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Dependent on Development

The interrelationships between illicit drugs and socioeconomic development

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The Drugs and Development Project

This report forms part of the 'Drugs and Development Project,' funded by the Open Society Institute, and being undertaken by the Nossal Institute for Global Health in collaboration with Family Health International (FHI) branches in Vietnam and India.

The project seeks to examine the complex interrelationships between illicit drugs (production, trade and use), illicit drugs policies, human rights and social and economic development (SED), with a particular focus in the Asian regions. The overall aim is to highlight the inadequately acknowledged association between drug policy and development policy, and the need for a fundamental human rights based approach to be inherent in the implementation of drug policies in the context of SED. The ultimate goal of this project is to generate meaningful discussions between bilateral donors, drug law enforcement agencies and the development sector on the complex interrelationships of illicit drug policy and SED.

Authors & Acknowledgements

Research and drafting of the report: *Priya Mannava, Sasha Zegenhagen, Nick Crofts*
Research and drafting of South Asia case studies: *Deepankar Malik, Ashok Agarwal*
Research and drafting of Southeast Asia case studies: *Nick Thomson, Simon Baldwin*

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Executive Summary

1. Introduction

In spite of the complex interrelationships between illicit drug production, trade and use and socioeconomic development (SED), drug control and development policies tend to occur in isolation of each other, as exemplified by the lack of inclusion of illicit drugs in the Millennium Development Goals. A failure to acknowledge the interconnections between these two areas hinders the effectiveness of both drug and development policies and also undermines a human rights based approach to both illicit drug policy and development policies and programs.

1.1 Aims of the report

This report highlights the multifaceted relationships between illicit drug production, trade and use, and SED, and then demonstrates the ways in which the implementation of illicit drug control policies often hinders development sector gains; and furthermore, the ways in which many development sector policies actually ***increase*** vulnerability to illicit drug production, trade and use. By raising awareness on the links between drugs, drug policy, and SED, this paper aims to facilitate future research as well as initiate dialogue and collaboration between development and drug control agencies.

1.2 Approach & Terminology

The report is based on the hypothesis that *'Equitable SED is necessary for successful control of illicit drugs,* while *effective and human rights based illicit drug control is required to foster sustainable SED'*. To test this hypothesis, we begin by examining the impact of SED on illicit drug production, trade, and consumption, and then conversely the affect of the three processes on SED. In so doing, we consider 'illicit drug production/trade/consumption' and 'SED' as independent variables, and expect that outcomes will hold true for diverse settings at various times and for different drugs. We also note that we are exploring associations rather than causality, expecting that there will be limited, and largely anecdotal, evidence available – at least these early formative research stages.

Here, we define 'socioeconomic development' as the processes of social and economic development in a society, whereby the 'socio-' in socioeconomic development consists of "social change designed to promote the well-being of a population as a whole" (Midgley 2005) while the 'economic' refers to "qualitative change and restructuring in a country's economy in connection with technological and social progress" (World Bank definition). 'Control' is referred to here as the processes undertaken in order to minimize the harms associated with the availability and use of drugs in a community at a given point of time. In line with the United Nations Office for Drugs and Crime, 'illicit drugs' are defined as drugs produced, traded, and consumed for purposes prohibited by law, as outlined by the international drug control conventions.

1.3 Methods

We conducted a review of formal and non-formal English language literature published between 1990 and 2010 on the relationships between illicit drug production, trade, and consumption, illicit drug policies, SED, and human rights.

2. Sizing the problem: illicit drugs – an overview

2.1 The need to control

Policies and programs that aim to control or eradicate illicit drugs have been justified by the real and potential harms associated with illicit drugs: health problems, crime, decreased productivity, unemployment, and poverty. An international drug control system, based on three international conventions, specifies the types of illicit drugs and how these should be regulated. Despite control efforts, supply and demand of illicit drugs continue to be widespread.

2.2 The extent of illicit drug use, production, and trading

Noting the difficulties in measuring indicators related to illicit drugs, it is estimated that around 3.5% to 5.7% of the world's populations aged between 15 to 64 years (155 to 250 million) consumes illicit drugs. Consumption continues to be higher in the wealthier regions of North America, Western Europe, and Oceania, though sharp rises in use are being witnessed in East and West Africa, the Middle East, and South America.

Production of opium, which increased by 80% between 1998 and 2009, is highest in Afghanistan, which accounted for 60% of the world's supply during the same period. Supply of cocaine, largely produced in Bolivia, Colombia, and Peru, was reported to have increased during the period of 2004 to 2007 as compared to earlier years, though the increase was not as dramatic as that of opium. Production of cannabis, the most widely produced illicit drug globally, and amphetamine-type stimulants (ATS) is prevalent in countries world-over. The illicit drug trade is also widespread, though data on seizures suggest the problem is more acute in those surrounding nations where illicit drug production or consumption is high.

2.3 Understanding demand and supply

Demand and supply of illicit drugs are influenced by many interrelated and complex factors. Various intrapersonal, micro-environmental, and macro-environmental elements create vulnerabilities to the use of illicit drugs, while the employment opportunities and profits arising from illicit drug production and trading act as incentives to supply. There are thus broader socioeconomic issues which impact on engagement with illicit drug economies.

3. The interrelationships between socioeconomic development and illicit drugs

3.1 Impact of socioeconomic development on illicit drugs

Both poor SED and enhanced SED can fuel illicit drug production, trade and consumption. Rural underdevelopment, conflict and economic crises are all factors that contribute to farming of illicit drug crops. Characteristics of plant-based illicit drugs mean that these crops are often a more viable option than licit ones in settings of poor SED. In countries ranging from Afghanistan to Colombia, to Morocco and Myanmar, evidence suggests that regions cultivating illicit drug crops are geographically and/or socially isolated, underdeveloped with few economic opportunities, and may also be plagued by violent conflict. Conflict, and the resultant instability, not only helps to facilitate and proliferate illicit drug economies, but in turn, often sustains the conflict – creating a mutually reinforcing cycle. In countries such as Afghanistan, Colombia, and Myanmar, rebel and pro-government forces have used illicit drug economies to finance their activities.

Conditions which contribute to weak SED such as unemployment, poverty, and marginalization may also create vulnerable environments for illicit drug use in both wealthy and less developed countries. For example, in the United States and United Kingdom, illicit drug use has been linked to socially and economically deprived urban settings. Similarly, studies in various countries of South America found that drug users were generally poorer, unemployed, and less educated.

On the flip side, processes such as trade liberalization may in fact facilitate the flow of illicit drugs across borders. Though the type of association that exists between free trade and illicit drugs is yet to be understood, a modeling study suggests that in consuming countries, efforts to control trading may be hindered by free-trade policies. Modernization and the resultant change in values or norms that often accompanies SED may also lead to increased consumption of illicit drugs. In Indonesia and Pakistan, for instance, illicit drug use increased with newfound wealth and youth identifying themselves with images of Western popular culture. Within the socially marginalized Akha tribe in Laos, consumption of heroin and ATS increased following participation in the country's market economy and in parallel with the country's opium eradication program.

3.2. Impact of illicit drugs on socioeconomic development

Simultaneously, illicit drug production, trade and consumption also affect SED. In the short-term, farmers and other members of impoverished communities benefit from illicit drug production and trade due to increased disposable income. At the national level, there may be a boost in the Gross Domestic Product (GDP), reduced unemployment, and multiplier effects in other sectors, either due to increased expenditure in local markets or increased demand for production inputs of illicit drugs. For instance, a study dating back to the early 1990s found that a 10% increase in cocaine production in Bolivia resulted in a 2% increase in GDP and 6% decrease in unemployment. In Colombia, multiplier effects arising from the illicit drug economy helped to fuel growth in the property market.

However, most of these short-term benefits are offset by the myriad of long-term adverse affects triggered by illicit drug economies. Firstly, the sheer volumes of money flowing from illicit drug economies help to encourage corruption. In several settings, there are reports of government and law enforcement officials turning a blind eye to illicit drugs in exchange for bribes. Secondly, social structures are disrupted as carers, such as single mothers or the income earner of the family, engage in risky trading of illicit drugs. As members of communities who participate in drug economies become richer, tensions in traditional power dynamics are created, thereby disrupting social harmony. Macroeconomic instability may also occur as a result of decreased investment in licit sectors, strengthening of the real exchange rate, and weakened effectiveness of monetary and fiscal policies. The evidence to support these findings, however, is more limited.

Violence and conflict between drug gangs, as well as between gangs and members of law enforcement, causes substantial mortality and morbidity while also isolating communities. In Mexico for example, drug-related killings have reached 28,000 over the past four years. In the United States, homicide rates have fluctuated in tandem with crack cocaine markets in cities where consumption is high and market sizes are substantial.

There are considerable health costs associated with illicit drug use; for example, injecting drug use accounts for 10% of all HIV infections worldwide, and 30% outside sub-Saharan Africa. Drug users are also likely to be less productive; a study by the International Labor Organization (ILO) in 5 different countries found that occupational injuries were 2-4 times higher and absenteeism 2-3 times greater amongst drug users as compared to non-drug users.

The relationships between illicit drug economies and SED are thus two-way and simultaneous. Causality is more difficult to determine given that illicit drug economies and factors that contribute to SED can interact in a mutually reinforcing cycle. Corruption, violence and conflict can for example facilitate illicit drug production, trade and consumption, which in turn can sustain corruption, violence and conflict.

4. Paradox on paradox: effects of illicit drug control policy on socioeconomic development

International and national illicit drug control policies have traditionally focused on reducing demand and supply of illicit drugs. Policies that focus on minimizing the harms associated with drug use are increasingly being adopted by many nation states. Supply side policies comprise traditional law enforcement approaches, including attempts to eradicate illicit drug cultivation and production; this latter approach sometimes accompanied by ‘alternative development’ programs that focus on providing other economic opportunities to communities that farm illicit drugs. To date, evidence suggests that these policies have been largely ineffective in deterring cultivation of illicit drug crops, as supply of various drugs has either been maintained or increased. In response to eradication programs in Colombia and Mexico, for instance, farmers simply shifted to farming opium on smaller and more dispersed fields. These policies have largely been unsuccessful in part because of the weak

acknowledgement of the fact that illicit drugs and associated harms are often a result of a broader range of political, cultural and socioeconomic factors.

By adopting approaches that are guided by narrowly defined goals and are not based on the political, social or cultural realties of a particular development context, law enforcement and eradication attempts actually cause further, multiple, harms and thereby weaken SED in communities. Examples from coca-producing Andean countries, as well as from Afghanistan and Myanmar where opium poppy cultivation is widespread, show how law enforcement and eradication programs actually wipe out the livelihoods of poor farmers social and economically disadvantaged communities. With few viable economic opportunities available, these households often resort again to farming of illicit drugs, simply from survival necessity. Successful alternative development programs are rare, although in Thailand a long-term (highly subsidized) approach has met with some success.

Interdiction – programs aimed at reducing or stopping trading – has contributed to a diversification of smuggling routes, often to countries where law enforcement is weak. For example, the low-income country of Guinea Bissau has become a new trading corridor for drugs being smuggled to Europe. Ironically, a systematic review that found a positive correlation existed between increased law enforcement and increases in violence and crime. This is explained in part by the fact that law enforcement activities can create a riskier environment in which illicit drug trading and dealing occurs, making the situation more volatile and prone to drug gang power dynamics when members or leaders are arrested.

There is even less evidence available on the impacts of demand side policies, which include primary prevention of drug use (mass media campaigns, community based programs, and education), treatment (secondary prevention), and law enforcement. While studies on the effectiveness of treatment for drug users have found that it helps reduce crime and risky injecting behavior, stringent law enforcement practices directed against drug users have only served to increase risky behavior, shift patterns in drug use, and deter health seeking. Studies examining the impact of law enforcement on drug use in Vancouver and Sydney found that drug use did not decrease, but riskier forms of use did. Following a ‘war on drugs’ campaign in Thailand, drug users reported increased reluctance to seek healthcare. Thus, social and economic costs to society are only sustained or even intensified, and are therefore likely to negatively impact SED.

Harm reduction (policies and programs aimed at reducing harms associated with drug use) encompasses many components in immediate impact, harm reduction as currently defined is cost effective and has positive impacts on social development. There is a need for harm reduction approaches to be further developed and integrated, and be more broadly defined so they can have more impact across the range of drug issues. Studies suggest that benefits include: reduced risky drug use behavior, decreased transmission of HIV, safer disposal of injecting equipment, and less public nuisance. These findings indicate that social and health costs to societies may thus be reduced, thereby helping to enhance SED.

5. The forgotten victim: human rights

Not only do some illicit drug policies have potential negative impacts on SED, but they also lead to violation of human rights. Eliminating families' main source of income without creating viable alternatives robs them of their livelihood and dignity. Harsh law enforcement and militaristic approaches to controlling supply and demand of illicit drugs have had serious human rights implications, with physical abuse, sexual assault, public humiliation, denial of legal representation, and mortality being reported in the name of law enforcement. Moreover, in many countries, drug users are forced to undergo 'treatment' which is not evidenced-based. Stringent drug laws have often been used as an excuse to discriminate against poor and marginalized groups of society, especially ethnic minorities. Worldwide, drug users continue to be discriminated against, and are denied treatment and other social rights on the basis of their consumption of drugs.

6. Conclusions

The interrelationships between illicit drug economies and SED are real and complex. Factors linked to SED may lead to or deter engagement with illicit drugs, while illicit drug economies negatively impact on SED in the long-term, despite possible short-term benefits. By not acknowledging these linkages, illicit drug policies which focus solely on reducing demand and supply through law enforcement or forceful measures have often had consequences that adversely impact on SED, and also violate human rights – causing more harm than the drugs themselves. Thus, our original hypothesis that illicit drug policies are development policies are interdependent holds true based on the evidence available.

The limitations of our review must be recognized. Our findings are based on limited evidence, which includes very few quantitative and detailed studies on the interrelationships, as well as a lack of rigorous evaluations of drug control programs. Our expectation of limited data availability was therefore also validated. In addition, there are inherent issues with determining impact of and on SED, and in this study we have assumed impact based on anecdotal and qualitative information rather than modeling or quantitative analyses.

Having said this, our review substantiates the need for greater collaboration between illicit drug control and development agencies. It is imperative for development agencies and governments of developing and transitional countries to investigate and account for the impact of development on vulnerabilities to drug production, trade, and use. All aspects of development, ranging from infrastructure projects to education programs, especially if donor funded, must consider implications for illicit drug production, trade, and use, as is currently done with respect to poverty, the environment or gender dynamics. At the same time, current illicit drug policies need review in light of their inequitable and damaging effects in relation to social development. While acknowledgement of the link between both fields has been increasing, further research in the area will help to provide a stronger base for advocacy to ensure that theory is translated into practice.

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AIDS	Acquired Immunodeficiency Syndrome
ATS	Amphetamine-type Stimulants
CND	Commission on Narcotic Drugs
DFID	United Kingdom Department for International Development
EU	European Union
FARC	Fuerzas Armadas Revolucionarios de Colombia
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HAART	Highly Active Antiretroviral Treatment
HIV	Human Immunodeficiency Virus
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social, and Cultural Rights
IDPC	International Drug Policy Consortium
IDU	Injecting Drug User
ILO	International Labor Organization
INCB	International Narcotics Control Board
MDG	Millennium Development Goal
NAFTA	North American Free Trade Agreement
NDLEA	Nigerian Drug Law Enforcement Agency
NGO	Non Governmental Organization
NSP	Needle and Syringe Program
OSI	Open Society Institute
OST	Opioid Substitution Therapy
SAPs	Structural Adjustment Policies
SED	Socioeconomic Development
TNI	Transnational Institute
UK	United Kingdom
UN	United Nations
UNAIDS	Joint United Nations Program on HIV/AIDS
UNDP	United Nations Development Program
UNODC	United Nations Office on Drugs and Crime
WFP	World Food Program
WHO	World Health Organization

1. Introduction

There is an intense relationship between illicit drugs and socioeconomic development - two way, complex, and not always apparent or clear. Drugs derived from plants, such as opium and its derivatives, or cocaine, become industries in failed or failing states, and livelihoods for very poor farmers with few other opportunities for subsistence. Ethnic minorities, often in border regions, who are often denied access to formal economies, turn to participation in informal economies such as drug production and trade. On the back of this, narco-regimes build narco-states, while strange bedfellows such as religious fundamentalists and opium warlords become normal. At the other end of the spectrum are newly rich classes of young people with massive disposable income, who are connecting with global youth culture, and in the absence of traditional, social organizing structures, engaging in recreational drug use – albeit mostly without deleterious sequelae, but still leaving a residuum of shattered lives.

Illicit drug trades cause corruption – it is an inevitable and necessary accompaniment. Corruption goes deep into society, into the people and organizations charged with maintaining social integrity and thereby hindering good governance. Due to the sheer amounts of money involved, far more than what is available to forces of law, the synergies between illicit drug trade and corruption become difficult to overcome. Illicit drug economies also fuel crime and violence, isolating communities and eroding social capital. Injecting drug use is acknowledged as one of the most efficient ways of transmitting HIV, which leads to AIDS at considerable costs to health systems and societies. Yet, the same countries with high prevalences of HIV may also have economies that are dependent, to various degrees, on illicit drug production and trade.

Adding to the complexity of these links is the impact of drug control policies, some of which may cause more harm than good. Measures to eradicate drug crops may wipe out the livelihoods of those who are most socially and economically disadvantaged, and thereby lead to political resistance and social unrest. Draconian law enforcement measures drive drug consumption further underground, creating an environment where forms of drug use may become riskier and deter drug users from seeking healthcare. Unfortunately, the incarceration of drug users many countries is the default response to the ‘drug problem’. Incarceration is largely ineffective in halting drug use or preventing re-initiation upon release. Incarceration itself poses multiple risks for individual and public health and further drains limited public resources –such resources that create alternatives to imprisonment and drug treatment.

Despite the far-reaching effects and implications, these intertwined relationships are rarely examined in the developing world – where illicit drug economies may also be a boon (paradoxically, to some). Development agencies rarely consider the impact of development on vulnerabilities to drug production or use, or the impact of the drug trade on corruption and its undermining of equitable development. At the same time, drug control agencies rarely consider the development context in which their activities are implemented. More importantly, within all this, the rights of the persons engaged in the illicit drug economy are often violated.

