication campaigns in selected regions. However, the eradication campaigns have had substantial side effects. The forced relocation of people has been highly controversial. A leader from the United Wa State Army in the northern Wa region reflects that:

“We force people from their highlands to move to the low lands here. We try to convince them, but they have to go. Frankly speaking they do not want to go, and some of them might have bad feelings against us because of this measure ... There are four thousand people left in the highlands here, and we are going to move all of them. The relocation will be completed by 2005.”¹¹²

The relocation of people has had dramatic consequences. The people were moved to areas where they were exposed to far greater risk of being infected by malaria, as well as by other diseases against which they had little resistance. This has led to the deaths of thousands of people.¹¹³

It has been difficult for farmers to find replacements for opium growing. There are few crops that provide the same combination of low technology requirements and high economic value for farmers. The remote location and poor infrastructure in the region have worsened the situation.¹¹⁴ Opium produced in these regions already had a steady market, whereas there were no readily available channels for selling other crops.

Concern has been raised, even among the staff of organisations working to limit opium production, that the eradication process has been too rapid and that there are not enough income alternatives for the farmers.¹¹⁵ Jean-Luc Lemahieu, Rangoon representative of the United Nations Office on Drugs and Crime, stated in 2003 that:

“What is evident is a drastic cut in acreage in north-east Shan State, including Kokang areas. A joint humanitarian assessment team visited the Kokang in early May and came back with the

¹¹² Interview with Soe Myint, USWA head of foreign relations Nam Thit Special township, Nam Thit 29 February 2004, cited in Transnational Institute (2005) p 15

¹¹³ Transnational Institute (2005)

¹¹⁴ Ibid.

¹¹⁵ Transnational Institute (2003)

positive news of drastic opium reduction there, but an alarming humanitarian situation concerning the opium farmers and their families. Fast intervention is required.”¹¹⁶

Later in 2003, the situation in Kokang became critical, and the World Food Program had to intervene by distributing rice to former opium farmers.¹¹⁷

The northern Wa region has a higher population density than Kokang, and the effects of the recent reductions in opium production are likely to be even more drastic. However, the Wa leaders have been determined that the deadlines for eradication should not be altered. The people in the region are well aware of the deadlines and of the associated punishment if the laws are not followed. In addition, the ban is internationally recognised, and the Myanmar Government has attached considerable political prestige to realising the time schedule.¹¹⁸

Studies have indicated that the main reasons for the negative consequences of the opium reduction have been the extremely tight time schedules that the eradication campaigns have followed, and the fact that the eradication began before there were alternative sources of income available for the already poor farmers.¹¹⁹ Both the national and the regional governments have been keen to decrease opium production quickly, due to international pressure (not least from donor agencies), but the lack of viable economic alternatives has had a devastating impact on long term development.

3. Laos

The growing of opium poppy as a cash crop is a relatively new phenomenon in Laos. In colonial times, most of the opium consumed in Laos came from Persia and Turkey. When these supply channels were closed during World War II, opium poppy cultivation in Laos increased remarkably as there were now huge profits to be made. The Lao growers, who had previously only grown opium in their gardens for medicinal purposes, took advantage of the new market. Opium was mostly sold illegally to opium dens rather than legally to the government. Between independence in 1975 and 1992, opium poppy cultivation increased almost five fold.¹²⁰

¹¹⁶ Making Inroads, An Interview with Jean-Luc Lemahieu, The Irrawaddy Online, Vol.11, No 4, May 2003, cited in Transnational Institute (2005) p.7

¹¹⁷ Transnational Institute (2003)

¹¹⁸ Joint Kokang-Wa Humanitarian Needs Assessment Team (2003)

¹¹⁹ See, for example, Transnational Institute (2003) or United Nations International Drug Control Programme (2001)

¹²⁰ United Nations Office on Drugs and Crime (2005b)

Most of the opium poppy in the Lao PDR is cultivated in the northern highlands. These remote areas are associated with a high rate of poverty and lack of social-economic and physical infrastructure. According to the country's National Growth and Poverty Strategy, 32 of the 47 poorest districts in the country were opium producing.¹²¹ Opium consumption was an important part of life in many of the highland areas; although opium was cultivated for export production, there was also considerable farming for own use as well as substantial opium trade flows within the country.