1.1 Aims and Purpose

The aims of this report are to:

1. Highlight the complex interrelationships between illicit drugs production, trade, and consumption and socioeconomic development (SED); and
2. Illustrate (to date) the poorly acknowledged association between drug policy and SED, and the implications of these policies on human rights.

In fulfilling our aims, we adopt a 'high-level view', rather than going into the specifics of the various factors and issues surrounding illicit drugs, SED, and human rights. This is because the purpose of this report is to raise awareness and initiate dialogue on the links between illicit drugs and drug policy with SED, while also helping to identify areas which merit further exploration and research.

This report feeds into the 'Drugs and Development Project', the objective of which is to enhance bilateral donor and multilateral consciousness of and involvement in the areas of the interrelationships of illicit drug policy and SED. The project, acknowledging the discussions and recommendations of the first Drugs and Development Conference held in Canberra in 2005 (see Box 1), has an overall goal of ensuring that findings and research are translated into development policies and practices that promote humane, rational and effective drug policy.

1.2 Approach

While there are several ways of exploring the interrelationships between illicit drugs,[1] drug policy, and SED - we do so based on a hypothesis that '*Equitable SED is necessary for successful control of illicit drugs*, while *effective and human rights based illicit drug control is required to foster sustainable SED'*. To test our hypothesis, we begin by adopting a 'double sided' approach, whereby we examine the impact of illicit drug use, trade, and production on SED, and conversely, how SED affects all three. This thus allows us to look at both 'drugs' and 'development' as *independent* variables, creating four possible outcomes: illicit drug use/trade/production enhance or hinder SED, while SED either reduces or enhances the impacts of the three processes on society. We then explore how drug control policies reinforce or reverse these relationships and further explore the implications of these policies for human rights.

In adopting such an approach, we expect it to be possible that outcomes will hold true both across and within different societies at different times or for different drugs. We also understand that relationships will not simply operate in one direction or exclusively, rather that many opposing forces may function together at the same time. For example, while free trade may help to boost employment and economic development, thereby reducing reliance of rural families on illicit drug crop farming,

[1] Note that when referring to illicit drugs in the context of relationships with SED, we are interested in production, trade, and consumption

it may also flood markets with cheap, illicit drugs. Similarly, while drug trading may be associated with corruption and violence, the employment and resultant income generated may be significant in certain economies. We also note that we are studying associations, rather than causal relationships. Proving cause and effect will require consideration of confounders, as well as detail and rigor that is beyond the scope of this report given that there is limited and largely anecdotal evidence available.

Box 1: Key recommendations from the first Drugs and Development Conference, Canberra 2005

- Greater focus be given to protection of human life in programmes addressing illicit drugs and harm reduction, and that this be incorporated into the discussion on addressing poverty in the Millennium Development Goals (MDGs);
- In addressing illicit drugs donor organisations give greater consideration to reducing vulnerability among the very poor, the displaced, dispossessed and internal or international migrants;
- The negative impacts of social and economic development and their relationship to drug use be recognised and ameliorated. Prevention programmes must address the fact that development is about change and that better and more attractive alternatives to drugs are needed to help people deal with change;
- A whole of government approach be adopted to include public health, legislation, law enforcement, and education, taking into consideration human rights and governance issues. It was strongly recommended that police and health officials work together to provide better understanding of harm reduction, how to prevent the spread of HIV/AIDS among intravenous drug users, and to provide greater clarity of their roles;
- National drug reduction networks be established among different government and non government organisations working in different aspects of drug reduction and development and that the responsibility for addressing illicit drugs and demand reduction incorporate health, education, development organisations and civil society in addition to law enforcement;
- Donors expand their economic emphasis on illicit drugs to include the social aspects of illicit drugs and the intersection between development, social behaviour and drugs;
- Programmes adopt a multi-faceted approach that deals in an integrated way with reducing drug supply, providing attractive livelihood alternatives, reducing drug use and demand, reducing the harms caused by drug use and the provision of treatment and support for existing drug users;
- Any programmes dealing with drug reduction incorporate an advocacy component to increase understanding of drug use, drug treatment and harm minimisation; and
- Appropriate research, monitoring and evaluation of illicit drug impacts in development programming/projects should be promoted and results made widely known.

1.2.1 Understanding Socioeconomic Development

Socioeconomic development is a complex and dynamic process, and correspondingly there are several views on what it comprises and how it should be measured (Szirmai 2005). Here, we define socioeconomic development as "*the process of social and economic development in society*," where economic development refers to:

> "*Qualitative change and restructuring in a country's economy in connection with technological and social progress. The main indicator of economic development is increasing GNP per capita (or GDP per capita), reflecting an increase in the economic productivity and average material wellbeing of a country's population"* (World Bank Definition)

And social development is defined as:

> *Process of planned social change designed to promote the well-being of the population as a whole in conjunction with a dynamic process of economic development.* (Midgley, J. 1995: Social development: The developmental perspective in social welfare)

'*Further it is commonly understood that the ultimate goal of social development is to improve and enhance the quality of life of all people. It requires democratic institutions, respect for all human rights and fundamental freedoms, increased and equal economic opportunities, the rule of law, the promotion of respect for cultural diversity and the rights of persons belonging to minorities, and an active involvement of civil society. All members of society should have the opportunity and be able to exercise the right and responsibility to take an active part in the affairs of the community in which they live. Gender equality and equity and the full participation of women in all economic, social and political activities are essential*' (Report of the World Summit for Social Development, 1995).

From the above definitions, it is clear that SED is made up of many different components ranging from institutional and economic factors, to human rights and rule of law, to inclusion and participation in society. Given this multidimensionality, determining 'impact' or 'effect' on or of SED is therefore not straightforward. Thus, it is important to note that we present evidence that revolves around factors which contribute to SED such as economic growth, employment, health, food security, and social cohesion amongst may others (see Figure 1). Being able to measure and determine impact *per se* will require further rigorous research, data analysis and modeling studies.

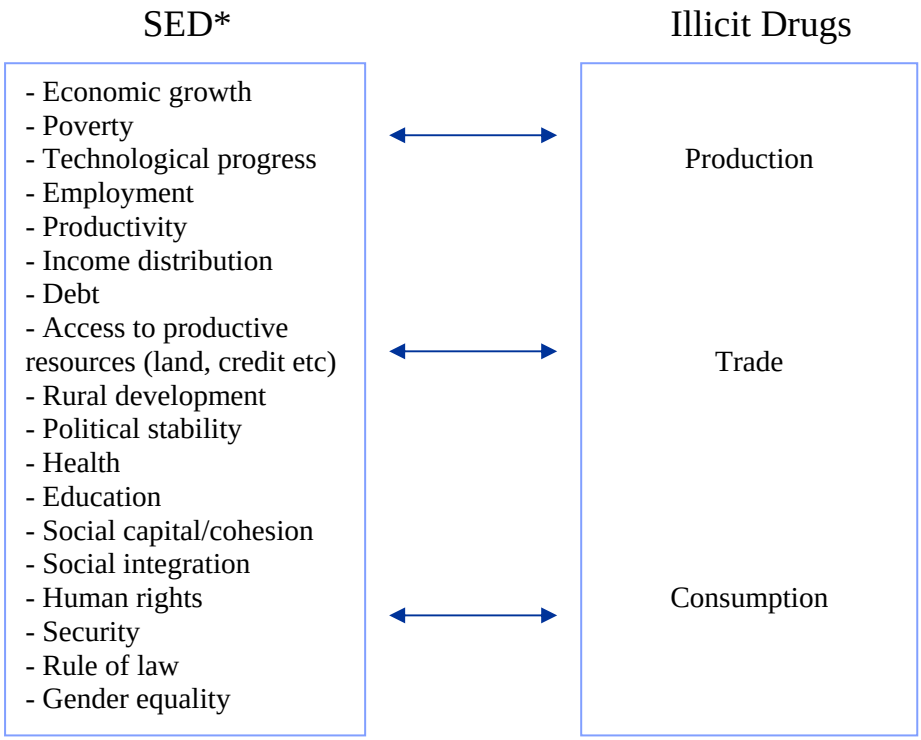
1.3 Terminology

As per UNODC definitions, here we define 'illicit drugs' as those which are produced, traded, and consumed for purposes prohibited by law, as opposed to 'licit drugs' where production, distribution, and use is regulated and permitted (UNODC definitions, see www.unodc.org). The illicit drugs we are concerned with in this report are those outlined by international drug control conventions (mentioned later in the report), such as opiates, cannabis, coca, and amphetamine type stimulants. We do not refer to alcohol and tobacco which are consumed, produced, or sold illicitly, despite

their often similar relationships with SED. 'Control' refers to the optimum combination of processes undertaken in order to *minimize harms associated with the availability and use of drugs* in a community at a given point of time. Control may involve decreases in the availability and use of a given drug; however in our use the term focuses more on preventable harms.

Figure 1: Exploring the interrelationships between SED and Illicit Drugs

In this review we present how SED affects and is affected by illicit drugs. Given the complexities in measuring SED, we do so by exploring how various components comprising SED are associated with illicit drug production, trade, and consumption.



*Note: The list of components under SED is non-exhaustive, see Szirmai 2005 for a more in-depth review of SED. World Bank and UN Development Indicators also provide an overview of various components considered as part of development.

1.4 Methods

This report is based on a review of formal and non-formal English language literature (books, papers, reports, journal articles, PhD theses) from 1990 through to the present (2010). No limits were placed on the type of illicit drug. Relevant literature was identified through library catalogue, database (such as PubMed and ScienceDirect), journal specific, and Internet searches, as well as through scanning of reference lists. The websites of key organizations working in areas directly or indirectly related to illicit drugs and development were also searched, such as Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), International Drug Policy Consortium (IDPC), International Narcotics Control Board (INCB), Open Society Institute (OSI),

Transnational Institute (TNI), United Nations Office on Drugs and Crime (UNODC), and the World Bank. To capture grey literature, individuals working or interested in the area were contacted and requested to provide any relevant references. However, almost all literature used for this report was already published.

In order to ensure that relevant articles, reports, papers, and books were not missed, broad search terms were first used such as 'illicit drugs and economic/social development', 'impact of illicit drugs on economic/social development,' 'drug policy and development', and 'illicit drugs and human rights'. Search terms were subsequently made more detailed following identification of recurring themes, giving strings such as 'impact of trade on illicit drugs' or 'conflict and illicit drugs'.

1.5 Structure

This remainder of this report is divided into five sections. In the next chapter, we review reasons for control of illicit drugs, and prevalence of drug use and production. Chapter 3 describes the interrelationships between illicit drugs (production, trade, and consumption) and socio-economic development, while Chapter 4 reviews the impact of illicit drug control policies in light of these interrelationships. The next chapter discusses the human rights impacts of drug policies, and finally, Chapter 6 concludes the report by bringing together findings from our review to discuss implications for drug control and development policy.

2. Sizing the problem: illicit drugs - an overview

> *"[A] World without drug users and dealers – is always already an impossible world."*
> - M. Collison in Police, Drugs, and Communities (cited in Denton, 2001 p 1)

Psychotropic substances have been used by humans since the beginning of civilization (Buxton 2006). In fact, only four (of 327) cultures worldwide do not have records of consumption of psychotropic substances, and only because they consist of isolated communities living in areas where plants cannot be cultivated - as in the case of the Inuit living in the Arctic regions of Canada (Buxton 2006). Since psychoactive drugs have the potential to alter perception, mood, motor co-ordination, consciousness and judgment, they are valued as physical, and often symbolic, goods. Historically, drugs were consumed by humans for various reasons: pain relief and medicinal purposes, physical stimulation - particularly by those engaged in laborious jobs, as food during times of famine or food shortage, relaxation, pleasure (or recreation), and as a commodity that could be exchanged in bartering (Buxton 2006). In many traditional societies, particularly tribal and village communities, drugs were also used in religious rituals (Babor *et al* 2010).

As production and consumption of psychotropic drugs increased world-over between the sixteenth and nineteenth centuries, due to a multitude of factors including colonization and the quest of western empires to boost their revenues, as well as scientific and technological advancements, so did knowledge on the toxicity of these substances (Buxton 2006). With rising poison cases and addiction rates associated with some drugs, it became evident to some in the early twentieth century that psychotropic drug use and production needed some form of regulation (Buxton 2006).

2.1 The need to control

Attempts to control and eradicate drugs currently classified as illicit are justified by the fact that there are harms (perceived, real and potential) to individuals and communities associated with any drug and its use. These harms will differ depending on the type of drug used and mode of administration (Babor *et al* 2010), as well as the inherent biological characteristics of the individual and the socio-cultural context within which it is used. For example, the stigma and discrimination often associated with drug use do not stem from use of the drug itself, but from social norms and values (Babor *et al* 2010).

In general, uncontrolled illicit drug use is often associated with:

1. Health problems: injury, poisoning (or overdose), unintentional injuries, spread of infection (especially HIV and Hepatitis C), cardiovascular problems, mental disorders and suicide – all resulting in significant morbidity and mortality. The World Health Organization's (WHO) Global Burden of Disease Project estimated that 0.8% of the world's burden of disease, measured in disability-adjusted-life years (DALYs) in 2000, and 0.5% of global deaths were attributable to illicit drugs;

2. Crime: ranging from small-scale activities (theft, robbery) to systemic violence (armed violence, homicides, domestic violence) to public disorder (unsafe discarding of drug equipment like syringes) and institutionalized corruption; and

3. Decreased productivity, unemployment, and poverty. (Babor *et al* 2010)

In recognition of the economic and social costs resulting from uncontrolled drug use, states worldwide came together to establish an international drug control system. Three conventions, 'The Single Convention on Narcotic Drugs' (1961), 'Convention on Psychotropic Substances' (1971), and 'Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances' (1988) (see www.unodc.org for more information), outline which drugs, classified as narcotics and psychotropic substances, are to be strictly controlled based on therapeutic value, risk of abuse, and health threats. The range of illicit narcotics and psychotropic substances existent today is summarized in Table 1 – these are ingested orally, snorted, inhaled, or injected. Despite control efforts, these drugs continue to be widely produced and consumed.

Table 1: Overview of types of illicit drugs
(Source: Barbor *et al* 2010 p 14; UNODC)

Type of drug	Origin of drug	Examples of derivatives
Opioids	Opium poppy plant	Heroin, morphine, codeine, methadone
Cannabis	Cannabis plant	Hashish, marijuana, ganja, bhang, hemp
Cocaine	Coca plant	Crack, rock
Amphetamines	Naturally occurring plants Synthetic	Dexamphetamine, metamphetamine, methylphenidate, phenmetrazine, diethylpropion
Hypnotics	Synthetic	Benzodiazephines, barbiturates, methaqualone
Hallucinogens	Naturally occurring Synthetic	Lysergide (LSD), Dimethyltriptamine (DMT), psilocybin, mescaline, MDMA, phencyclidine
Psychoactive inhalants	Synthetic	Industrial solvents, glue, aerosol, paints, petrol, cleaning fluids, amyl nitrate

2.2 The extent of illicit drug use, production, and trade

Illicit drug economies now affect all countries of the world. While production of plant derived drugs is confined to select regions, trade and use of illicit drugs are widespread.

2.2.1 Illicit Drug Use

Estimating prevalence of drug use is difficult, largely as a result of the legal and social (marginalization, discrimination) issues surrounding drug use itself. The prevalence of occasional drug users is estimated based on surveys in the general population, which may be biased as a result of false reporting by illicit drug and non-drug users (Babor *et al* 2010). Estimates of the number of 'problem drug users', defined as those who use drugs on a frequent or regular basis and who are dependent on drugs or have suffered social or health consequences' (UNODC 2010) are derived from a number of sources including mortality statistics, police records, hospital records, and population surveys (Babor *et al* 2010). Depending on data systems and policing practices, the method applied and accuracy of estimates may differ by country (Babor *et al* 2010).

Bearing in mind the limitations surrounding estimates of illicit drug use, UNODC estimates that between 155 and 250 million people would have used illicit drugs at least once in 2009, corresponding to around 3.5% - 5.7% of the world's population of persons aged between 15–64 years (UNODC 2010). This range is not easily comparable to figures from previous years, however data suggest that illicit drug use may in fact be increasing, given the booms in consumption being reported in East and West Africa, the Middle East, and South America (Buxton 2006; UNODC 2010). Still, the prevalence of drug use remains higher in the wealthier regions of North America, Western Europe, and Oceania compared to lower income countries, with the exception of societies where drug use has long been embedded within the culture prior to being deemed illicit, such as the case of chewing coca leaves in the Andean region (Babor *et al* 2010).

Of the total number of drug users, approximately 16–38 million (10–15%) are thought to be problem drug users and 15.9 million (10%) are estimated to be injecting drug users (IDUs) (UNODC 2010). Only 12–30% of problem drug users would have ever received treatment,[2] leaving a range of 11–33.3 million who have not been treated (UNODC 2010). In terms of type of illicit drugs used, the highest in prevalence is cannabis, followed by amphetamine type stimulants, opiates, and cocaine (UNODC 2010). However, this masks considerable regional variation: the primary drug for which users have received treatment over the past decade is cannabis in Africa, cocaine in South America, and opiates in Asia and Europe (UNODC 2010). In North America there is no dominant drug, while in the Oceania region the there has been a shift in consumption from opiates to cannabis (UNODC 2010).

2.2.2 Illicit drug production

Significant production of drugs for scientific and medical purposes is done in countries around the world, such as in Australia, China, France, Germany, Japan, India, Poland, Romania Spain and Turkey. Licit production is monitored by the INCB and must be carried out in accordance with regulations of the 1961 Single Convention on Narcotics Drugs of 1961. Drugs produced for illicit reasons, however, are more difficult to monitor, and estimating quantities is problematic due to the clandestine nature of production and trade.

Estimates of the supply of cannabis and amphetamine-type stimulants (ATS) are difficult to derive given that production is dispersed world-over and the existence of several sub-markets, both at national and regional levels (Buxton 2006; UNODC 2010). Moreover, for ATS, monitoring is complicated by the ease, as well as covert and evolving nature, of the manufacturing process (UNODC, 2010). Nonetheless, it is known that cannabis is the world's most widely produced drug, and that ATS manufacturing is increasing with more countries reporting production activity (UNODC 2010). Opium production increased by 80% between 1998 and 2009, with Afghanistan accounting for at least over 60% of the world's annual production during this period (90% in more recent years) – except in 2001, following a ban on production in the country (UNODC 2010). Other major opium producing countries

[2] Note the definition of what constitutes 'treatment' in calculations is often not stringent, with simple detoxification, for example, also qualifying as 'treatment'. It should be noted that there is great concern that what constitutes 'treatment' in many countries is in fact not evidenced-based, is coerced and it not under medical management.

include Colombia, Mexico, Myanmar, Pakistan and the People's Democratic Republic of Laos (Laos) – this excludes those countries where opium production is permitted for legal purposes[3] (CIA Factbook; GTZ 2003b; UNODC 2010). Cocaine production has not seen the same explosive increase as for opium, with similar levels in 1998 as in 2008 – though supply was higher during the period of 2004 to 2007 (UNODC 2010). Bolivia, Colombia, and Peru are the world's largest producers of cocaine. In fact, low-income countries continue to be the main producers of plant derived illicit drugs (UNODC 2010).