Opium is grown as a part of the shifting cultivation schemes, and as such, has been a concern of government policy for a long time. Three years after independence, the government signed a national decree on forestry protection¹²² that included requirements for prevention of shifting cultivation in watershed areas and for forest conversion. These regulations were not met in practice, but nonetheless continued to be the official government policy.¹²³

The first National Forestry Conference, in 1989, on the other hand, is seen as a benchmark of forestry development in the Lao PDR. The conference proposed allocation of forestland to villagers and drew up guidelines for the rationalisation of forest management and for introducing alternatives to shifting cultivation.¹²⁴ The conference also adopted a resolution that by the year 2000, there would be a permanent resettlement of 60% of the 1.5 million people engaged in the shifting cultivation. This amounted to approximately a quarter of the total population of the Lao PDR at the time.¹²⁵

Following this conference, systematic efforts to control opium production began. The pilot project was the Palaveck Alternative Development Project, which started the same year. The objective of the project was to provide the highland farmers with simple post-harvest technology, coupled with improved road infrastructure, and to help them to sell small livestock.¹²⁶ Two years later, the United Nations Office on Drugs and Crime initiated a number of projects with similar emphasis in the Xieng Khuany region.¹²⁷ Demand side measures, aimed at decreasing the number of domestic opium addicts, were also carried out.

¹²¹ Ibid.

¹²² Council of Ministers Instruction No 74 on Forest Protection (19 January 1979)

¹²³ Boonwaat (2004)

¹²⁴ Thomas (2004)

¹²⁵ Evrard and Goudineau (2004)

¹²⁶ United Nations Office on Drugs and Crime (2005b)

¹²⁷ United Nations International Drug Control Programme (2001)

In 1994 the government of the Lao PDR, in association with the United Nations Office on Drugs and Crime, worked out the so called Comprehensive Drug Control Program to gradually improve drug control, with emphasis being put on alternative development strategies. The plan was to strengthen the country's law enforcement and, at the same time, reduce both the supply and demand of opium through rural development strategies.¹²⁸ As part of this strategy, opium poppy cultivation became legally prohibited for the first time in 1996.¹²⁹

In 1999 a strategy called "Balanced Approach to Opium in the Lao PDR" was developed jointly by the United Nations Office on Drugs and Crime and the Government of Laos. The program was closely linked to the country's general development programmes in the development areas.¹³⁰ The objective was to reduce the economic incentives for opium production, decrease the domestic demand for opium, and strengthen law enforcement to stop trafficking.¹³¹

In 2001 the seventh National Party Congress stipulated that opium production and use was to be eliminated by 2005.¹³² Rather than being based on domestic policy considerations, this relatively tight deadline was largely chosen due to pressure from foreign governments that were concerned about opium exports from the Lao PDR.

3.2 Consequences of eradication in Laos

In 2005 the authorities in the Lao PDR proclaimed their country as opium free.¹³³ According to the United Nations Office on Drugs and Crime, the area under opium poppy cultivation has been reduced, from 26 800 hectares in 1998, to 6 600 hectares in 2004 and further down to only 1 800 hectares in early 2005.¹³⁴

The Palaveck Project has gained international attention for being able to reduce opium poppy cultivation successfully. By 1994, the estimated production had fallen by more than 90% within the project area.¹³⁵ This is interesting, since it was accomplished before the ban of opium

¹²⁸ Ibid.

¹²⁹ Cohen and Lyttleton (2002)

¹³⁰ Thomas (2004)

¹³¹ Boonwaat (2004)

¹³² United Nations Office on Drugs and Crime (2005b)

¹³³ Economist (2005)

¹³⁴ United Nations Office on Drugs and Crime (2005b)

¹³⁵ Farrell (1998)

cultivation and it was accomplished without use of forced eradication or punishment. The success was explained by a strong clan leadership and community involvement.¹³⁶

In order to eradicate opium cultivation in the later stages of the opium eradication campaign, approximately 65 000 hill-people were evacuated from the mountains of northern Lao PDF. They were, as in the case of Myanmar, exposed to malaria and other diseases, and faced an increased mortality rate, sometimes as high as 4%.¹³⁷

From a gender perspective, the subsequent reductions in opium growing and opium use appear to have been a success.¹³⁸ Opium cultivation is very labour intensive, and it was often the women who did the hard work in the poppy fields. The men were frequently addicted to opium, which made them less productive. Since the fields were often located far away from the homes, a lot of time was spent getting to and from the fields. In the Laos opium study, women reported that their working days had been shortened by 1 - 2 hours per day, as they were able to work closer to home after the relocation to new areas, and that they had more time and energy for other activities. In addition, when the husbands quit their opium addiction the households' productivity increased remarkably.¹³⁹

In the preface of the Laos Opium Survey Antonio Maria Costa, executive officer at the United Nations Office on Drugs and Crime, states that:

“There is ample reason to pay tribute to the intelligence and resilience of farming families in the former opium growing mountains of northern Laos. They have coped remarkably well under difficult circumstances. But their communities have still not escaped the poverty associated with drug production.”¹⁴⁰

However, many of the coping strategies that farmers have chosen are problematic. In order to cope with the new situation, the former opium farmers' main strategy has been to grow more field crops. This, in turn, has led to an increase in the cultivated area and to a subsequent increase in shifting cultivation. Farming has spread over hilltops and onto steep slopes. This development stands in contrast with the broader goals for the development of the highland areas, but local officials have accepted this since, at the moment, shifting cultivation is essential for the livelihoods of the people. Other coping strategies for the affected families have been to

¹³⁶ United Nations Office on Drugs and Crime (2005b)

¹³⁷ BBC Friday, 15 July 2005

¹³⁸ Cohen and Lyttleton (2002)

¹³⁹ United Nations Office on Drugs and Crime (2005b)

¹⁴⁰ Ibid.

sell their livestock, collecting and using non-timber forest products, and taking various types of paid employment.¹⁴¹ Paid employment can be seen as a long term coping strategy, but the other coping strategies all deplete either household resources or environmental carrying capacity and can only, at best, be seen as temporary stopgap measures.

Another worrying factor is that many of the domestic opium users have switched to using heroin and amphetamines instead. The increased usage of these drugs is, in turn, likely to increase the risk of HIV/AIDS.¹⁴²

It has been pointed out that the government in the Lao PDR previously argued that poppy cultivation should not be eradicated until alternative crops and economic development were already in place. However, when the US government and narcotics agencies escalated the pressure in 2000, this was overlooked. As one leader of a non-governmental organisation, who preferred to be anonymous, put it¹⁴³:

“They pushed for opium elimination before economic development was in place, so they put the cart before the horse.”

4. Thailand

Thailand has a long history of opium reduction efforts. As early as the year 1360 a law was issued that prohibited opium dealing and consumption. This prohibition policy was practised for almost 500 years. When the immigrants came from China in the nineteenth century, opium production increased rapidly and as a result opium policy was changed in 1851. Smoking was allowed in authorised dens and tax revenue was collected.¹⁴⁴ In the beginning of the twentieth century, the Thai state monopoly on opium was financing a considerable fraction of the Thai state budget; during some periods the opium trade accounted for as much as a quarter of the government revenue. However, the state monopoly was under a lot of international criticism, and international pressure eventually forced the military government to prohibit opium cultivation, trade and consumption in 1957.¹⁴⁵ In spite of the new laws, a UN Commission on

¹⁴¹ Ibid.