2.2.3 Illicit drug trading

Estimating the amount of illicit drugs traded annually is difficult given the covert nature of operations, the various and varying trading routes, and the large volume of transactions involving small quantities of drugs. Figures on seizures of illicit drugs can be used as an indication of amounts being traded, and the countries which are used as trading corridors (Reuter *et al* 2004). However, seizure estimates also have limitations in that reported large amounts of intercepted drugs may simply be the result of improved law enforcement rather than an increase in trading volumes (Reuter *et al* 2004). The UNODC reported that in 2008 a total of 1,301 metric tons (mt) of opium and its derivatives were seized, mainly in Iran (785 mt), Turkey (109 mt), Pakistan (91 mt), and Afghanistan (66 mt) (UNODC 2010).

Interceptions of cocaine (unadjusted for purity) in the same year totaled 712 mt, with similar amounts reported in the four previous years (UNODC 2010). Cocaine is typically traded through countries surrounding the Andean production centers, Mexico, the Caribbean, countries of west and southern Africa, and countries acting as 'gateways' into mainland Europe – Spain, Portugal, Netherlands, Belgium, and more recently the Balkan countries (UNODC 2010). The total amount of ATS seized in 2008 was 51.3 mt, a small decrease since the year before (51.7 mt), but an increase since 2004 when seizures totaled to 44.3 mt (UNODC 2010). Due to the synthetic nature of ATS, and the relative ease of production, trading occurs in numerous countries worldwide. In fact, the proportion of member states of the UNODC reporting ATS seizures rose from 36% in 1999 to 50% in 2008 (UNODC 2010).

2.3 Understanding demand and supply

If illicit drugs by very definition are prohibited by law, why do people continue to consume or produce the substances? The answers are complex and involve several interrelated factors.

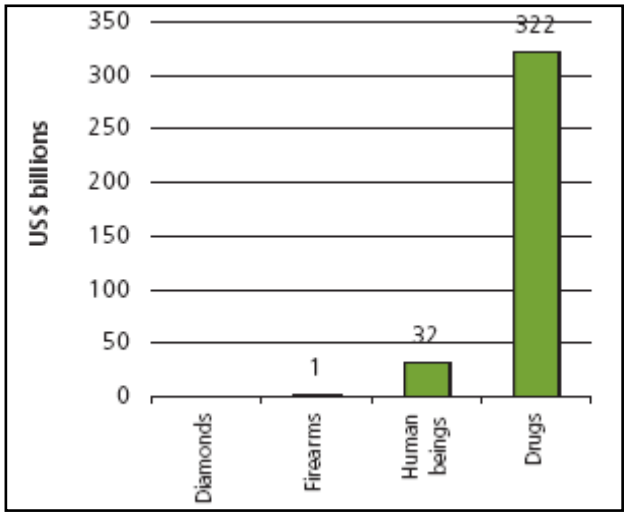
Psychotropic drugs have the potential to alter behavior, mood, and also relieve pain. There are many reasons why a person might seek to experience these changes outside of monitored medical environments, which together create vulnerable environments for drug use (Spooner & Hetherington 2005). Rhodes *et al* suggest that 'risk factors' associated with drug use can be understood on three levels: intrapersonal, micro-environmental, and macro-environmental (Rhodes *et al* 2003). While exploring all factors is beyond the scope of this paper, examples include: antisocial or problematic behavior, quality and structure of the family environment, peer influence, social and

[3] For medical and scientific purposes, for instance in Australia, India, and Turkey. This can result into leakages into the illicit markets

economic deprivation, as well as diffusion of drug cultures (Rhodes *et al* 2003). Another important micro-environmental factor associated with drug use is psychosocial integration in society, lack of which is known as 'dislocation' (Alexander 2001). A means of coping with severe dislocation may lead to establishment of alternative lifestyles, which frequently revolves around addiction and drug use (Alexander 2001).

In terms of production and trading, illicit drugs are all saleable commodities with a largely inelastic demand (i.e. where changes in demand are relatively small in response to changes in price), given their addictive nature, thus providing producers and traders with a stable and profitable market (Becker 2005). In its 2005 'World Drug Report,' the UNODC estimated that the value of the global illicit drug economy was around US$ 320 billion in 2003, based on retail prices and taking into account seizures and other losses (UNODC 2005). The 2007 World Drug Report builds on this, by comparing the value of the global illicit drug economy with those of the illicit economies of diamonds, firearms, and human beings (see Figure 1). Unlike the other three, the report states that illicit drugs are more profitable because "drug supply is consumed each year and in need of continuous renewal" (UNODC 2007a). Moreover, apart from synthetic drugs, all other illicit drugs are derived from plants or crops, which require human labor as production inputs (Chao-Tzang 1993). Consequently, for those with few employment opportunities, the illicit drug economy offers the chance to earn a livelihood (Babor *et al* 2010).

Figure 2: Values of different global illicit economies
Taken from UNODC 2007a, p 170



There are thus many factors that lead individuals to produce, trade in, or consume illicit drugs. In the next chapter we examine how economic and social factors (macro-environment) are interrelated with illicit drugs.

KEY FACTS RELATED TO AN OVERVIEW OF ILLICIT DRUGS

- Psychotropic substances have been produced and used since the dawn of civilisation yet the need to control these substances did not become an issue of international control until 1911.
- Since the UN drug conventions of 1961, 1971 and 1988 were enacted, drug production, trading and consumption of illicit drugs has actually increased and the illicit drug economy is a more significant part of the global economy than it was before.
- The illicit drug market is robust due to the value of its economy and the fact that people will use illicit drugs for a host of reasons. Neither the UN drug conventions nor any other UN conventions have been able to address the host of factors that lead to peoples' involvement in either the illicit drug economy or in the use of illicit drugs.

3. The interrelationships between illicit drugs and socioeconomic development

> *"Opium is simultaneously a conflict good, an illicit commodity, and a means of survival"*
> - Jonathan Goodhand 2005

Traditionally, approaches to enhancing SED have generally focused on boosting economic growth and generating additional income. SED policies and programs have therefore involved, for example, investments in infrastructure, policy reform, and strengthening of governance, as well as provision of services to address the basic needs of populations: healthcare, education, and water and sanitation facilities. Illicit drug control, however, has not typically been a component. Rather, illicit drugs have primarily been considered as a domain of law enforcement, though more recently there has been increased recognition that drug use is also a public health issue.

The interrelationships between development and illicit drugs are less well acknowledged, if not ignored – as illustrated by the fact that discourse around the implications of drug use on development does not figure within the discourse on the Millennium Development Goals (MDGs). If however we examine the countries or regions where illicit drugs are grown we find common development issues: weak governance, civil strife or conflict, food insecurity, underdevelopment – often specifically in agricultural infrastructure. Furthermore, illicit drugs are often grown in isolated geographical locations by or socially isolated and marginalized populations (Chouvy & Laniel 2006). All these issues are either directly or indirectly (by leading to consequences which then impact on other factors) related to attainment of the MDGs, namely the goals of eradication of extreme poverty and hunger, universal education, gender equality, and maternal and child health. Box 8 in this report provides more detail on how illicit drugs are related to the MDGs. These observations, combined with the acknowledged macro-environmental influences on illicit drug use (Rhodes *et al* 2000), thus suggest an important link between SED and illicit drugs. Understanding how both areas are associated will help to inform the design of effective and complementary policies and programs.

In this section, we review the complex interrelationships between SED and illicit drugs. We do this by considering how SED affects illicit drug production, trade, and consumption, and then conversely, how the latter three impact on SED. The limitations associated with measuring 'impact' of or on SED, as highlighted in the introduction, must be remembered when considering the findings below. It is also important to note that the relationships highlighted are not one-to-one correlations per se given the quality of evidence available; rather they serve to illustrate that one factor can facilitate emergence of the other (Thoumi 2003).

3.1 The impact of socioeconomic development on illicit drugs

3.1.1. Poor socioeconomic development

(i) Production and trading

Rural underdevelopment

Our literature review suggests that rural underdevelopment is an important factor associated with illicit drug production. Illicit drug crops are cultivated in the poorest regions of low-income countries; for example, communities farming opium in the highlands of Vietnam have the lowest household income in the country (Melis & Nougier 2010). In these destitute and often isolated regions, agriculture is the main economic activity, yet infrastructure and available facilities are unconducive to agricultural growth. These regions are often characterised by soils unsuitable to many licit crops, poor irrigation systems, weak transport systems, small landholdings, and lack of access to markets and credit facilities. In addition, broader social issues such as poor access to health or education are also prevalent (Chouvy & Laniel 2006; Melis & Nougier 2010). With few other economic alternatives available, farmers in these regions thus turn to farming of illicit drug crops out of need to earn a livelihood and maintain food security (Chouvy & Laniel 2006; GTZ 2000b; UNRISD 1994).

The characteristics of illicit drug crops make them a financially more attractive option in comparison to other crops. Firstly, drug crops such as coca, cannabis, and the opium poppy grow in soils of varying qualities, including steep slopes, and at a range of altitudes and temperatures in comparison to many licit food crops (Whynes 1991; Chouvy & Laniel 2006; Dion & Russler 2008), while also requiring relatively less water and land (Byrd 2010). \Secondly, other than coca, drug crops do not perish quickly and are easily stored for long periods of time (Chouvy and Laniel 2006). This means that households can maintain stockpiles of drug crops and then sell these during seasons when harvests are poor. In addition, drug crops produced for illicit reasons often sell at a higher price than licit crops, enabling otherwise destitute families to afford basic necessities even if only a very small proportion (less than 1%) of the profits made from sales of illicit drugs flows back to farmers[4] (Buxton 2006; Flynn, 1993; Singer 2008). For instance, in 2002, one hectare of opium poppy in Afghanistan was worth eight times more than one hectare of potatoes, at US$ 16,100 compared to US$ 2,000 (Buxton 2006). More recently, it was reported that a UNODC survey found that 2.5 acres of opium yielded US$ 4,900 compared to US$ 770 for wheat (Lally, 2010). In Lebanon, the price difference was much higher, with one kilogram of cannabis selling at US$ 300 compared to a mere US$ 0.20 for the same amount of potatoes (Buxton 2006).

The price difference between licit and illicit crops provides an important incentive to grow illicit drugs for reasons of higher profitability. Farmers do not need to worry about transport facilities and being able to access markets, as illicit drug traders have established routes and networks – even to the most remote areas. Also, illicit drug

[4] Prices of illicit drugs are largely determined by the risks involved at each stage up till retail, and the distance between production and retail sites. The bulk of profits go to traders and retailers (Buxton 2006)

crops are often used as a form of currency or credit, whereby crops can be exchanged for household commodities or used as a basis to obtain loans from local brokers (Chouvy & Laniel 2006b). In the Shan State of Myanmar, for instance, opium was more than a cash crop, it was a local currency used as a form of exchange as there was little confidence in the paper form of money during the 1980s and early 1990s. Local creditors, as well as tradesmen who sold manufactured goods like clothes, salt, oil, medicine, utensils etc, preferred opium over paper cash as a means of payment (Chao-Tzang 1993). Likewise, in Afghanistan, farmers are able to take loans based on forecasts of illicit drug crop yields (Chouvy & Laniel 2006b). Drug traders themselves may also provide credit and agricultural inputs (such as seeds) to farmers as an incentive to farm (Byrd 2010; Dion & Russler 2008). Lastly, as mentioned before, the market for illicit drugs is relatively stable.

In the context of rural underdevelopment, the properties of illicit drug crops make them a more appealing option. Indeed, studies conducted on influences on household farming decisions, namely by Mansfield and Pain in Afghanistan, show that profitability is not the sole factor driving cultivation of illicit drug crops. Other elements related to rural underdevelopment that also appear critical include: food security, agricultural infrastructure particularly with regards to irrigation systems, household assets (livestock, tractors, vehicles etc), access to land, number of income-earners, proximity to markets, regular wage opportunities (example government jobs with monthly salaries), and access to credit (Mansfield 2007; Mansfield & Pain 2006; Mansfield & Pain 2007). In households and communities where these elements are missing, illicit drug farming becomes the most reliable means by which to earn a livelihood (Mansfield 2007; Mansfield & Pain 2006; Mansfield & Pain 2007; Tullis 1995; UNRISD 1994). The link between lack of rural development and illicit drug production can be found in other illicit drug producing countries.

In some African countries cannabis production is said to have become an economic necessity for farmers due to a lack of agricultural employment opportunities propelled by the collapse of licit agricultural industries – such as the peanut and cacao industries in Mali and Ivory Coast (Mac Gregor 1993). Dion & Russler argue that in Colombia, coca cultivation thrives in regions that are often far away from markets, located in jungle areas or rugged terrain with poor road infrastructure, because quickly perishable and less sturdy licit crops do not survive in such environments (2008). In fact, regression analyses found that having few paved roads and poor access to legal markets was statistically associated with increased coca cultivation in Colombia (Dion & Russler 2008). Similarly, in Myanmar, Laos, and Thailand, the opium poppy has mainly been cultivated in remote and poor mountainous regions, home to ethnic tribes such as the Akha who are socially marginalized and denied citizenship (TNI 2008). These areas are characterized by sloping lands, and poor agricultural and transportation infrastructure such as a lack of irrigation systems (TNI 2008). In such conditions there are few other crops that could compete with the opium poppy in terms of farming practicalities. As such, the poppy has become an important cash crop, enabling households to avoid food shortages, and pay for education and healthcare (TNI, 2008).

In the Wa region of Myanmar, 82% of farmers used income from opium poppy cultivation to buy food, with sales of opium accounting for 72% of the household income (TNI, 2008). In Myanmar particularly, food insecurity was closely linked to

opium cultivation. A study by the UNODC found that in East Shan State, 79% of households in villages where opium was not farmed were food secure for 12 months as compared to 52% in farming villages (UNODC 2006). Disparities in food security between opium and non-opium cultivating areas were also found in other states: 65% versus 11% in North Shan State, 48% versus 14% in Kanchin State, and 29% compared to 20% in Kavah State (UNODC 2006). The majority of households which grow illicit drug crops were destitute and continue to be so, the crops are simply a means of sustenance (Melis & Nougier 2010).

We thus find that illicit crop production can be considered a consequence rather than or as well as, a cause of poor SED (Chouvy and Laniel 2006). Nonetheless, it must also be recognized that there are several other elements acting in combination with SED to fuel production, including geopolitical, historical, and social factors such as the country's geographical position, history of illicit drug farming, or illicit drugs being an inherent component of the culture and/or the economy.

Poor macroeconomic conditions

Illicit drug production may also emerge in conditions of economic crises fuelled by ineffective economic policies (in many cases structural adjustment programs), which increase unemployment and reduce income (amongst other consequences) (UNRISD 1994). Indonesia's financial crisis, for instance, is said to have led to a surge in both illicit drug production and trading (Irwanto 2004; Irwanto & Sarasvita 2004 cited in Irwanto 2006). In an attempt to curb excessive inflation caused by the debt crisis in 1985, the Bolivian government adopted an economic policy comprising the freezing of wages, privatization, opening of borders for imports, and prohibiting bank staff from questioning the origin of foreign dollar deposits. While this had the desired effect of reducing inflation to a manageable level, it had the adverse effect of causing a recession and significant unemployment. Indeed in the tin industry, 20,000 of 26,000 miners and their families were made redundant - many of whom subsequently migrated to the coca producing areas in search of employment (Labrousse 1990; Chouvy & Laniel 2006).

Likewise, in Peru, soaring unemployment and inflation caused migration to the coca growing areas of Selva Alta (Chouvy and Laniel 2006). In Colombia, unemployment was one of the key determinants in seeking employment as a contract killer with drug cartels (Tullis 1995). A more recent report in late 2010 suggests that illicit production of opium has increased in countries of the 'Golden Triangle' - Laos, Myanmar, and Vietnam - following the global financial crisis due to loss of jobs, as well as despair resulting in increased consumption of opium and therefore demand for opium (Kruger 2010). Overall, while evidence is limited, examples from Andean countries suggest that in environments where illicit drug economies are already existent, conditions which weaken economic development, namely high unemployment, may facilitate further engagement in production and trading.

Violent conflict

In settings with a history of illicit drug production or trading, violent conflict can easily facilitate a growth in drug economies (Graubner 2007). Afghanistan, Colombia, and Myanmar, all major illicit drug producing countries, are examples of where

conflict has facilitated growth of drug production and trading (GTZ 2003a). In fact, 95% of opium production occurs in countries currently experiencing war or have a history of war (UNDP 2003). The link between illicit drug economies and conflict can be explained by several factors.

Firstly, violent conflict causes considerable damage to infrastructure, destroys livestock and farming land, results in the mass displacement of populations, leads to social instability, loss of members within a household either due to recruitment into the conflict or because of death, and human rights violations (Graubner 2007). It is thus evident that SED is undermined. Due to some of the properties of drug crops, and the fact that farming these does not require intense physical strength, production of illicit drugs becomes a viable source of income (Graubner 2007). In the Wa region of Eastern Myanmar, for example, rice growing farmers began producing opium poppies to counter-balance increased food insecurity caused by armed conflict and resultant weak economic development in the region (Graubner 2007). Moreover, with most of the men away fighting, little available fertile land, and continuing demand for opium from drug traders, farming of opium poppies became a feasible and real source of income for the women and children left behind (Graubner 2007). A similar situation was found in Afghanistan (see Box 2).

Secondly, rebel factions and warlords engaged in conflict require income in order to finance their activities. With few opportunities to engage in licit activities controlled by governments, these groups often try to fulfill their economic needs through robbery, trade, and control over lucrative activities or resources (GTZ 2003a). Resources preferred most are those which can be easily transported, stored, and concealed, and also yield maximum profit – illicit drugs match these requirements (GTZ 2003a). In many instances around the world, warring factions have used and continue to use illicit drug economies as a source of income. For example in Colombia, activities of the Fuerzas Armadas Revolucionarios de Colombia (FARC) are sustained by revenue from taxes imposed on illicit drugs within FARC controlled areas (Buxton 2006; Graubner 2007).