¹⁴² BBC Friday, 15 July 2005

¹⁴³ Ibid.

¹⁴⁴ United Nations International Drug Control Programme (2001)

¹⁴⁵ Buergin (2000)

Narcotic Drugs estimated in the mid-1960s that annual opium production was approximately 145 tons.¹⁴⁶

Renard (2001), in his review of opium reduction policies in Thailand between 1970 and 2000, divides the policy process into three phases; the phase of crop replacement policies in the 1970s, the phase of integrated rural development policies in the 1980s and the phase of participatory work in the 1990s. In addition to the three historical phases identified by Renard, a fourth phase can be said to have started in 2003, when the Thai government declared a “war on drugs”.

During the first phase of crop replacement policies in the 1970s, a number of projects started with the objective of finding high yield crops that could replace the income from opium poppy cultivation. The first of these projects, called the Royal Project, was initiated by King Bhumibol in 1969. The objectives of this project were, among others, to improve conditions for the hill-people, to stop opium cultivation, and to produce cash crops for the benefit of the Thai economy.¹⁴⁷ During this period, Thailand’s opium production became a matter of international concern. In 1971, the United Nations Crop Replacement Community Development Project started, and experimental stations were established to identify and promote new crops. The two projects worked closely together, and it was agreed that no opium poppies should be destroyed until there were proper replacements.

At the national level, the government of Thailand decided to unify the highland work under the national five year development plans. The objectives of these plans were to provide development to the highlands, to reduce the opium poppy cultivation, stabilise the livelihoods of the residents, abolish shifting cultivation, and to ensure the security in the border areas. The government used a “carrot and stick approach”, offering a number of welfare and development activities with one hand but threatening with law enforcement with the other hand.¹⁴⁸

During the second phase, that of the integrated rural development policies in the 1980s, the projects became multi-sectoral. It was realised that the narcotics problems could not be solved in isolation. The projects spanned a wide range of activities, such as education, health and market promotion. One of the more controversial projects during this period was the Mae Chaem Integrated Watershed Development Project with the objective to issue land ownership titles to the hill-people. The USAID required that the hill-people were identified as Thai citizens with the legal right to land titles. This was not accepted by the Royal Forest Department, the

¹⁴⁶ Renard (2001)

¹⁴⁷ United Nations International Drug Control Programme (2001)

¹⁴⁸ Dirksen (1997)

formal owner of the land. USAID thereupon withheld its funding until the issue was resolved. Eventually 4,000 permits were issued.¹⁴⁹

Another of the projects launched during this time, and as it turned out the longest-lived of all the international opium replacement projects in Thailand, was the Thai-German Highland Development Project (TG-HDP).¹⁵⁰ The emphasis of this project was to promote the replacement of opium by other crops, as well as to promote rural development in general. Examples of more specific activities were efficient utilisation of the natural resources in the highlands and facilitating the assimilation of the hill-people into the Thai nation.¹⁵¹

In the 1990s, during the third phase of participatory work, the projects started to involve the villagers in the decision process. In the TG-HDP, the focus shifted from crop replacement to strengthening and supporting local organisations such as credit groups and rice banks among the villagers. In addition, community-based drug control was introduced. The Royal Project began to include the whole marketing chain from post-harvest to market research in its considerations. Vegetables, cut flowers and other products from the villages were sold under a new launched trade mark called Doi Kham. At the national level during this period, the government built roads, schools and health clinics. Furthermore, electrification and infrastructure were brought to remote areas.¹⁵²

In 2003, the Prime Minister of Thailand announced a war on drugs. The main objective was to abate the rapidly increasing use of methamphetamine and heroin. The “war” was conducted in three steps. First, the emphasis was on the supply chain aiming to stop the production and trafficking. Second, the campaign focused on demand reduction, and in the third step communities were strengthened to sustain this reduction.¹⁵³

The supply strategy included a policy where small-scale drug dealers were given an opportunity to report themselves to the authorities, and where those with otherwise clean criminal records were sent to behavioural adjustment camps. These minor dealers were to be used by the authorities in order to obtain information about large-scale dealers.¹⁵⁴ The demand strategy included a law mandating all drug users to attend drug treatment. After a certain time, all known

¹⁴⁹ Renard (2001), and Djedje and Korff (2002)

¹⁵⁰ Renard (2001)

¹⁵¹ Dirksen (1997)

¹⁵² Renard (2001)

¹⁵³ Office of the Narcotic Control Board (2003)

¹⁵⁴ Ibid.

dealers and users who had not reported themselves were put on lists that were spread in the communities.¹⁵⁵

4.1 Consequences of opium eradication in Thailand

After a long journey of opium reduction efforts in Thailand, the main objective can be seen as having been accomplished. From being a producer of nearly 150 tonnes annually at its peak in 1965, today Thailand is virtually free of opium production.¹⁵⁶ Furthermore, rural development has progressed, the standard of living has increased, and infrastructure has improved considerably in the area. The highlanders have become Thai citizens and are better integrated into Thai society than before.¹⁵⁷

Several factors have been pointed out as important for these achievements. Some of these factors were intended and planned, such as:¹⁵⁸

- A visible leader in King Bhumibol who often visited the hill villages to encourage the people to shift to other crops.
- A national unity, a strong political will as well as participation of the people.
- A long term strategy, allowing the process to evolve gradually.

Other important factors were more related to the economic environment¹⁵⁹:

- The reduction of opium in Thailand came at the same time as the Myanmar opium market expanded, causing drastic declines in opium prices, which made Thai opium production less profitable.
- The economic success of the country has given the Thai government the financial means to support the development process in the highlands.

However, these achievements did not come without costs. One of the major criticisms of the projects has been the impact on tribal culture. Studies show that hill-people felt that they had

¹⁵⁵ Vongchak et al. (2005)

¹⁵⁶ United Nations Office on Drugs and Crime (2005a)

¹⁵⁷ United Nations International Drug Control Programme (2001)

¹⁵⁸ Ibid.

¹⁵⁹ Dirksen (1997)

lost their roots and that they did not feel as home neither in their own nor in the Thai society.¹⁶⁰ However, to what extent this has been caused by opium eradication as such is questionable. As Renard (2001) puts it:

*“There are forces, however, larger than the development process. Regardless of international donors or even the opium in the hills, eventually the vibrant Thai economy and population would have expanded into the hills. Roads and other development would have entered the highlands guided almost purely by the profit motive, the forces of globalisation, and laissez-faire, presumably with harsher consequences on the hill tribes.”*¹⁶¹

Another criticism has concerned the impacts of crop replacement, both on the environment and on the livelihoods of the farmers. The newly introduced crops were often less resistant to pests and diseases than the opium poppy is, and therefore needed more chemical inputs and hence caused greater environmental problems. They also required larger growing areas, which further increased the environmental stress. In many cases only one new crop was introduced as a replacement, which led to loss of soil fertility. Often it was difficult to find a market for the new crops and the prices for these crops were highly unstable, which led to increased economic risks for the farmers.¹⁶²

A by-product of the Thai opium eradication policies appears to be that the cartel controlling opium production in Thailand has become more sophisticated in its methods. It has been reported that, from 1997 onwards, Thai farmers have been hired by the criminal network to experiment with opium production to achieve higher yields. Those farmers who still grow opium have also been taught how better to escape detection by the authorities.¹⁶³

Another negative impact of opium eradication is that the use of other narcotic substances has increased in Thailand, as opium users have switched to other drugs. Thus, the use of methamphetamine has increased remarkably since the mid 1990s. In addition, there has been a steady increase in heroin injection.¹⁶⁴