In Afghanistan, the Mujahidin and the Northern Alliance financed their activities through opium poppy sales during the 1980s and 1990s (Buxton 2006). Indeed approximately 30-40% of the Northern Alliance's income originated from taxation on opium production and trade (Chouvy 2009), while the Taliban imposed a tax of 10-20% on opium sales and consequently earned annual revenues of between US$35 and 70 million annually (Lubin *et al* 2002). Similarly in Tajikistan, 70% of the armed opposition's income stems from opium production (UNDP 2003). Armed groups in the Shan State of Myanmar use revenue from opium production and trade to fund purchasing of uniforms and food, and other activities (Chouvy 2009; TNI 2008). In Algeria, bans from collecting donations at Mosques as well as the increasing cost of supporting families of 'martyrs,' has forced terrorist groups to resort to illicit drug production (Block 2001). Thus, illicit drug economies are sustained as a result of the interests of parties involved in violence and conflict.

Finally, during times of violence and conflict there is weak governance and law and order – which may be both a cause and consequence of the former. In a regression modeling study, Dion & Russler found that in Colombia, the association between strong 'state presence' and reduced coca cultivation was statistically significant

(2008). The explanation put forward was that weak state presence created an environment conducive to illicit activity, and thereby permitted armed groups such as the FARC and the United Self-Defence Groups of Colombia (AUC) to use illicit drug economies to finance their activities (Dion & Russler 2008). Moreover, policing illicit drugs in areas of conflict or controlled by rebel groups can prove impossible, thus assisting trade and production to proceed unabated. Flynn also states that conflict impedes border control cooperation and intelligence thus facilitating cross-border drug trading (Flynn 1993).

In summary, there are several ways in which violent conflict and the resultant instability provide an ideal platform for the proliferation of illicit drug production and trading. This in turn causes and sustains further violence, for example through financing the activities of rebels. Conflict and illicit drug economies thus engage in a mutually reinforcing cycle, which poses considerable challenges to SED (Chouvy 2009; Chouvy & Laniel 2007; Graubner 2007; GTZ 2003a). We explore how illicit drug economies fuel conflict and violence later in this chapter.

The conditions of poor socioeconomic development explored above – rural underdevelopment, economic crises, and conflict – are also interrelated, and often act together to promote illicit drug economies. For example, conflict in itself undermines rural development. Poor socioeconomic development is also shaped by broader political and historical issues. Boxes 2 and 3 illustrate some of these relationships.

Box 2: Poor socioeconomic development and illicit drug production in Afghanistan

Afghanistan is presently the world's largest producer of opium, with production in 2009 accounting for around 66% of global supply (UNODC 2010). It has been suggested that production has stemmed mainly from underdevelopment and poor governance in the country, which in turn, have been exacerbated by years of war and civil conflict (Chouvy & Laniel 2006; Mansfield & Pain 2007).

The opium poppy has been grown in Afghanistan for hundreds of years for medicinal and social purposes (Graubner 2007). However, following the Soviet invasion in the late 1970s and the subsequent civil war, the opium poppy became a cash crop by which operations of opposition groups against the Soviet communists could be funded (Graubner 2007). Opium, a crop that can be cultivated in a range of soils and environmental conditions, also became a means of survival for poor farmers, as substantial land, livestock, and agricultural infrastructure had been destroyed by the on-going conflict (Graubner 2007; World Bank 2004). In fact, in 1985 more than 50% of Afghani farmers reported that their villages had been bombed, and over 25% reported that irrigation systems had been destroyed or livestock had been shot (Chouvy 2009). Not surprisingly, between 1978 and 2000, cereal production almost halved in Afghanistan (Graubner 2007).

Today, in a country struggling to rebuild itself and restore security, the opium poppy still constitutes a bread-winner in an environment of constant risk for numerous poor, rural families. Faced with few economic opportunities, poor infrastructure, violence and conflict, and food insecurity, the opium poppy is a 'low risk crop in a high risk environment' (Mansfield & Pain 2007). Opium grows in a range of soils, there are established trading networks, and fluctuations in demand are less compared to other licit crops (Buxton 2006).

(ii) Consumption

Rhodes and colleagues cite studies, conducted in the United States and the United Kingdom, which demonstrate linkages between illicit drug consumption and urban settings of 'social and economic deprivation' (2003). Various conditions which constitute poor SED, including poverty, unemployment, crime, poor housing and low levels of education are associated with illicit drug use and diffusion of illicit drugs (Rhodes *et al* 2003). The same associations can be found in different countries worldwide (see Box 4 for an example). For instance, marijuana and psychotropic drug consumption increased in youth and labor workers in Indonesia following

Box 3: Poor socioeconomic development and illicit cannabis production in the Rif Region, Morocco

Rif, a mountainous region in northern Morocco, is home to the Berber tribe who have historically largely resisted both foreign rule and Arab rule (Chouvy 2009). The Berber figure amongst the country's poorest, and investment in the development of Rif has largely been sidelined by Moroccan governments, unlike in the Arab coastal and urban regions (Chouvy 2005a). As a result, agricultural infrastructure is poor in Rif and there are few non-agricultural employment opportunities (Chouvy 2005a; Chouvy & Laniel 2006). Moreover, it is a hilly region with irregular rainfall and poor quality/infertile soils that are easily eroded, and hence not suitable for intense agricultural production (Chouvy 2005a; UNODC 2007b). These economic and environmental conditions demand a crop that is easily grown and not labour intensive, while also yielding the highest possible economic gains. Cannabis meets all these criteria.

Today, cannabis cultivation in Rif is amongst the highest in the world (UNODC 2007a; UNODC 2010). Rif is possibly also the world's largest producer and exporter of *hashish*, an illicit drug derived from cannabis resin (Chouvy 2009; UNODC 2010). Marginalization of the Rif region, a Moroccan economic crisis during the 1960s and 1970s, and demand for hashish in Europe, fuelled production of hashish from cannabis - that was already being cultivated in the region for local and domestic use (Chouvy & Laniel 2006). Since then, cannabis cultivation and hashish production has increased, from 25,000 hectares in the mid 1980's, to 60,000 hectares in 1990, and to 120,500 ha by 2004 (Chouvy 2005a; UNODC 2007). As a result of eradication and other supply reduction measures, cannabis cultivation decreased to 72,500 ha in 2005 (UNODC 2007b).

Cannabis cultivation and hashish production are the main economic activities in Rif, providing employment to many farmers and helping to prevent mass migration to regions where economic prospects are better (Chouvy & Laniel 2006). Due to political, social, and economic factors, leaders are thought to have turned a blind eye to the illicit drug activities in Rif. Chouvy argues that cannabis cultivation in Rif can be explained by the "failure of the state to control its territory, by economic development, political integration, and law enforcement" (Chouvy 2009).

unemployment (Irwanto 2006). In the Southern cone of South America, IDUs typically live in the poorer outskirts of middle-class neighborhoods in large cities (Bastos *et al* 1999). Several studies have shown that high unemployment, poor housing and disruption of social structures are associated with increased risky drug use behavior and the spread of HIV (Strathdee *et al* 1997a, 1997b; Wallace 1993 cited in Bastos *et al*, 1999). In a Brazilian study, 58.6% of IDUs interviewed reported earning less than US$ 90 per month (minimum wage) and 45.8% had no secondary school education (Oliveira 2005). Bastos *et al* point to the 'impoverishment' of HIV in South America, stating that transmission is increasingly linked to IDUs living in poorer areas where education levels are low (Bastos *et al* 1999). As rightly pointed out by Rhodes *et al* however, it is important to recognize that for all examples mentioned above and below, the evidence highlights associations and not causality (2003).

Poor SED is also linked with illicit drug consumption amongst children. Those living in socially isolated and poor areas, often plagued by violence, such as street children, may use illicit drugs as a means to escape the harsh realities of life (UNODC 1994; Block 2001). In the Great Lakes region of Eastern Africa, 43.5% of street children reported both consuming illicit drugs and sharing injecting material (Reid 2009). Developing countries, home to 80% of the world's youth, also experience high rates of unemployment (Singer 2008a). Lack of employment opportunities for youth who move from rural areas to cities may lead to isolation and low self-esteem; this dislocation may encourage drug consumption (Flynn 1993; Singer 2008a). Street children or unemployed youth may also become involved in drug trading out of economic necessity (UNODC 1994).

Box 4: Understanding consumption of opium amongst the Akha in Laos

The Mung Sing district in northern Laos is home to several tribes, including the Akha who cultivate and consume opium. The Akha predominantly live in the high-lying mountainous areas of the district, and therefore are fairly isolated from the capital city as a result of poor transport networks and rugged treks. They are also economically underprivileged compared to other ethnic tribes. Prior to the opium ban in Laos, Epprecht reported that the Akha farmed opium mainly for local consumption, with only 10% of production exported. Around 12% of the Akha population in Mung Sing smoked opium on a daily basis, while on average, about 50% of Akha households had an opium addict. The high addiction rate is mainly attributed to a weak primary healthcare system, poor access to treatment, disillusionment with the realities of life including marginalization, as well as depression. Opium was consumed by the Akha like a medicine, in order to heal emotional and physical pain. Until the opium ban, authorities were said to have tolerated production and consumption in the region due to the lack of alternative economically viable options for survival.

Source: Epprecht 2000

'Transitioning societies' in which widespread economic and social reforms are being implemented, and old norms are being replaced with new cultural norms, may create vulnerable environments to illicit drug consumption and abuse (McKee 2002). The

transition period following the collapse of the Soviet Union, for example, has been associated with increased illicit drug use (McKee 2002; Poznyak *et al* 2002). During this time, there were dramatic economic, political, and social changes (Poznyak *et al* 2002). Old systems of social control disintegrated, and unemployment increased resulting in an abundance of people with non-transferable skills (McKee 2002). In the absence of social support and confronted with new values and practices, many, particularly unemployed youth, turned to consumption of drugs in order to cope with hopelessness and the difficulties of life (Garrett 2000; McKee 2002). Drug lords took advantage of the turmoil and breakdown in social and political structures to targ*et al*ienated youth with cheap drugs (Garrett 2000; Poznyak *et al* 2002). As countries previously 'behind the iron curtain' were now open to drug trading, types of drugs available in the markets also increased – as seen in Russia and Ukraine (Poznyak *et al* 2002). Dramatic increases in cases of drug dependence and illicit drug use were seen in Russia, Ukraine, and Belarus (Poznyak *et al* 2002). In Russia, newly registered people with drug dependence increased from 3.4 per 100,000 in 1991 to 50.7 per 100,000 in 2000, while prevalence levels of drug use increased by 17% among young adolescents (Poznyak *et al* 2002).

3.1.2 Enhanced socioeconomic development

Determination of what constitutes as 'enhanced' or 'strong' SED is a complex task, because changes in the factors which contribute to development, such as increased income or improvements in health. may not necessarily be equally enjoyed by all members of a society – SED is not always equitable. In this section, we look at processes thought to contribute to enhanced SED, such as trade liberalization. Whether the resultant development benefits all persons remains questionable.

(i) Trading

Bearing in mind country and regional differences, trade liberalization involving opening of markets and reduction in trade barriers, has been associated with increased foreign direct investment, as well as economic growth and development (Wacziarg & Welch 2008). At the same time, others argue that trade openness results in loss of jobs and a decrease in wages (Bartilow & Eom 2009). Likewise, there are conflicting views on the impact of trade liberalization on illicit drug trading – Bartilow & Eom provide a good overview of the current debates (2009). They explain that there are three broad opinions, trade liberalization: facilitates illicit drug trading, reinforces interdiction, a law enforcement measure which aims to reduce trading, or lastly, has no effect on trading.

It has been argued that the increased volume of goods being transported across borders as a result of free trade enables drug traders to conceal illicit drugs more easily while also challenging law enforcers' ability to detect and monitor them (Bartilow & Eom 2005; Flyn 1993; Garrett 2000). For example, the North American Free Trade Agreement (NAFTA), Asia-Pacific Economic Cooperation and Mercosul free trade zones are all said to have facilitated the flow of illicit drugs across borders (Flynn 1993; Singer 2008). Similarly, illicit drug trading between Afghanistan and Western Europe increased following the collapse of the Soviet Union, as countries that were previously inaccessible now had open borders (Garrett 2000). In Vietnam, the emergence of heroin trading routes was aided by improved regional trade and

transportation networks (Griffiths 2005). In addition, open markets have enabled drug gangs to expand operations on a global scale by increasing opportunities for money laundering and investments – in legal or illegal activities (Bartilow & Eom 2005; UNRISD 1994). Illicit drug gangs are able to set up enterprises under the guise of investing in local industries while actually producing and trading illicit drugs (Yongming, 1999). This occurred in the Fujian province of China, where 2,600 kg of 'ice' was seized in 1995 following alleged 'business investments' by Taiwanese (Yongming, 1999).

A statistical modeling study by Bartilow & Eom on countries in the Americas suggests that the degree of impact varies depending on the country and its strategic importance within the illicit drug production chain (2009). Results indicated that trade liberalization reinforced interdiction measures in drug producing countries and negatively impacted on interdiction efforts in drug consuming states, at levels of statistical significance. Bartilow & Eom argue that this is because the economic growth afforded by free trade will create an expansion of the licit economy in producing countries, creating job opportunities which will help to deter potential engagement in illicit drug economies (2009). At the same time, increases in national revenue can be used to strengthen interdiction operations and law enforcement. In consuming countries however, the dual conditions of strong demand for illicit drugs and trade liberalization will result in a larger flow of both licit and illicit goods which, in turn, will weaken interdiction. These findings could carry important implications for illicit drug policy but further in-depth studies are required to explore the interrelationships between trade liberalization and illicit drug trading.

(ii) Consumption

SED is accompanied by significant cultural and political changes, including modernization (Inglehart & Welzel 2005). While definitions vary, modernization is generally characterized by the creation of a consumer society centered around autonomy, individual choice and pleasure (Ingelhart & Welzel 2005; Lyttleton, 2004). Traditional norms are replaced with new identity formations and values, which in turn may influence vulnerabilities and decisions to consume illicit drugs.

According to Lyttleton, 'patterns of drug use and abuse evolve as socioeconomic modernization and increased engagement in a globalised commodity culture create new markets' (2004). Indeed, economic opportunities arising from SED have led to the emergence of a new middle class in many developing countries, in addition to an influx of Western pop culture. With a sudden increase in wealth, these emerging middle-class citizens are able to access new forms of leisure activities including psychotropic drugs (Smith at al 1992; Irwanto 2006). This was seen in Indonesia between 1968 and 1981, where a 7% growth of the economy gave rise to a suddenly new affluent class of society which now had the financial and social means to access illicit drugs (Irwanto 2006). Western pop culture became increasingly popular, influencing the types of drugs being consumed: use of heroin, marijuana, psychotropic pills and mushroom consumption increased (Irwanto 2006).

Similarly in Pakistan, modernization is said to have contributed to increased heroin consumption in the 1980s which Smith *et al* claim 'came to the middle classes and the affluent through pop music and the jeans generation' (Smith *et al* 1992).

Globalization has enabled media outlets to distribute Western film and television, disseminating images of illicit drug consumption throughout developing countries. Many youth then associate illicit drugs with the West, modernity and wealth, regardless of whether the negative impacts of illicit drug consumption are also acknowledged and communicated to the public (Flynn 1993). Indeed Singer refers to the status-symbol of illicit drugs in developing countries as representing 'the doorway to the promised land' (Singer 2008a). Klein claims this holds true for Nigeria, where illicit drugs are seen as a symbol of modernity (Klein 1999). The internet has also facilitated access to information regarding drugs and their various forms of consumption, including the injecting of illicit drugs (WHO 2005).

More traditional and isolated societies may not be as well equipped to adjust to economic, infrastructure development and other changes to their social environment that threaten their traditional values and practices. For instance in Laos, the Akha who had faced decades of discrimination including exclusion from education, employment services, and property rights, suddenly had to abandon subsistence economies to participate in the nation's market economy (Lyttleton 2006). In order to cope with the demands of a new lifestyle, these ethnic groups have often resorted to consumption of illicit drugs particularly ATS and heroin consumption – due to their properties of boosting physical strength and psychosocial pleasure (Lyttleton 2006). Activities such as prostitution also increased, thereby impacting on HIV infections (Lyttleton 2006).

3.2 The impact of illicit drug economies on socioeconomic development

3.2.1 Enhance socioeconomic development

While more difficult to grasp, illicit drug production, particularly crop cultivation, can have a positive effect on the social and economic circumstances of an individual, which in turn can have important short term positive effects on national economies.

The illicit drug sector attracts the under- or unemployed rather than those already employed full time, (De Franco and Godoy 1992) providing important economic opportunities particularly for those with limited skills or education such as small farmers and unskilled laborers (INCB 2002). Despite the difficulty in obtaining accurate figures due to the illicit nature of the sector (Tullis 1995), estimates indicate that 2.5% of Peru's and 16% of Bolivia's labor force are employed within the illicit drugs economy (Buxton 2006). Moreover, in Afghanistan and Myanmar in the early 2000's, approximately 3.3 million people were dependent on the illicit drug industry for their livelihood (Buxton 2006). Illicit drug production and trade have also provided nations 'a cushion of employment' and an 'economic safety net', particularly during periods of crisis as previously mentioned (Whynes 1991).

When sanctions were imposed in Myanmar there was increased reliance on high-profit generating activities such as illicit drugs (Buxton 2006). Similarly in Colombia and Bolivia, collapses in the textile and tin industries respectively during the 1980s did not necessarily result in equivalent increases in unemployment as workers made redundant joined illicit drug economies (De Franco and Godoy 1992). In addition to minimizing the negative impact of an economic crisis, limited evidence suggests that the illicit drug sector may also reduce further impoverishment. MacGregor (1993) states that in Colombia, the illicit drug industry assisted in raising the standard of

living of 1 million Colombians, and led 40% of the nation out of extreme poverty, either directly through farming or from stimulated aggregate demand.