The last episode in the Thai drug policy history, the “war on drugs”, has led to a large number of completed treatments of drug users as well as to large numbers of arrested users and

¹⁶⁰ Renard (2001)

¹⁶¹ United Nations International Drug Control Programme (2001)

¹⁶² Dirksen (1997)

¹⁶³ Renard (2001)

¹⁶⁴ Vongchak et al. (2005)

dealers.¹⁶⁵ However, the “war” has been strongly criticised for violating basic human rights and for bypassing the legal system.¹⁶⁶ The policy has been associated with a large increase in the number of drug-related shootings, both by the police and by large-scale drug dealers against smaller dealers in fear of being turned in.¹⁶⁷

Conclusions

The three countries in the Golden Triangle have all attempted to eliminate opium production, but there have been considerable differences between their respective strategies. Myanmar has eradicated opium forcibly in selected regions very rapidly, but has – so far – implemented few alternatives to opium production. Although opium production has declined considerably in the targeted regions, this decrease has been partly offset by an increase in production elsewhere in the country. Moreover, the social consequences of the eradication policies have been disastrous, with widespread famine and health problems resulting from the sudden loss of income and the forced migrations associated with the policies. In Laos and Thailand, on the other hand, opium eradication has been a part of overall rural development planning, rather than a separate policy objective in itself, and the importance of identifying suitable alternative crops has been recognised. On the face of it, these two countries also appear to have been more successful in achieving their policy objectives than Myanmar has been.

However, even in the more successful countries Laos and Thailand, the unintended side consequences of the eradication policies give pause for thought. In Laos, despite the attempts to develop alternative livelihoods for the affected farmers and to integrate opium eradication into the country’s general rural development planning, the overall effects of the policy are alarming from a humanitarian perspective. When the long term development strategies were more or less abandoned in the rush to eradicate opium production quickly, the social and environmental effects were devastating.

In Thailand, a decades-long rural development strategy, with opium reduction as only one of many objectives, has been largely successful both in decreasing opium production but also in developing alternative livelihoods for the farming communities. Even there, however, the side effects have been considerable. There is no other crop that combines low technological requirements and high value per hectare in the way that opium does. Decreased opium

¹⁶⁵ Vongchak et al. (2005)

¹⁶⁶ Human Rights Watch (2004)

¹⁶⁷ Vongchak et al. (2005)

production, and increased reliance on other crops, has led to increased pressure on the available land and increased use of chemicals, with as yet unknown environmental effects in the longer term.

What lessons can be learned for Afghanistan from the experiences of these three countries? In Afghanistan, as well as in the Golden Triangle, opium production is a farming activity which is undertaken because all other crops are worse options – in terms of production costs, production possibilities, and/or marketing opportunities. Eradicating opium forcibly does not make the other options more attractive, it only makes opium less so.

Building on social networks, and on existing institutional infrastructure, has proved to be a key aspect of successes in Laos and Thailand. It has been seen in Afghanistan that opium farming is closely linked with the local social networks. Hence, local solutions that include genuine involvement of all stakeholders and particularly the ‘voices of the poor’, are essential.

Quick fixes such as those chosen in Myanmar and (to some extent) in Laos may lead to at least temporary decreases in opium production, but at huge social costs to already impoverished rural communities. Moreover, the Myanmar experience, with opium production merely shifting from eradication areas to other parts of the country, seems already to be repeating itself in Afghanistan¹⁶⁸ – and the scope for increasing opium production by improving productivity is likely to be even greater in Afghanistan than it was in Myanmar, given the large differences in current productivity.

Thailand is at least a qualified success story in terms of combining opium reduction with rural development, but the Thai strategy has taken decades to implement. In a large-scale opium producing country such as Afghanistan, a government that wishes to reduce opium production permanently without, at the same time, causing a humanitarian disaster in rural areas, will in all likelihood have to work on the same timescales as Thailand has.