Additionally, the illicit drug industry creates multiplier effects within the economy which further increases employment within legitimate sectors, stimulating economic activity and growth. Multiplier effects occur from both increased income of producers who are then able to purchase more essential and luxury goods, as well as an increased demand for production inputs. While the multiplier effect will be diluted depending on the proportion of extra income that is spent on imported goods, the overall net effect generally remains positive (INCB 2002). In Bolivia, for example, demand for inputs of kerosene, sulfuric acid (De Franco and Godoy, 1992) and even toilet paper, a material used to filter cocaine, increased significantly, with 60% of Bolivian toilet paper destined for the coca growing region of Chapare (Tullis 1995). In Colombia, multiplier effects translated into a boom in land and property due to 'narcodollars' being reinvested in the economy (Thoumi 2002). One Colombian cartel owned 700 properties in 1989, while another focused investment in urban infrastructure and businesses, both of which subsequently improved legitimate employment opportunities in their respective regions (Tullis 1995).

Some countries, such as Afghanistan and Pakistan, have experienced more localized multiplier effects. For instance opium poppy production provided Afghan cultivators with increased disposable income which generated additional spending at local markets thereby assisting the local economy, local producers and simultaneously improving liquidity (INCB 2002). A similar scenario occurred in Pakistan, where improved local incomes from drug production helped to develop service industries and sustain the growth of local markets (Tullis 1995). However UNODC claims that while revenue generated from illicit drug sales in Pakistan is primarily derived from low-income earners, this is rarely reinvested in poor communities and flows to middle and upper class individuals instead (1995). At the same time, multiplier effects can also occur in non-productive sectors that fail to promote sustainable development including gambling and brothels (INCB 2002).

Aggregate effects of employment and expenditure translate into increased Gross Domestic Product (GDP). In fact, in Afghanistan, the opium economy alone was estimated to be worth $100 billion in 2000 (Lubin *et al*, 2002), and accounted for 61% of licit GDP in 2004, 52% in 2005, 46% in 2006, and 53% in 2007 (Chouvy, 2009). Similarly, an estimated 4% of the Pakistani GDP in the 1990s was accounted for by the opium trade (Buxton 2006). In the 1980s it was estimated that 15% of Bolivia's annual GDP, averaging to around US $700 million, was generated from cocaine-related sales, though Bolivian Minister for the Interior, Honorable Cámara de Diputados estimated that this figure was as high as 53% to 66% in 1986 (Cited in Labrousse 1990). In a study conducted in the early 1990s, De Franco found that a 10% increase in cocaine production in Bolivia led to a 2% increase in GDP and 6% decrease in unemployment (De Franco and Godoy, 1992). Increases in GDP are often matched with decreases in unemployment (De Franco and Godoy, 1992). Tullis further claims that this combined effect of increased economic stability and employment can actually diminish resentment and dissatisfaction towards the government, thus creating a period of stability (Tullis 1995). This is supported by De Franco and Godoy who suggest governments have actually endorsed migration

policies to coca growing areas in the hope this will deter political dissent stemming from unemployment (De Franco and Godoy, 1992).

Our review suggests that the positive effects of the illicit drug trade and its production are mainly in the short-term, and offset by the investments required to control and mitigate the negative impacts of illicit drug economies. Therefore, illicit drug economies are highly unlikely to support long-term sustainable socioeconomic development. Indeed Thailand, Laos, Lebanon, Bolivia, Peru and Vietnam have all experienced economic growth in periods of decreased illicit drug crop production (INCB, 2002).

3.2.2 Hinder socioeconomic development

Despite the aforementioned benefits of illicit drug production and trade, in the long run the industry can seriously impede SED. The negative consequences can be classified in several different ways. For example, a 1994 UNODC report identifies three main opportunity costs of illicit drug production and consumption including (1) forgone investment in licit activities; (2) reduced human capital investment; and (3) increased costs on the quality of the workforce (UNODC 1994). Singer outlines six key areas by which drugs adversely impact on development: (1) interpersonal crime and community violence; (2) corruption of public servants and the disintegration of social institutions; (3) emergence of new or enhanced health problems; (4) lowering of worker productivity; (5) engagement of youth in drug distribution and away from productive education or employment; and (6) skewing of economies to drug production and money laundering. Here, we follow Singer's classification, considering the various areas based on whether they stem from production and trading or consumption of illicit drugs.

(i) Production & Trading

Corruption

Noting the difficulties in determining causality, as well as issues with defining corruption and thereby obtaining appropriate data (Thoumi 2003), there are repeated examples of the connection between the illicit drug industry and corruption. All illicit drug producing countries also are plagued by chronic corruption, which is exacerbated by the drug industry regardless of whether it is the root cause (Reuter *et al* 2004). The United States Bureau of International Narcotic Matters (INM, now Bureau of International Narcotics and Law Enforcement Affairs) claims that while "corruption of narcotics involvement is individual, not institutional…it is endemic in some governments that it has neutralized the controlling forces of the country" (Alvarez 1995). For instance drug trading from Central Asia to Europe is facilitated by a myriad of corrupt government officials including policemen, border guards and customs officials (Lubin *et al* 2002).

The profitability and accessibility of the illicit drug trade encourages low paid government officials and law enforcement employees to engage in corruption to supplement their meager wage, at times at the expense of human rights. For example, law enforcement officials in countries world-over have been known to intentionally hold people on suspicion of possession, even when this is not the case, and then

released them in exchange for money (Lubin *et al* 2002). In Brazil in 1998 police were even paid bonuses to execute drug traders (Moraes de Castro e Silva & Nougier 2010). In Nigeria, Nigerian Drug Law Enforcement Agency (NDLEA) employees have been reported to take advantage of punitive laws which hand-over arrested individuals' assets to the state, by embarking on 'arresting to loot' in order to supplement their approximate $1 per day income (Klein 1999). There have also been instances of law enforcement officials re-selling confiscated drugs (Singer 2008b). Again, in Nigeria, only 12 of 637 NDLEA confiscated heroin parcels were accounted for in 1993 (Klein 1993).

However it is not merely poorly paid individuals who are involved in corruption, but also high-ranking government officials including prime ministers. Examples include previous ministers in Guinea Bissau, Colombia and also Myanmar, where "drug traders who once spent their days leading mule trains down jungle tracks are now leading lights in Burma's new market economy and leading figures in its new political order" (Singer 2008b; Dupont 1999). Even election campaigns in Andean countries have been funded by drug cartels in exchange for favorable policies (Thoumi 2002).

Furthermore, corruption and violence stemming from the illicit drug trade has led to the weakening of institutions, particularly within the legal system. For example in Colombia during the 1990s social justice was substituted with private justice. The integrity of the justice system collapsed and human rights abuses prevailed, all as a direct consequence of corruption and blackmail (Mac Gregor 1993). Corruption is a severe impediment to sustained socioeconomic growth since, as the above examples demonstrate, it can penetrate the political system, as well as judicial and economic structures, thereby weakening social integrity. This, in turn, can fuel further drug trade, thus creating a vicious circle (GTZ 2003a; Allen 1999).

Disruption of social structures

The illicit drug trade disrupts social structures. Firstly, a family member's involvement within the illicit drug industry can tear families apart, causing them to struggle socially and financially particularly if a primary care giver is incarcerated for drug related offences (Singer 2008b). Children left behind may then engage in criminal activity or drug use as they struggle to cope with living in institutions, foster care, or with relatives (Bewley-Taylor *et al* 2009). Women in particular are made vulnerable from the drug trade, yet gender inequalities are largely absent from discourse on the illicit drug trade (Melis & Nougier 2010). Female involvement in drug trading has been steadily increasing due to economic circumstances, such as single mothers needing a means by which to feed their family, and the perception, in some regions such as Central Asia, that law enforcement authorities will be more lenient on women in comparison to men (Lubin *et al* 2002). However, as a result, women are more likely to be subject to violence or harassment including invasive searches (Lubin *et al* 2002). For instance in Kazakhstan, police who were engaged in cavity searches of females suspected of drug possession, often returned the seized drugs in exchange for sex (Pinkham & Malinowska-Sempruch 2008).

Secondly, the illicit drug trade can also affect income inequality, which may then disturb power structures within communities. For example, Graubner claims that in north-eastern Afghanistan traditional local leadership is waning as younger village

members involved in the drug trade are becoming wealthier and consequently demanding more authority and power. This has eroded the traditional social structures where elders are village leaders, causing social tension and resentment (Graubner 2007). Moreover, visible income differences encourage more people to enter the illicit drug industry (INCB 2002). The connection between wealth and power has also led to the establishment of political and social movements. For instance, increased income amongst coca farmers has granted them increased political power, thereby restructuring the political power bases of the country (Tullis 1995).

Macroeconomic instability

Despite potential short term benefits, there are numerous adverse affects of the illicit drug industry that thwart sustainable development in an illicit drug producing country. Negative affects, as cited in literature, include decreased investment, reduced national income, Dutch disease, weakened effectiveness of fiscal and monetary policy, slower growth in legitimate sectors, increased credit rates, increased supply of black market products, food insecurity, higher costs of production inputs, increased expenditure on law enforcement at the expense of investment in social services such as health and education, and distortions to the economy at large. Indeed MacGregor claims it was the illicit drug sector that was a decisive factor in the 1970s and 1980s Peruvian economic crisis (Mac Gregor 1993). However, evidence to demonstrate all of the above is limited, and thus here we explore those factors for which information was relatively more accessible.

Financial and human resources invested in the illicit drug sector erode the potential for long-term sustainable SED (INCB 2002). This is evident in the case of Colombia, Bolivia and Peru where decreased investment occurred simultaneously with increased coca production (INCB 2002). Finances earned through the illicit drug industry are largely invested in unproductive sectors based primarily on the potential to launder money (Dupont 1999; Thoumi 1992; Tullis 1995). Increased money laundering also means that there is an influx of black market goods sold below cost price, preventing local businesses from competing in the market (Tullis 1995).

Speculative investments can similarly increase; as was the case in Bolivia where the collapse of a building society worth US$56 million, caused by connections with the cocaine industry, left many of its 20,000 depositors penniless after some had invested their life savings (Tullis 1995). This then triggered the collapse of other building societies (Tullis 1995). Other destabilising factors associated with the illicit drug industry include violence that leads to escalating security costs, the weakening of institutions, money laundering and corruption, and can cause private investment in licit and productive areas to decrease. Businesses seek opportunities in safer and more stable environments while wealthy nationals place financial assets elsewhere from fear of extortion (Buxton 2006). Decreased investment serves to hinder economic industrialization and employment opportunities within the licit sector, thereby increasing individual incentive to partake in the illicit drug economy (GTZ 2003a).

Reliance on the illicit drug industry is exacerbated further by ‘Dutch disease’ (Buxton 2006). This occurs due to the illicit drug trade creating an inflow of foreign exchange which strengthens the domestic real exchange rate (Buxton 2006; De Franco and Godoy 1992). Smith *et al* claim that even if those employed in the illicit drug trade

keep a small proportion of their profits within their country, these could still cause the local currency to appreciate by 10-20% (Smith *et al* 1992). This then makes imports relatively less expensive while causing export markets to suffer as they are no longer able to compete with world prices (DeFranco 1993; Tullis 1995). Examples of Dutch disease occurrences have been seen in Colombia and Bolivia, with the latter experiencing collapses in the textile and manufacturing industries as a result (Tullis 1995).

The illicit drug industry may also increase costs of production of inputs such as labor and land, as these increasingly become devoted to drug production. For example the Colombian Medellin cartel bought significant amounts of land, increasing land prices from US$500 to US $2000 per hectare during the 1980s (Buxton 2006). This also occurred in the coca growing sector in Peru and Bolivia, where increased labor costs made it more difficult for farmers cultivating licit crops to afford hiring labor.

Violence

Just as violence and conflict can fuel growth of illicit drug economies, the reverse relationship also exists. While the presence of drug markets does not necessarily guarantee the prevalence of violence, numerous studies have found a correlation between the two (Stevens & Bewley-Taylor 2009). Violence caused by illicit drug economies threatens peace and security, weakens social institutions, and undermines state legitimacy – which together prevent SED (ICOS 2007).

Drug cartels or gangs often engage in violence to protect and control the production and trading of illicit drugs (Block 2001). It is partly the illicit nature of illicit drugs that leads to violence, as gangs are willing to use whatever means necessary to covertly protect their share of the market and ensure all processes required for drug trading are operating effectively (Buxton 2006). For example in Afghanistan there have been accounts of drug warlords engaging in violence to protect their opium fields and stocks (Chouvy 2009), while in Jamaica there have been numerous killings associated with drug trading. In the poor slums, or favelas, of Rio de Janeiro, armed gangs patrol illicit drug selling points in case of raiding by police or attacks by rival gangs (Moraes de Castro e Silva & Nougier 2010). Between 2001 and 2008 alone, Brazilian police seized 87,033 weapons, while in 2009 70,000 people were serving sentences for drug related offences (Moraes de Castro e Silva & Nougier 2010).

Drug gangs also resort to intimidation of state authorities and violence in order to achieve their desired objective. For instance, when the Colombian government refused the Medellin cartel's offer to repay the country's national debt in exchange for protection and greater government cooperation, the cartel responded by killing three presidential candidates, police, journalists, and over 200 judges and court officials (Buxton 2006). Violence is also used to take revenge for illicit drug convictions. For instance in Nigeria, contract killers were often hired by convicted prisoners seeking revenge on judges (Block 2001), while in Colombia in January 1990, monthly kidnappings were estimated to be 158 (Tullis 1995). Even within drug gangs, conflict often arises as a result of disagreement regarding payments and profits (Reuter *et al* 2004; Singer 2008b).

Innocent civilians suffer the most from drug fuelled violence (GTZ 2003a). One only needs to cite Mexico's 28,000 drug-related killings in the past four years to illustrate this point (Morris 2010). In the U.S, city violence has fluctuated with crack-cocaine markets, for example cities with extensive crack cocaine markets had higher homicide rates (Stevens & Bewley-Taylor 2009). In the favelas of Rio de Janeiro, 3,937 minors were killed in drug-related violence between 1987 and 2007, which is particularly poignant when considering that 467 minors were killed from gun related violence in the Israel-Palestine conflict during the same period (Buxton 2006). Such violence severely impacts children growing up in favelas, many of whom subsequently become involved in the illicit drug trade themselves and reproduce the violence they witnessed during their childhood (Moraes de Castro e Silva & Nougier 2010). Poor households living in coca and opium growing regions have often been rendered homeless as a result of violent disputes between rival warlords, guerrillas or law enforcement groups (GTZ 2003a). This occurred in Colombia where intimidation and violence incited by drug-funded guerrilla and paramilitary groups was largely responsible for the displacement of 281, 230 people between 2000 and 2005. As violence continues in a particular area, wealthier inhabitants and businesses leave for safer environments, in turn leaving behind a poorer segment of the community to face deteriorating and abandoned facilities and infrastructure, increased unemployment, and decreased social mobility due to fear of bloodshed (Buxton 2006). With few remaining economic opportunities, those originally employed in legitimate sectors often seek economic opportunities in the illicit drug industry (GTZ 2003a).

(ii) Consumption

Productivity

Illicit drug consumption results in considerable social and economic cost to society (Tullis 1995). Loss of productivity from drug consumption occurs at both an individual and societal level. In the former, those involved in illicit drug consumption have been found to have increased occupational injuries and absenteeism (UNODC 1994; Singer 2008b). For example in an International Labor Organization (ILO) study conducted on Egypt, Mexico, Namibia, Poland and Sri Lanka, the prevalence of occupational accidents was 2-4 times higher and absenteeism was 2-3 times higher amongst drug users compared to non-drug users (UNODC 1994; Drugs and Development 2008b). A decrease in productivity also occurs amongst drug producers, who are affected by hazardous work conditions and exposure to chemicals, with side effects including asthma, diarrhea, and gastro problems (Singer 2008; Melis & Nougier 2010). At a national level, illicit drug consumption is particularly prevalent among 15–44 year-olds, which is also the most productive sector of an economy. According to Singer, this means that rather than contributing to the national economy, an important source of a country's productivity is instead becoming a financial and social burden (2008b). Exacerbating this, many drug traders are also within this productive age group and are often arrested while smuggling, further reducing the size of the population of productive labor (Singer 2008b).

Health

Health effects of illicit drug consumption are numerous, including blood borne infections such as Hepatitis C and HIV, increased risk of bacterial infections,

tuberculosis, embolisms, thrombosis, cardiovascular toxicity leading to stroke or aneurysms, mental illness including psychiatric disorders, overdose, and suicide (Chen 2009; Elliot *et al* 2005; UNODC 2007). The gravity of illnesses will depend on biological characteristics of the individual, as well as environmental and contextual factors (Chen 2009).

Of the health consequences, viral infections are widely recognized. Risk of transmission of HIV is high amongst IDUs, due to sharing of injection equipment and engagement in unprotected sex. The latter can either be in exchange for drugs, to gain income in order to afford drugs, or while under their effects which can lead to feelings of sexual arousal and lack of inhibitions (Bastos *et al* 1999; UNODC 2007). Risky sexual behavior can also increase exposure to sexually transmitted diseases such as chlamydia, gonorrhea and syphilis (UNODC 2007). It is estimated that injecting drug use accounts for 10% of all HIV cases globally (IHRA 2010), while close to 20% (3 million[5]) of the estimated 15.9 million (11-21 million) IDUs are HIV positive (UNODC 2010). Injecting drug use is responsible for an estimated 50-90% of HIV infections in Eastern Europe, central Asia, the Pacific and eastern Asia, 25-50% in North America and Western Europe, 10-25% in Latin America, 1-10% in southern and south-east Asia, and less than 1% in sub-Saharan Africa (WHO 2005).

Injecting drug use is also a risk factor for hepatitis A, B, C and D – particularly for B and C. In the U.S., IDUs account for over 60% of all hepatitis C infections (probably a large underestimate), while in Australia and Thailand, prevalence of the infection is as high as between 80 to 90% amongst IDUs (Matthews *et al* 2005; Hansurabhanon *et al* 2002; Taketa *et al* 2003). In fact, an estimated 90% of the 170 million people worldwide who have hepatitis C are current or former IDUs (Hunt *et al* 2003). Hepatitis B is less prevalent amongst IDUs in comparison to hepatitis C, as it is often contracted sexually rather than through sharing of needles (Hunt *et al*). That said, hepatitis B infection is likely to lead to co-infection of hepatitis D, which cannot be contracted on its own (Hunt *et al* 2003).

Drug overdose is yet another significant health issue associated with drug use, with five times as many people in Europe dying from overdose than AIDS in 2000 (Hunt *et al* 2003). In the European Union approximately 8,000 to 9,000 deaths per year are attributed to overdose (Hunt *et al* 2003). Drug-related suicide is also a risk, estimated to be 14 times more likely to occur amongst drug users compared to the general population (Peterson & Best 2005).