¹⁶⁸ United Nations Office on Drugs and Crime (2005d), on Afghanistan: “Of greatest concern is the fact that opium poppy cultivation has been introduced into previously unaffected areas and is now found in all 34 provinces of the country”.

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Part Four

Draft Law Protecting Afghan Farmers from Forced Eradication

The Senlis Council

Draft Law Protecting Afghan Farmers from Forced Eradication

PREAMBLE

This law recognises that:-

i) Eradication interventions constitute a violent action against the poor farmers of Afghanistan who are living in severe poverty and are often unable to provide for their families in another way.

ii) Government responses to poppy cultivation for the production of heroin should focus on providing Afghan opium farmers with alternative livelihoods rather than violent interventions against them

iii) It is the poorest people in society: farmers and labourers, who suffer most directly and most severely from the effects of eradication

iv) Forced eradication will lead to economic hardships and insecurity, cause conflict in rural communities, lead to the displacement of rural populations, and work against the further establishment of peace and democracy in Afghanistan.

v) Chemical and biological eradication interventions elsewhere in the world have created health risks for local communities, irrevocably damaged the environment, caused conflict and violated human rights,

This law reaffirms the United Nation's Action Plan on International Cooperation on Eradication of Illicit Drug Crops and on Alternative Development, which warns about the counter-productive effects of forced eradication in areas where sustainable alternative livelihoods are not yet available.

GENERAL PROHIBITION

Article 1

1. This Law prohibits all acts aimed at the forced eradication of opium poppy throughout the territory of Afghanistan. It shall be an offence to contravene, attempt to contravene or abet the contravention of this prohibition.

Definitions

Article 2

“Biological agent” means a cultivated micro-organism that causes damage to plants and other biological material;

“Herbicide” means a pesticide designed to control or kill plants, weeds or other organic materials;

“Eradication” means all activities, regardless of scale or manner of delivery, aimed at the partial or complete destruction of opium poppy crops without the full consent of the owner of the land on which the crop is grown;

“Microbial” means a micro-organism that can cause diseases in plants;

“Mycoherbicide” means a herbicide in which the active ingredient is a living fungus that infects a plant and then kills or inhibits it;

“Opium poppy” means the plant of the species *Papaver Somniferum L.*;

“Public official” shall mean any officer, employee, or person acting for, on behalf, or under the authority of any department, agency, or branch of either the Provincial or Central Government of the Islamic Republic of Afghanistan.

Scope of Prohibition

Article 3

1. The prohibition in Article 1 shall apply to all eradication activities. In particular, this shall include:
 - (a) the use of all chemical herbicides, including all glyphosate formulations;
 - (b) the use of all microbial or other biological agents such as mycoherbicides, or toxins, including those derived from the fungal species: *Fusarium oxysporum* and *Pleospora papaveracea*;
 - (c) all manual forms of eradication, such as the burning and the uprooting of opium poppy plants;
 - (d) all mechanical forms of eradication, such as fumigation and aerial spraying;
2. The prohibition on the use of all chemical, microbial or biological agents shall apply irrespective of whether the agent is naturally occurring or genetically modified, or whether the agent is host-specific or is considered in some other way to be environmentally safe.

Application

Article 4

1. The prohibition in Article 1 shall apply to individuals, companies and non-commercial entities (including governmental and inter-governmental agencies), whether Afghan or foreign, and without exception.