Violence & Crime

Illicit drug users may be more likely to engage in violent behavior and crime for two main reasons: due to the pharmacological effects of the drugs which trigger increased aggression or anxiety, or out of financial need to sustain their drug habit (Hoaken & Stewart 2003). At the same time, others argue that crime actually predates, and also exacerbates, illicit drug consumption as users purchase drugs with the income derived from criminal activities (Stevens *et al* 2005). In this way drug addiction and crime are likely to sustain each other (Stevens et. al 2005).

[5] Within a range of 0.8 – 6 million, recognizing limitations and uncertainties surrounding estimations Source : UNODC, 2010

Determining the effects of illicit drug consumption on violent and criminal behavior is challenging, given that multiple drugs may be taken at any one time and because pharmacological effects will differ according to type of drug and mode of administration (Parker & Auerhahn 1998). For instance, cannabis is likely to actually decrease aggressive behavior, while crack cocaine is likely to increase the likelihood of violent behavior (excluding rape and robbery), more so when the drug is smoked rather than injected or snorted (Parker & Auerhahn 1998). In most part however, evidence is insufficient and often conflicting on the links between specific drugs and aggression or violence (Hoaken & Stewart 2003).

While there is a connection between crime and drugs, the relationship is not necessarily causal as a delinquent lifestyle and socioeconomic marginalization are also important factors influencing criminal behavior (Stevens *et al* 2005). Parker and Auerhahn support this notion, claiming a person's social environment is a far more influential factor than the pharmacological effects of illicit substances (1998). Thus strong welfare systems and policies aimed at improving social development and cohesion may be more effective crime reduction policies than law enforcement against drug users. While anecdotal evidence suggests a link between illicit drug consumption and violence, more research needs to be conducted in order to find a direct causal link between the various illicit drugs and violence and crime. Indeed the main drug found to lead to violent behavior is alcohol.

KEY FACTS RELATED TO THE INTERELATIONSHIP BETWEEN ILLICIT DRUGS AND SOCIAL ECONOMIC DEVELOPMENT

- **The extraordinary economic value of illicit drug crops compared to other farmed crops means that primary producers of illicit drug crops have an opportunity to potentially be able to house, feed, educate and provide health care to their families, in essence, achieve a level of existence as spelled out by the MDGs. Without these crops, this becomes infinitely more difficult.**

- **The relationship between illicit drug production and armed conflict is perpetual and recursive meaning that without significant investments in conflict resolution and state building, SED will be hindered not just as a result of conflict but the illicit drugs that either result from it or fuel the conflict.**

- **Without significant investments in addressing the structural determinants of drug use such as poor housing, low employment, lack of health and education opportunities, poor and marginalized populations in society will be vulnerable to illicit drug use and its harms.**

- **As a countries move from developing to transitional economies they are likely to see shifts in the types of drugs used. National drugs and development policies and programs need to be able to adjust to these shifts in illicit drug consumption so that they do not adversely hinder SED.**

4. Paradox on paradox: effects of illicit drug control policy on socioeconomic development

> *"Today, many Afghans believe that it is not drugs, but an ill-conceived war on drugs that threatens their economy and nascent democracy."*
> - Ashraf Ghani, former Finance Minister of Afghanistan (cited in TNI 2005 p 4)

Building on the findings presented in the previous section, this chapter reviews the impact of illicit drug control policies in the context of the interrelationships between SED and illicit drug economics. We have seen that the very socioeconomic factors that lead to growth of illicit drug economies, such as poverty, conflict, and marginalization, are in turn further exacerbated once drug markets are established – thus SED, whether weak or strong, is a both a 'cause' and a 'consequence'. Here, we seek to understand whether policies are taking into account this broader developmental context by addressing the socioeconomic issues which lead to engagement in production, trade, or consumption, while also minimizing the social and economic costs of drug economies. For example, if farmers are growing illicit drug crops out of need to reduce food insecurity, are supply side measures tackling broader developmental issues in order to reduce production? Similarly, if injecting drug use is fuelling explosive HIV epidemics worldwide, are demand side policies helping to reduce these health costs on society?

A range of different illicit drug control measures are adopted by countries, few of which have been systematically and rigorously evaluated (Reuter *et al* 2004). Here we consider the various approaches based on whether they focus on reducing supply, demand, or 'harm'. We begin by providing an overview of each policy, and then discuss the effectiveness of each within a SED context.

Given that the social benefits of various policies are still largely unclear while the costs more widely acknowledged (Keefer *et al* 2010); this section is inevitably skewed towards presenting the negative impacts of drug policy on SED. Though this may possibly be a reflection of the ineffectiveness of drug policies, the lack of evidence highlights the need for more rigorous evaluations across a variety of settings: to date most evaluations of drug policy have been in high-income countries (Keefer *et al* 2010). In addition, this section is more focused on supply side policy, a reflection of the evidence available and the fact that the vast majority of funds for drug control are allocated toward decreasing supply. This also demonstrates the weak acknowledgement of the relationships between illicit drugs and development, which applies to more than just poor rural development and drug crop cultivation. As in the previous chapter, the similar cautions in terms of understanding 'impact' on SED are applicable here.

4.1 Supply side policy

Drug control strategies have mainly focused on curbing supply of illicit drugs, based on the logic that decreased availability and distribution of drugs will reduce use and the associated harms (Roberts *et al* 2004a). The social and economic costs linked with supply side policies are significant – these are highlighted below according to type of control strategy.

4.1.1 Law enforcement, eradication, and alternative development

In countries producing drugs derived from plants, three main policies have been adopted to reduce farming: law enforcement, eradication, and alternative development. Law enforcement involves prohibiting cultivation of illicit drug crops, with failure to comply deemed as a criminal offence. Examples include the ban imposed by the Taliban on opium poppy farming in Afghanistan in 2001, as well as a ban on poppy cultivation in the Shan and Wa states of Myanmar in 2003 and 2005 respectively (TNI 2005). Eradication consists of using manual, mechanical (by tractor, helicopter, or plane), chemical (herbicides), or even biological (fungi or mycoherbicides) means to destroy illicit drug crops, often done forcefully rather than with the consent of farmers (Chouvy 2009). At times, there may also be 'voluntary eradication' whereby the farmer is offered money in exchange for destroying crops (Reuter *et al*, 2004). Alternative development is meant to be a more 'farmer-friendly' approach compared to the first two policies, as it is based on the premise of creating alternative economic opportunities in order to reduce engagement in illicit drug farming. Based on the UN General Assembly definitions, alternative development is "*a process to prevent and eliminate the illicit cultivation of plants containing narcotics and psychotropic substances through specifically designed rural development measures in the context of sustained national growth and sustainable development efforts in countries…*" (see UNODC website www.unodc.org). Thus as the name suggests, alternative development is an approach that is theoretically meant to be rooted in socioeconomic development. Projects have been implemented in countries such as Afghanistan, Laos, Myanmar, and Thailand.

In general, these three policies have had limited success in reducing the global supply of illicit drugs. As noted in chapter three, the vast majority of poor farmers in drug producing countries grow illicit drugs out of need; mainly in order to achieve a basic level of food security. In law enforcement and eradication, households suddenly find that they have lost their principal source of income. This is particularly the case with eradication as farmers lose entire fields of crops, as opposed to law enforcement where there is loss of revenue but still opportunity to grow alternative crops (Chouvy 2009). Income loss is more acute when eradication occurs prior to harvest, as investments in human labor and other inputs of production have already been made (Chouvy 2009). Thus, as a result of these policies, farmers and their families struggle to survive with no other alternatives by which to earn a living in often underdeveloped and/or conflict-ridden areas. In cases where compensation is provided, this is often grossly inadequate. In the long term, SED is hindered – particularly in those areas which are highly reliant on the illicit drug economy. Indeed, research on the impacts of eradication in Konkang, Myanmar found that it had negatively impacted on the economic and social conditions of the concerned regions, while in the Aguatía region of Peru, a voluntary eradication program led to a decreased quality of life (Barrett *et*

al 2010). Here, drug policies are actually counter-productive to the aims of development agencies such as the UNDP and the World Bank (Barrett *et al* 2010).

Reports from different producing countries show that responses to bans on cultivation or eradication programs are generally the same: expenditure is decreased including on food and healthcare, assets are sold, and migration occurs. In Colombia, aerial spraying was found to be statistically associated with displacement of people, which in itself, has important economic and social consequences (Dion & Russler 2008). In fact, the displacement of 75,000 people in Colombia between 2001 and 2002 has been attributed to fumigation efforts (Dion & Russler 2008). Decreased expenditure in other sectors of the economy can result in considerable losses. For example, following eradication of coca fields as part of the 'Plan Dignidad' (Dignity Plan), implemented in Bolivia in 1998, the Bolivian economy experienced an annual loss of approximately US$ 500 million (Graubner 2007). Economies of the regions of Cochabamba and Chapare, where coca farming constituted as high as 90% of household incomes, were virtually destroyed (Graubner 2007). The loss of income, unemployment, and food insecurity resulting from supply control programs often leads to frustration, antipathy to authorities, and social instability. Eradication of coca cultivation through military-police force in Bolivia during the late 1990s, for instance, led to social upheaval and protests by 'cocaleros' – the coca farmers (Graubner 2007).

Experiencing hardship and with no other options on hand, households often resume cultivation. Farmers disperse fields more widely or move to more remote locations (Babor *et al* 2010). Opium poppy spraying programs in Mexico during the mid 1970s for example, did result in an actual decline in production for five years. However, by the early 1980s production levels had bounced back to pre-eradication efforts, as farmers had moved to other areas or cultivated on many widely scattered, small fields (Babor *et al* 2010; World Bank 2004). Likewise, despite aggressive eradication measures implemented under 'Plan Colombia' between 2001 and 2005, coca cultivation only increased by 36% during the same period (Dion & Russler 2008). Moreover, 44% of fields where coca cultivation was reported in 2005 in Colombia had previously been unidentified (Dion & Russler 2008). Even if farmers directly affected by supply side policies do not re-cultivate, production may increase in other regions – known as the 'ballooning effect' (Buxton 2006).

Alfred McCoy, for instance, reports that isolated heroin prohibition efforts in various areas of opium-producing regions in Asia by the US Drug Enforcement Administration (DEA) simply shifted production from the Golden Triangle to countries of the 'Golden Crescent' – Afghanistan, Iran, and Pakistan, and then back again (McCoy 1991). Similarly, when opium production decreased in Mexico in the 1990s, it rose in Colombia – with a reversal in the early 2000's (Buxton, 2006). Decreases in supply may in fact lead to an increase in the farm gate prices of illicit drug crops, which then acts as an incentive for poor farmers in other regions to grow the crops (Buxton 2006; Jonglez & Byrd 2006). In Afghanistan, for example, prices of opium sharply increased from between US$ 30 – 100 per kilo to US$ 700 per kilo, incentivizing farmers in regions where production was relatively low to grow opium (Jonglez & Byrd 2006). Box 7 provides a detailed overview of the consequences of law enforcement in Afghanistan.

While alternative development projects were based on intentions to improve socioeconomic conditions of farmers growing illicit drug crops, to date these have met with mixed success. In Thailand, for example, several alternative development projects have been implemented since 1969, including the 'Royal Highland Development Project,' the 'Doi Tung' development project, and the Thai-German Highland Development Program (UNODC 2005a). These have been successful in shifting farming to illicit drug cultivation to licit crops such as fruits, vegetables, and flowers, while also helping to increase household income and access to health, education, drinking water (Buxton 2006; Smith *et al* 1992; UNODC 1995; UNODC 2005a). These projects were broader in focus, and involved activities such as building of infrastructure, establishment of credit facilities, and training to boost local skills and capacities (Buxton 2006; Smith *et al* 1992; UNODC 1995; UNODC 2005a). In other settings some successes have been noted but these have often been at a scale inadequate to the needs; timelines have been brief and funds too little (UNODC 2005a).

Melis & Nougier argue that alternative development programs have often been implemented with narrowly defined short-term goals, and without a comprehensive understanding of the overarching context of the area or with a clear strategy in mind (2010). In certain settings such as in the northern highlands of Laos or Thailand, implementing projects within ethnic minority communities requires addressing other fundamental and complex issues such statelessness and access to mainstream education and health services. Gender perspectives also need to be considered, as certain tribes are matriarchal (UNODC 2005a). In certain hill tribes in south east Asia, women are the income earners of the household and therefore cultivate opium poppy. When cultivation is no longer allowed, the balance of gender roles is disturbed and there are negative repercussions – for example women engaging in sex work instead (UNODC 2005a). While the adverse consequences of alternative development on SED do not seem as strong as compared to the eradication or law enforcement, this policy has still fallen short of its goal of boosting development.

Lyttleton argues that supply side policies and programs may in fact change values and practices within a traditional society, and thereby impose new demands (2004). Members struggle to cope and illicit drug consumption either increases or patterns change (Lyttleton 2004). For instance, tribes living in the highland villages of Thailand bordering Laos and Vietnam, have switched from opium to heroin and then to ATS consumption (Lyttleton 2004). This switch was the result of many factors including prohibition of opium cultivation, marketing tactics of traders, hopelessness and depression, and desire to boost physical strength and psychosocial pleasure as a result of changing values and practices (Lyttleton 2004). Box 5 provides more detail. Supply side strategies may also change consumption patterns as drug addicts seek to sustain their dependency when prices increase or availability of a particular illicit drug decreases. In Thailand, for instance, consumption of heroin, particularly via injection, was rare during the late 1970s, while opium consumption was more prevalent. However, a ban on opium production, in an environment where heroin consumption was prevalent, led drug users to switch from opium to heroin in order to meet their opiate needs (Griffiths 2006). A switch to heroin injection particularly is said to have contributed to the rapid spread of an HIV epidemic in Thailand (Griffiths 2006). Similarly, increases in prices of heroin following the Taliban's ban on opium cultivation in Afghanistan, resulted in some European drug users switching from

smoking heroin to the use of other illicit drugs such as cocaine and amphetamines, or transitioning to heroin injection (OSI 2003).

Issues discussed above are illustrated through country examples provided in Boxes 5, 6, and 7.

Box 5: Coping with eradication
The case of northern Laos

In the Akha villages of the Long and Sing districts of northern Laos, an enforced eradication of opium poppy crops in 2002 led to shortages in rice (Cohen, 2006). In 2003, international NGOs and the World Food Program (WFP) had to provide emergency assistance in the form of food-for-work programs in order to address the acute rice shortages in Northern Laos (TNI, 2008). The Akha villagers responded to food insecurity by resuming opium cultivation, either in their present location or moving to more remote locations, engaging in trading of other drugs, or migrating to the lowlands where rice production was more viable (Cohen 2006; Lyttleton, 2004). TNI quotes that around 15 villages, together comprising of around 2,000 people, were deserted as a result of migration to the lowlands (TNI, 2008). However, such coping methods only served to further marginalize the Akha, either because of their involvement in the illicit drug economy or as a result of exploitation by other ethnic tribes settled in the lowlands for several years prior to arrival of the Akha. Those who moved to the lowlands began to consume ATS, instead of opium, due to its physical stimulation properties in order to cope with the demands of the new life (both social and physical). Lyttleton provides accounts of Akha villagers who worked in the palm fruit trade taking ATS in order to remain alert during night long journeys in the forest. He also cites an example of Akha labor, working on rice fields of the Tai Lue in the lowlands, being given drinking water mixed with ATS in order to enhance productivity (Lyttleton, 2004). Drug consumption patterns changed in order to facilitate transition into a new environment (Lyttleton, 2004).

In 2007, two years after Laos was declared 'opium free', TNI reports that rural households were still struggling to make ends meet as poor access to credit and market facilities, agricultural extension services, as well as transportation systems, meant that alternative agricultural activities were not necessarily translating into a livelihood (TNI, 2008). Families were forced to adopt various coping strategies including decreased food consumption, withdrawing children from schools, and selling household assets - which were already few to start off with. Several communities continued to migrate from the highlands to the lowlands, but in the process, sold assets, incurred greater debt, and also suffered from higher mortality rates namely due to contraction of malaria (TNI, 2008). Little assistance was provided by the government in helping families to deal with the withdrawal of their livelihood (TNI, 2008).

4.1.2 Interdiction & Law enforcement

Interdiction includes programs aimed at stopping trading or smuggling of illicit drugs, both at the final destination (importing country) as well as along the trading route (Babor *et al* 2010). Interdiction poses additional costs on the smuggler, who may have to replace the seized shipment or bribe enforcement officials to avoid incarceration –

Box 6: Coping with law enforcement and alternative development
The case of Shan State

The isolated (geographically and politically), mountainous regions of Kokang and Wa in the northern Shan state of Myanmar figure among the world's largest producers of opium. The ban on cultivation of opium, since 2003 in Kokang and 2005 in Wa, has denied many farmers a livelihood (TNI 2005; TNI 2009). Farmers in these already impoverished regions relied on opium income to buy medicines, clothing, and fertilizer, as well as to pay for children's education (TNI 2005). In fact, opium was, until the ban, the main source of income, accounting for around 70% of total cash income, for an estimated 2 million people in both regions (TNI 2005). An assessment done in Kokang two years after the ban found that around a quarter of the population had emigrated, two-thirds of privately run clinics and pharmacies had shut down, and 30% of schools in the northern areas closed resulting in 6,000 children being out of school – thereby halving the number of children in school (TNI 2005). Some of those who migrated moved to other areas where they could cultivate opium poppy (TNI 2009). Over 50% of the population in Kokang, were guaranteed food for only six months. Children suffered the most, as a result of no education and increased vulnerability to malnutrition (TNI 2005). Poor nutrition meant that parents' productivity also weakened (TNI 2008).

A UNODC report in 2006 and a 2009 TNI report stated that in the Wa region, family income had decreased by as much as 50 to 70% (TNI 2009; UNODC 2006b). Families were unable to afford basic necessities such as rice, oil, salt, and clothing (UNODC 2006b), and therefore decreasing food consumption or consuming less nutritious food (TNI, 2009). Before the ban, just over half of all households were able to afford rice for 3 months, and the other proportion for anywhere between 3 to 12 months (UNODC, 2006). In 2005, following the ban, the poorest families were only able to produce enough rice for 3 months, and the average household just for marginally longer at 4 – 6 months (UNODC, 2006b). In fact, the WFP has been providing food assistance to ex-opium poppy farmers in Shan since 2003 in the form of food-for-work, food-for-training, and food-for-education programs (TNI, 2008; www.wfp.org).

Several families in both regions are also deep in debt, and struggling to make repayments. Opium was previously used as a form of currency and an exchange commodity, and was a means by which credit could be accessed (TNI, 2009). In certain townships of the region, there were reports of half of the shops having to close down because of lack of business – a reflection of the economic conditions (UNODC, 2006b). Very few households reported benefits from the ban, and these were mainly due to the fact that there was an addicted member in the family or because these households were not reliant on poppy cultivation prior to the ban (TNI, 2009). The most vulnerable households in both regions were those without land, isolated and with no access to transportation, or with little opportunities for other forms of employment (TNI, 2009).

Bans were imposed mainly due to international pressure from the United States, China, and Thailand, and it was hoped that in exchange, greater aid would be provided in order to compensate for the losses (TNI, 2005). In the Wa region, rubber was promoted as an alternate cash crop, with Chinese companies investing in commercial plantations for rubber cultivation (TNI, 2009). However, despite the potential for making significantly higher profits compared to opium, ordinary farmers were unable to afford the initial investment required and did not have the patience or means to wait seven years for harvest (TNI, 2009). Another problem was that in areas of rubber plantation, arable land was becoming increasingly rare to poor farmers, as Chinese investors were buying land for rubber plantations (TNI, 2009). Other alternative development projects implemented by international organizations continue to be small in scale or are inadequately addressing the needs of local farmers, who are unable to leverage on opportunities to diversify crop production (TNI, 2009).

which are then reflected in the final retail price (Babor *et al* 2010; Reuter *et al* 2004). However, the effectiveness of interdiction as well as efforts to make it more stringent, have been questioned. A modeling study by Reuter and colleagues on cocaine and marijuana imported in the US found that a doubling of import price only translated into a 10–20% increase in retail price (Babor *et al* 2010), while another study by Crane *et al* found that seizures did not significantly rise retail price (Reuter *et al* 2004).

Moreover, illicit drug traders have responded to interdiction by diversifying and using increasingly sophisticated modes of transport, as well as changing routes. The latter often involves shifting trading to states where the capacity to monitor trade and consumption is weak (Keefer *et al* 2010). With large amounts of illicit drugs available and little cost involved in distribution, transit countries often also experience an increase in drug consumption – which in turn can lead to an increased burden on the health system (Keefer *et al* 2010). For instance, lax border control and corruption has meant that Guinea-Bissau has become an important transit point for illicit drugs being smuggled into Europe over the last decade. Accordingly, cocaine use is said to have increased in the country (Keefer *et al* 2010).

Similarly, trading of drugs from Afghanistan to Europe through Central Asia, following the disintegration of the Soviet Union, led to sharp rises in illicit drug use (Garrett 2000; Keefer *et al* 2010). Countries such as Kazakhstan and Kyrgyz Republic, which had no drug addiction problems prior to the 1990s, are now said to have rates higher than in western Europe (Keefer *et al* 2010). The subsequent explosive HIV epidemics witnessed in countries of Central Asia has been largely attributed to injecting drug use. Thus, stringent policies and corresponding programs aiming to curb illicit drug trading have largely only served to create new trading routes, often in 'vulnerable' or low-income countries, where the impacts on socioeconomic development are not easily mitigated given limited resources and weak social systems.

Limited evidence available also suggests that law enforcement of illicit drug traders, in settings where the 'profitability' of criminal activities is high and costs of bribing relatively low, only leads to an intensification of violence and criminal activities – particularly of organized crime (Keefer *et al* 2010). This, in turn, simply undermines social welfare and development. In fact, a systematic review found that 9 out of 11 studies involving statistical analyses of data uncovered a positive correlation between law enforcement and increased violence (ICSDP 2010). Another study by Miron in the United States, which adjusted for confounders, found that expenditure on law enforcement is 'a strong predictor' of homicide rates (ICSDP 2010). MacGregor claims that daily killings and military involvement in the drug trade are 'the most serious threats to a constitutional state and the rights and liberty of the citizens' (MacGregor 1993).

It has been suggested that this phenomenon of law enforcement actually resulting in increasing levels of violence can be explained by the fact that trading and dealing become more volatile in riskier environments, and as a result the number of violent disputes rises (ICSDP 2010). Furthermore, by destabilizing the illicit drug market structure, by either imprisoning or killing leaders of gangs and organizations, States actually replace what was previously a monopoly or oligopoly with a market

consisting of several rival competitors instead (ICSDP 2010; Keefer *et al* 2010). Removal of the Cali and Medellín cartels in Colombia during the 1990s created opportunity for new entrants in the illicit drug market (Dion & Russler 2008), which eventually led to increased violence as gangs tried to defend their market share (Keefer *et al* 2010). Drug related violence result in an estimated 27,000 deaths each year during the 1990s (Keefer *et al* 2010). Lastly, there is also the violence and mortality that occurs as a result of clashes between State forces and those involved in illicit drug economies. In the favelas of Rio de Janeiro for example, "invasive and siege like" approaches used by the State to control illicit drug trading and sales have resulted in an increase in mortality (Stevens *et al* 2009). The number of deaths recorded as 'resistance to authorities' during police operations rose from 427 in 2000 to 1,330 in 2007. Similarly, conflicts between state authorities and traders have intensified violence in the Caribbean - quadrupling the murder rate in Trinidad & Tobago between 1995 and 2005 (Stevens *et al* 2009). A clamp-down on illicit drug traders launched by the President of Mexico in 2006, involving military forces, caused 10,000 deaths by 2009, with a doubling of mortality in 2008 compared to 2007 (Keefer *et al* 2010).

Box 7: Coping with supply side control in Afghanistan

Following a ban implemented in 2005, as well as coercion and pressure, opium poppy cultivation in Nangahar, a traditional poppy producing region in Afghanistan, decreased by 97% between 2004/05 and 2005/06 (Mansfield & Pain, 2007). Production halted based on the promise of assistance – which was either unfulfilled or inadequate. Some farmers who had access to markets as they lived closer to the provincial center, Jalalabad, were able to grow and sell high value vegetables (Mansfield & Pain, 2007). Others, who were poorer or living in remote areas were increasingly finding it difficult to survive (Mansfield & Pain, 2007).

With their source of income withdrawn, as opium accounted for around 75% of total household cash income (Mansfield, 2005), families, particularly those with few assets, used different strategies to cope. Households decreased expenditure on both essential (such as food and medicines) and non-essential (diesel, ceremonies like funerals or weddings) goods. The nutritional value and quantities of food consumed decreased: cheaper grains and vegetables were eaten, while meat and fruits became a rarity (Mansfield, 2005). Healthcare was not sought, even when required, due to cost of treatment (Mansfield, 2005). Though education was free, some families still had to withdraw their children from school due to a need for additional labour (Mansfield, 2005). Families also had to sell off assets, such as livestock and at times even daughters, in order to repay loans and buy food. Many also temporarily or permanently migrated from Nangahar, namely to Iran and Pakistan (Jelsma, 2005; Mansfield, 2005). In fact, Mansfield reported that one third of households in five districts of Nangahar had at least one member who had migrated (Mansfield, 2005). Many farmers switched to cultivating wheat, however the resultant income earned was insufficient to meet needs (Mansfield & Pain, 2007). Another drawback with wheat cultivation was the decreased access to land for poor families, as wheat is less labour intensive in comparison to opium poppy, and so leasing of land or sharecropping became less attractive to landowners (Mansfield, 2005). One of the biggest consequences of the ban was inaccessibility to a system of credit as lenders were no longer confident that repayments would be made (Mansfield, 2005). This only served to exacerbate households' debt.

Decreased cultivation did not only affect the agricultural sector, but the wider economy of Nangahar as well. With one hectare of opium poppy estimated to create around 5.6 jobs in the rural non-farm sector, unemployment increased in other sectors (Mansfield, 2005). Unskilled workers suffered the most with very few opportunities to earn a living, while other businesses such as shops, fuel stations, car garages, taxis, and construction experienced loses as people were spending less (Mansfield, 2005). The poorest of the unemployed, with no other choice, were lured into the illicit activities of perpetuators of violence (Graubner, 2007). Social unrest and protests also increased as a result of economic problems, with certain tribes voicing their anger against the ban openly (Mansfield & Pain, 2007). Soon, farmers living in remote areas resumed opium poppy farming, many seeking the protection of armed groups in order to avoid punishment (Mansfield & Pain, 2007). By the 2006/07 growing season, opium poppy cultivation was on the rise again; cultivation increased by 1,650% compared to in 2004/05 (Mansfield & Pain, 2007). Jelsma suggests that debt was an important factor that drove households back into opium poppy production (Jelsma, 2005).

In summary, the evidence available on supply side drug policies and programs, suggests that these have largely been ineffective. Not only has SED been negatively affected, but the goals of supply side policies have not been achieved either. Data from the US and Europe shows that while the intensity of control measures have increased over the years, prices of heroin and cocaine have either remained the same or even decreased and demand has not declined either (Keefer *et al* 2010). Similarly, aggressive eradication and interdiction measures in Bolivia, Colombia, and Peru did not lead to an increase in wholesale prices of cocaine in the US, rather prices actually decreased (Dion & Russler 2008). Financial resources devoted to supply side strategies are also considerable, and come at an opportunity cost of investments in public services such as health and education. For example, US$ 9 billion is spent by the Mexican government on controlling drug trading each year, triple the amount spent by the United States relative to GDP (Keefer *et al* 2010).

4.2 Demand-side strategies

Demand-side strategies, as the name suggests, aim to reduce demand for and hence consumption of illicit drugs. These can be broadly divided into: prevention which aims to deter potential users or discourage increased or riskier forms of use; treatment which focuses on reducing or terminating consumption by regular drug users (Reuter *et al* 2004), as well as law enforcement.

4.2.1 Prevention

Prevention activities have included mass-media campaigns, community based programs, and education programs in schools. To date, rigorous evaluation studies on such prevention programs have either not been conducted or have not shown wide-scale effects (Reuter *et al* 2004) – most certainly not in developing country settings.

4.2.2 Treatment

There have been few controlled experimental studies which have explored the effectiveness of treatment in reducing illicit drug use and associated harms (risky behavior, crime, HIV transmission etc). However, the studies done to date suggest that substitution therapy with drugs like methadone and buprenorphine, for heroin and other drugs, has proven to be effective in reducing criminal activity of drug users, as well as in improving their health status – particularly in terms of reducing spread of HIV (Reuter *et al* 2004). Reductions in crime by as much as 70% have been reported amongst drug users undergoing treatment (Reuter *et al* 2004). Likewise, Kimber and colleagues found that there is evidence to support that opioid substitution therapy (OST) helps to decrease transmission of HIV, frequency of injection, sharing of injecting equipment, and risk of death from overdose[6] (2010). Indeed several cycles of treatment and relapse may have to ensure before long-term behavioral changes occur (Reuter *et al* 2004). A RAND Corporation cost-effectiveness study on cocaine markets found that providing treatment for cocaine users was 10 times more effective

[6] Note that this study distinguishes between OST delivered in community and prison settings. Evidence for effectiveness in prison settings is not as conclusive, see Kimber *et al* 2010. There are however other positive effects of drug treatment provision in prison – see WHO technical series on this

in reducing drug abuse compared to law enforcement and 23 times more effective than eradication (Chouvy 2009).

4.2.3 Law enforcement

Demand-side strategies have often heavily concentrated on law enforcement and prohibition of possession or consumption, in the hope that severe punishments will deter potential drug users and encourage current users to give up consumption. While studies have shown that minor penalties may work in reducing drug use amongst felony probationers, research and evidence on the effectiveness of law enforcement measures are either limited or specific to high-income countries such as the US and UK (Babor *et al* 2010).

Available studies show that police crackdowns on possession or consumption of drugs have not necessarily decreased consumption or reduced the social and health harms associated with illicit drug use. In response to law enforcement, drug dealing is often displaced to neighboring areas where drug use and associated crime then emerge (Wood *et al* 2004). A study examining the effect of law enforcement on illicit drug use in Vancouver found that frequency of injection did not change, injection was shifted to different areas and increasingly done in public areas, and that willingness to use safe injection facilities decreased – thereby increasing unsafe injecting and the sharing of injecting equipment and thus the risk of transmission of blood borne diseases (Wood *et al* 2004). Another study on street policing in Sydney found that drug users were likely to engage in riskier behavior out of fear of being caught (Maher & Dixon 1999). With the need to inject quickly in policed areas, drug users were more likely to share needles or use non-sterilized ones, inject larger doses, cause more harm to oneself, and unsafely dispose of needles (Maher & Dixon 1999). As in Vancouver, drug dealing and use was also dispersed to new locations (Maher & Dixon 1999).

It is now widely acknowledged that punitive drug laws drive drug use further underground, forcing drug users to switch to more covert or riskier forms of drug use, such as pills which can be easily consumed or injection where pharmacological effects can be achieved quickly (OSI 2003).\ Penalizing environments also serve to further marginalize drug users within society (Elliot *et al* 2005; OSI 2003). Out of fear of being disclosed to authorities, imprisoned, or coerced into forced treatment, drug users often do not seek health services or treatment as information registered in hospitals and clinics is often shared with law enforcement agencies – particularly in countries with stringent illicit drug regulation, such as in the former Soviet Union (Barrett *et al* 2008; OSI 2003; United Nations General Assembly 2010).

This was illustrated by Thailand's 'War on Drugs' launched in February 2003 to tackle increasing use of ATS, heroin, and cocaine. While the campaign was deemed successful in December of 2003, evidence suggests that low-income drug users switched to substitute drugs which were cheaper and widely available such as lacquer, while high-income users may have continued to use the same drugs (Roberts *et al* 2004b). Another consequence was decreased healthcare seeking behavior amongst drug users, even amongst those who had previously sought treatment (Barrett *et al* 2008). Such conditions are conducive to the development of other serious social and health problems such as the spread of HIV (OSI 2003). Indeed, injecting drug users in

Thailand reported sharing of injecting equipment because of lack of access to sterile syringes (Barrett *et al* 2008).

Incarceration of illicit drug users (and traders, dealers) also carries considerable economic and social costs, while evidence on its success in deterring consumption is minimal (Bewley-Taylor *et al* 2009; Dolan *et al* 2007). In high-income countries, drug users, particularly IDUs, account for a large proportion of prisoners – as high as 50% in federal prisons in the United States and over 25% in the European countries of Cyprus, Italy, Luxembourg, Portugal, Spain, and Iceland (Bewley-Taylor *et al* 2009). In the US, this high rate has been attributed to stringent drug control policies (Bewley-Taylor *et al* 2009). Interestingly, as Keefer and colleagues point out, the productivity costs of imprisoning drug offenders can be considerable, even when taking into account that they are unlikely to significantly contribute to licit economies when not in prison (Keefer *et al* 2010). In the US, it was estimated that productivity loss resulting from incarceration of drug offenders could still amount to around US$ 40 billion annually (Keefer *et al* 2010). In terms of social costs, risk of HIV and viral hepatitis transmission is higher in prisons compared to in general communities, as confirmed in prison settings in North America and countries of western Europe, as well as in Australia, Brazil, Iran, Russia, and Thailand (Dolan *et al* 2007).

Given that HIV/AIDS prevention and treatment services are generally weak and inadequate in prisons, interaction of drug users with other members of communities once released means that transmission can then spread into the general population (Dolan *et al* 2007). These health costs will only worsen conditions in already socioeconomically deprived communities. Secondly, as we have seen before, incarceration disrupts social structures and the resultant adverse consequences may negatively impact on the development of communities. Lastly, it has been found that offence rates of drug users do not decrease upon release from prison, and that users who had served longer sentences were in fact more likely to engage in criminal activity (Bewley-Taylor *et al* 2009; Dolan *et al* 2007).

4.3 Harm reduction

As per the International Harm Reduction Association (IHRA), harm reduction is made up of policies and programs which aim to reduce the ‘harms’ caused by drug use, rather than drug use itself, amongst people who use drugs on an on-going basis (see IHRA website, www.ihra.net). IHRA, in its definition, mentions reducing the ‘health, social, and economic consequences’ from use of psychoactive drugs, thereby implying that harm reduction is concerned with more than just the health of the individual drug user but also the welfare of society at large. Of course what constitutes as ‘harm’ is itself a matter subject to debate, and indeed various taxonomies have been developed which define levels of harm, types of harm, and ‘bearers of harm’ (Ritter & Cameron 2005).

Harm reduction programs are a ‘package of interventions’ and will differ depending on the type of drug and setting. However, those for illicit drugs typically include these components: needle and syringe programs (NSPs), supervised injecting facilities, non-injecting routes of administration (promoting reduced initiation of injecting or a shift away from injecting), outreach, HIV education and testing and counseling, overdose prevention, and psycho-behavioral/cognitive therapy (Ritter & Cameron 2005). As a

result, evaluating the effectiveness of harm reduction programs has been more complex given the different interventions and the difficulty in determining how and what 'proportion of the effectiveness' is contributed by each one (Ritter & Cameron 2005).

Ritter and Cameron did a systematic review of evaluations of these individual components, results of which showed that the body of evidence available differs greatly according to type of intervention (2005). Evidence was strongest for NSPs but lacking for non-injecting route of administration, psycho-behavioral therapy, overdose prevention, and education interventions (Ritter & Cameron 2005). Across the different interventions for which evidence was substantial (NSPs, supervised injecting facilities, and outreach) benefits of harm reduction programs included: reduced risk behavior, decreased transmission of HIV, less injecting in public places, safer disposal of injecting equipment, and decreased 'public nuisance'. A 'review of reviews' done by Kimber and colleagues found that there was 'tentative evidence' to suggest that primary level NSPs helped to decrease transmission of HIV, while evidence was inconclusive for other types of NSPs such as in prisons, as well as needles and syringes dispensed through vending machines or obtained in pharmacies (Kimber *et al* 2010). The same review found that evidence demonstrating that supervised injecting facilities led to decreased injecting behavior was also tentative (Kimber *et al* 2010).

These different findings highlight the difficulties in evaluating the effectiveness of harm reduction, but nonetheless strongly suggest that these programs decrease social costs relative to other policies and strategies such as law enforcement. For example, by decreasing HIV transmission, particularly in settings where epidemics are primarily fuelled by injecting drug use, harm reduction programs have been shown to be very cost effective thus having a positive impact on SED.