Jurisdictional scope

Article 5

1. This law shall apply in areas within the limits of Afghanistan's national jurisdiction.

Persons who may bring an action

Article 6

1. Any farmer or other person who is able to show that they have proprietary rights over the land and / or opium crop in respect of which eradication has taken place and that they have suffered economic loss or other form of damage, including health-related damage, as a direct result of such eradication, may bring an action against the commissioner of the offence.
2. Any farmer or other person who is unable to show that they have proprietary rights over the land and / or opium crop in respect of which eradication has taken place, but who is able to show that they have suffered economic loss or other form of damage, including health-related damage, as an indirect result of such eradication interventions, in particular through aerial spray drift or pollution of the water table, may bring an action against the commissioner of the offence.
3. Following the bringing of an action in accordance with the previous paragraphs, the matter shall be referred to the formal courts system which shall investigate allegations of eradication activities, either past, present or prospective, and a decision shall be taken as to liability and redress. In the first instance, the matter shall be heard in the Primary Court. The Appeal Court shall have the authority to review decisions of the Primary Court in accordance with its power under the Law Concerning the Organization and Jurisdiction of Courts of the Islamic Republic of Afghanistan. Thereafter, the Supreme Court shall have jurisdiction to review decisions of the Narcotics Tribunal of the Appeal Court in accordance with its power under the Law Concerning the Organization and Jurisdiction of Courts of the Islamic Republic of Afghanistan.

Monitoring and Enforcement

Article 7

1. In accordance with the ordinary use of their powers, the relevant Afghan law enforcement agencies shall take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition, or retention of the agents and means

of delivery specified in Article 3 of this Law, where there are reasonable grounds to believe that these are employed in eradication activities.

Liability

Article 8

1. Where an offence under this Law has been committed by a company on behalf of a non-commercial entity, every person who at the time the offence was committed was in charge of, or was responsible for, the conduct of the company, as well as the company and the non-commercial entity themselves, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly.
2. Notwithstanding anything contained in the previous paragraph, where an offence under this Law has been committed by a company on behalf of a non-commercial entity and it is proved that the offence has been committed with the consent or connivance of any director, manager, secretary or other officer of the company or the non-commercial entity, such director, manager, secretary or other officer shall also be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly. It shall be no defence that the director, manager, secretary or other officer are not Afghan nationals.

Penalties

Article 9

1. In the case of a finding against a company or non-commercial entity that an offence under Article 1 has been committed, this shall be punishable with a fine not exceeding ten billion Afghanis. The Court shall also have within its power the discretion to make such order as it deems reasonable and appropriate against the company or non-commercial entity concerned, to prevent the reoccurrence of the offence. Such order may include the seizure and confiscation of assets such as facilities, material, equipment and movable property, used or intended for eradication activities.

2. Where, for example the company or non-commercial entity is not registered in Afghanistan, it shall be ordered to immediately cease all its operations inside Afghanistan.
3. In the case of a finding against an individual that an offence under Article 1 has been committed, this shall be punishable with a fine not exceeding one billion Afghanis and/or imprisonment up to a maximum term of twenty five years. The level of punishment shall be determined according to the degree of involvement of the individual in the commission of the offence.
4. In the case of non-Afghan nations convicted of the above offence, in addition to fine and/or imprisonment they shall be deported and shall be banned for life from re-entering Afghanistan.
5. In the case of Afghan nationals convicted of the above offence, in addition to fine and/or imprisonment, they shall irrevocably lose their right to vote throughout the course of their lifetime and may face a lifetime ban from holding any public office, depending on the severity of the offence.
6. In the case of a finding against a Public Official that an offence under Article 1 has been committed, that person shall be liable for immediate removal from office. The Court may additionally impose a fine on that person not exceeding two billion Afghanis and/or imprisonment up to a maximum term of thirty years.
7. During the course of legal proceedings it shall be open to the Afghan courts to seek international judicial cooperation where necessary or desirable in order to bring to justice individuals accused or suspected of the abovementioned offence.
8. Where appropriate, and in addition to any award of fine, the Court may make a remedial order requiring the offending company and/or non-commercial entity to make reparations to those persons who have suffered as a result of the offence committed. Such reparations shall be non-financial in nature and shall involve such actions as cleaning up the land. The aim shall be to restore the quality of all agricultural conditions (soil, irrigation etc) to that which existed prior to eradication.