KEY FACTS RELATED TO THE EFFECT OF ILLICIT DRUG CONTROL POLICY ON SOCIOECONOMIC DEVELOPMENT

- **Drug control programs targeting the production of illicit crops can lead to significant loss of income to the farmers who are involved which can directly affect their food security and livelihood. Furthermore, some drug control programs have had adverse effects on both the surrounding environment and the health of the communities surrounding the crops that are being eradicated.**

- **Alternative development programs have for the large part failed to provide an alternative income because the programs fail to take into account the broader social, cultural, political or environmental context in which they are operating. Successful alternative development programs are those programs that take a long term in outlook that includes ongoing subsidization.**

- **Despite the significant global investments in drug demand strategies, evidence is either non-existent or weak as to their effectiveness in either preventing drug use or stopping relapse into drug use.**

- **High rates of incarceration of drug users either through imprisonment or forced detention in "treatment" programs leads to a host of negative consequences for the individual and the collective society including increased exposures to infectious disease and reducing the size of the productive labour force.**

- **The definition of harm reduction programs needs to expand so that the harm reduction strategies and philosophies can be incorporated into drugs and development policies so that drugs and development policies do not result in adverse impacts on SED including the violation of human rights.**

5. The forgotten victim: human rights

> *"Around the world, harsh national and international drug laws and repressive drug policies are implemented in a manner that makes the violation of drug users' human rights inevitable."*
> *- Protecting the Human Rights of Injection Drug Users: The Impact of HIV and AIDS, OSI Report 2005, p 5*

At the nexus of illicit drugs policies and socioeconomic development is the issue of human rights. As Navarette-Frías and Thoumi note, human rights violations arise due to the manner in which illegal drug economies operate and also stem from drug policies and the ways in which the policies are implemented (2005). In this section, we are interested in the latter.

The human rights aspect, despite being fundamental, has often been ignored or overlooked in implementation of illicit drug control policy even though the international drug control system was put into place for the 'health and welfare of mankind' (1961 Single Convention on Narcotic Drugs, available at http://www.incb.org/pdf/e/conv/convention_1961_en.pdf). Ironically, conventions under this same system have enabled countries to justify and defend draconian drug policies (Barrett *et al* 2008; OSI 2003; UNGASS 2010). The 1988 Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, for instance, states that all signatory countries should implement the 'necessary measures' to ensure that possession of illicit drugs, when done intentionally, is deemed as a criminal offence under domestic law.

'Necessary Measures' were never defined and countries have often used compliance with the convention as a justification or excuse for repressive law enforcement (OSI 2003; Barrett *et al* 2008). At the same time the UNODC, tasked with overseeing drug control, has failed to act on widespread, acknowledged human rights violations worldwide or provide detailed guidance on how best to implement rights based drug control strategies (Barrett *et al* 2008).

Thus, human rights continue to be violated on the basis of use of illicit drugs or engagement in illicit drug economies. Implementation of certain drug policies has resulted in marginalization and discrimination of drug users, violence and torture, inhumane treatment in prisons, denial of healthcare, and loss of livelihoods. Here we provide a broad overview of human rights violations associated with drug policies - detailed accounts and discussions are provided elsewhere (see The Beckley Foundation Drug Policy Report Series, OSI human rights and drug policy publications, Human Rights Watch releases).

5.1 Prohibition and Eradication

Prohibition and eradication of drug crops, without adequate compensation or aid to develop alternate livelihoods, robs families of their very means of sustenance and a life with security and dignity. Such policies, which often leave families to cope with food insecurity, poor health, and increasing debt, are a critical violation of human

rights. In addition, implementation of eradication, often involving the military, has been reported to result in human rights abuses including physical abuse, burning of fields and houses, and stealing of food and other assets (OSI 2010b).

Eradication that involves aerial fumigation, presently done only in Colombia, can affect the health of farmers and their families, destroy legal cash crops, harm livestock, and cause environmental degradation – all of which only cause further suffering to farmers and their families (Chouvy and Laniel 2007). Indeed, a visit by the UN Special Rapporteur on the Right to Health to Ecuador in 2007 confirmed that there was substantial and valid evidence showing that fumigation in areas along the Colombia-Ecuador border had caused harm to health (OSI 2010b). Of concern is also how aerial spraying seems to affect the health of children and other vulnerable groups of communities most (Barrett *et al* 2008). Another investigation conducted between 2002 and 2003 found that aerial spraying had caused considerable damage to licit food crops, pastures, and livestock (Barrett *et al* 2008).

5.2 Law enforcement

Harsh law enforcement of illicit drug use has had appalling human rights consequences worldwide. As possession and use of drugs is an illegal offence in the majority of countries worldwide, drug users, dealers, and traders, have often been subject to severe and brutal treatment. For example, 60% of IDUs interviewed in Indonesia reported physical abuse by police: beating of the feet, hands, chest, and head by officers using their hands, fists, boots, pistol butts, iron rod and folded chairs (Davis *et al* 2009). One reported being beaten with a wrench and flat side of a saw while others reported being burned by cigarettes, had their toe nails pulled out, were publically humiliated, threatened, and even given electric shocks (Davis *et al* 2009). Six percent reported sexual harassment or assault. Moreover, reports written in the police station were often inaccurate and those accused were denied access to a lawyer (Davis *et al* 2009).

Similarly in the Ukraine there have been reports of police capitalizing on withdrawal in order to extract testimonies from drug users, or abusing their power by extorting money from users (Barrett *et al* 2008). In countries such as China, Indonesia, Malaysia, Singapore, Thailand, and Vietnam, a considerable number of executions have been carried out for drug offences – even minor ones (Barrett *et al* 2008). In fact, despite the fact that capital punishment has increasingly been stopped in many countries, the number of states that included execution as a penalty for drug offences increased from 22 in 1985 to 34 by 2000. This is in clear violation of the UN Human Rights Declaration which states that everyone has the right to life, liberty and security of person, and the International Covenant on Civil and Political Rights (ICCPR) which outlines that death penalties should only be enforced in the case of the most severe and heinous of crimes (Barrett *et al* 2008).

In countries where corruption is widespread, law enforcement might be used as an excuse to target particular communities such as ethnic minorities. For example in Uzbekistan, Tajik or Afghan immigrants may be unfairly detained in connection to illicit drug possession when in fact they do not even posses any illicit drugs (Lubin *et al* 2002). On a similar note, most of the deaths resulting from law enforcement on drug trading in Brazil are poor, black youth living in the favelas (OSI 2010c). In other

countries, drug related arrests may simply be used to strengthen an autocratic regime and spread fear such as in Sudan where arrests and seizures specifically occur in regions where political opponents to the government opponents live - seriously bringing in to question civil liberty (Allen 1999).

The same vested political interests argument can be extended to an international context, where drug control policy may be used more as a foreign policy tool. Certain donor organizations of western countries, for instance, have known to use recipient countries' drug policies as a means of withholding foreign aid – indirectly meant to put pressure on 'problematic' governments (Klein 1999). Likewise, it has been argued that American aid and the country's 'war on drugs' was used as an excuse to intervene in Colombia's internal affairs (Mac Gregor 1993).

In the United States, there are reports of punitive drug laws in the United States disproportionately affecting poor and the marginalized groups of the community (Buxton 2006). According to 2005 figures, 44.8% of all state prisoners incarcerated for illicit drug offenses were African American, while 28.5% were white – even though rates of illicit drug use and offences are similar to white Americans (Bewley-Taylor *et al* 2009; Moore & Elkavich 2008). Such discrimination further marginalizes a particular segment of society (Bewley-Taylor *et al* 2009; United Nations General Assembly 2010). Moreover, the vast majority of arrests are due to possession of small quantities of drugs, rather than sales or trading, which has no impact on the large volumes being traded (Buxton 2006).

5.3 Militaristic approaches

Due to failures of traditional law enforcement strategies, increases in terrorist activities, or violence used by drug gangs, some countries have entrusted the military/army with drug control or used military weaponry and strategies to combat illicit drug activities (Buxton 2006). Yet, militarization of drug control has not been successful in combating illicit drug use or trading. While production of illicit drugs did decrease in Colombia and Thailand following use of the armed forces drug control, low supplies were offset by increased production in neighboring countries (Buxton 2006). In addition, innocent citizens are often the victims of forceful approaches or as a result of conflict between drug gangs and the military. Evidence shows that there is often violation of human rights when drug control is militarized, especially when the rule is 'shoot to kill' or 'shoot on sight' (Buxton 2006).

In Bolivia, for instance over 200 people were killed due to protests against forced crop eradication between 1999 and 2002 (Buxton 2006). A similar, tragic situation was felt in Brazil, when a militaristic approach was used to control illicit drug trade: over 15,000 people 'disappeared' after being held by security forces, and people shot by the forces had an average of 4.6 bullets – the majority of which were in the head. Policies and rules enacted by the Brazilian government gave more power to the forces and allowed their actions to go unchecked (Buxton 2006).

5.4 Forced treatment

In many countries worldwide, people incarcerated for the use or possession of illicit drugs may be forced to undergo treatment (Barrett *et al* 2008). The 1961 Single Convention on Narcotic Drugs allows countries to 'provide' for drug users who have committed an offence to undergo treatment (Barrett *et al* 2008). The problem is the that 'treatment' is often not based on medical evidence, and instead is often forced labor, military-like drills, torture, and experimental treatment – a clear violation of the right to enjoy health and access appropriate services and treatment (United Nations General Assembly 2010). Moreover, it is estimated that anywhere between 90 to 100% of drug users who undergo forced treatment later resume drug use (United Nations General Assembly 2010).

In China, for instance, arrested drug users are obligatorily sent for rehabilitation, which also involves "treatment" consisting of forced unpaid labor for as long as 18 hours per day, and sometimes executing violence on fellow inmates (Barrett *et al* 2008; Human Rights Watch 2010). It thus comes as no surprise that some Chinese drug users adopt extreme measures to avoid treatment: findings from a survey conducted in 2004 revealed that 9% of 3,213 heroin users had taken steps such as swallowing glass (Barrett *et al* 2008). In Thailand, thousands of drug users were forced to attend drug treatment during the 2003 crackdown, those who did not show up were arrested or blacklisted (Barrett *et al* 2008). It was reported that several people underwent treatment simply out of fear of being arrested otherwise, even if they had never taken illicit drugs or had stopped use prior to the campaign (Barrett *et al* 2008). According to a recent Human Rights Watch Report, serious human rights abuses occur in compulsory drug treatment centers in Cambodia including: beatings, sexual violence, and forced labor lashings (OSI 2010a).

5.5 A discriminatory environment

The illegal nature of drug use, as created by international and national policy and regulation, has result in considerable stigma and discrimination. Suwannawong notes that in village communities of Thailand, drug users are often refused loans, falsely accused of crimes, and can even be denied their post-death Buddist rites and rituals (Suwannawong 2010). Internationally, many drug users are subject to prejudice within the healthcare system and denied treatment. For example in the United Kingdom drug users have been refused treatment for Hepatitis C, contrary to guidelines, based on the argument that they will not adhere to treatment (United Nations General Assembly 2010). The UK is not the only case, there are millions of drug users world-over, as stated in chapter 2, who are not being treated – a gap attributable to a range of factors including stigma and discrimination (Melis & Nougier 2010).

In countries like Russia and Ukraine, there have been reports of pregnant drug users being denied healthcare, forced into undergoing abortions, or asked to face legal recourse at the risk of losing parental rights (Melis & Nougier 2010). Human rights violations are intensified when the drug user is also HIV positive. In Thailand, HIV positive drug users are often denied treatment, both by medical and government authorities (Suwannawong 2005). World-over, HIV positive drug users continue to

have disproportionate access to treatment compared to the need, particularly in Eastern Europe and China (Barrett *et al* 2008).

KEY FACTS RELATED TO THE IMPLEMENTATION OF ILLICIT DRUG POLICIES AND THEIR IMPACTS ON HUMAN RIGHTS

- **Drug eradication programs and law enforcement crackdowns have resulted in wide spread violations of human rights that include compromising the food security of poor and marginal people or beatings, intimidation and murder of people who may or may not be involved in aspects of illicit drug production, trade or use at the hands of the state.**

- **Drug treatment that is conducted compulsorily, without scientific evidence of effectiveness, by people who are not medically trained to deliver treatment and in conditions that can only be described as inhumane, is itself a gross violation of human rights.**

- **Any human rights violations conducted in the name of drug eradication programs, alternative development, law enforcement and treatment can only lead to poor outcomes in terms of the socioeconomic development.**

6. Summary & Conclusions

> *"…it is essential to promote development in drug-growing regions. Our work to achieve the Millennium Development Goals and fight drugs must go hand in hand."*
> *- Ban Ki moon, Secretary General of the United Nations*

As the first international convention to control the use of narcotic drugs turns fifty next year, we find that all countries of the world are now affected by illicit drug economies – be it production, trade, or consumption (or a combination of any of these). Societies have long grappled with the issue of how to control the social and economic costs arising from illicit drugs, pursuing strategies to decrease, supply, demand or harm. It has been acknowledged that involvement in illicit drugs is a product of broader social, economic, and cultural factors while illicit drugs themselves also act as an impediment to progress within the same spheres. Translation into practice, however, has been lacking or inadequate, suggesting that there is a need for greater recognition of the interactions between illicit drugs and development. As part of a larger project that aims to increase awareness so as to ensure that theory is put into practice, this report has sought to illustrate the complex relationships between illicit drugs, drug policies, SED, and human rights.

6.1 The interrelationships between illicit drugs and SED are real and complex

Our literature review shows that SED and illicit drug production, trade, and use are associated through several intertwined and opposing pathways. Rural under-development, conflict and economic crises can drive illicit drug production. Poverty, unemployment, marginalization, and changing social norms create vulnerable environments for drug use. At the same time free trade, modernization, and greater disposable income resulting from enhanced SED may encourage consumption of illicit drugs and facilitate trading. Illicit drug economies may sustain and boost economic development in the short-term, however this is likely to be offset by longer-term consequences of corruption, crime, erosion of social capital, increased health costs and reduced productivity in the long term.

These relationships are particularly important in developing countries, many of which are affected by prevalent drug consumption, trade, and production, as well as poor SED. In these cases poverty, weak governance, corruption, and other factors that constitute a poor environment for SED create the conditions for illicit drug economies to thrive. Further the corrupting influence of these very economies inhibits any attempt to tackle poverty and impose law and order. Afghanistan is a classic example where conflict, lawlessness, and poor development have fuelled opium cultivation and establishment of strong trading networks. At the same time, the corruption, narco-regimes, insecurity, organized crime and violence resulting from the illicit drug economy has hindered attempts at state building, restoration of peace, and enhancing development in the country. Still, the opium economy, which accounts for a significant proportion of the country's economic activity, is also critically important

in providing livelihoods. This case highlights with striking clarity the complexity with which the illicit opium economy and SED are inherently linked. Afghanistan is not the only case in point, similar situations can be found in other countries – albeit at a different scale.

6.2 Illicit drug policies do not address the very socioeconomic context which influences engagement in drug economies

Illicit drug control policies, largely championed by the wealthier, 'consuming' countries, have mainly comprised of stringent and often zero-tolerance strategies aimed at eradicating supply and demand of illicit drugs, which in turn, is supposed to reduce the associated harms. However, as Roberts and colleagues argue, the relationship between prevalence and harm is not linear or simple (Roberts *et al* 2004c). Indeed, as we have seen in this report, illicit drugs are a function of broader socioeconomic issues, and reductions in availability or use do not necessarily entail a decrease in harms caused to societies. In fact, such policies which aim to create a 'drug free world' have mostly either exacerbated the social and economics costs associated with illicit drugs, or paradoxically, reversed the 'security' offered by illicit drug economies, while also violating human rights. These consequences continue to be overlooked however, with success of drug control programs primarily measured in terms of amounts of illicit drugs produced and consumed (Roberts *et al* 2004c).

6.2.1 Supply side policies

Available evidence shows that supply side policies and programs have, more often than not, failed to curb production of illicit drugs. Studies show that farm-gate price is but one of the many factors that lead farmers to cultivate drug crops, food insecurity, access to credit and land, poor agricultural infrastructure, and environmental conditions are also important. Underlying these factors are issues of social and political marginalization as illustrated by the examples of Rif in Morocco and the Akha tribe in countries of the Golden Triangle, as well as conflict and violence, as in Myanmar and Afghanistan. Consequently, as highlighted by the several examples illustrated in Chapter 4, the non-development oriented measures of law enforcement and eradication only weaken SED in already poor communities by decreasing income and increasing food insecurity, in addition to disrupting traditional norms and practices. Since the problem of poor development persists, so does illicit drug production.

Mansfield and Pain argue that law enforcement and eradication failed to stem production in Afghanistan because there was no difference in opportunity cost. Switching to cultivation of wheat meant that there was still likely be food insufficiency for most Afghan families. At the same time, growing opium poppy and then having the crop destroyed in eradication, produced the same end result of food insecurity. Consequently, it was still worth the risk to most families to grow opium and try to reduce insecurity (Mansfield & Pain 2006; Chouvy 2009). Similarly, Chouvy explains that in light of the size of the Afghan illicit drug economy and its importance in providing rural families access to credit, cash income, and relative food security and protection in a highly unstable environment, schemes such as compensation from the government (which is resource poor) in return for stopping cultivation will be highly unattractive (Chouvy 2009). These same arguments can be

applied to the contexts of Shan State in Myanmar or in the northern regions of Laos and Thailand, where farmers resumed cultivation of illicit drug crops out of sheer need because alternative options did not meet their immediate requirements. Where communities have access to commodity markets and other sustainable economic activities, supply side strategies may work (Mansfield & Pain 2007; Chouvy 2009). Households with relatively higher-income, assets, and access to land are more likely to eschew drug crop farming (Mansfield & Pain 2007; Chouvy 2009). Poorly developed communities and the most deprived households however are less likely to, even when faced with legal penalties.

Alternative development projects which have tried to root themselves within broader development frameworks but have largely been unsuccessful because, as Byrd argues, 'have been not only narrow but also far too short term in their orientation' (Byrd 2010). While such projects were meant to focus on areas such as infrastructure, and access to markets and credit facilities, the emphasis has mainly been on short-term outcomes instead (Byrd 2010). 'Cash-for-work programs,' whereby agricultural inputs are provided free of cost so as to compensate for immediate losses in income are an example (Byrd 2010). Such projects only act as a palliative, alleviating burdens in the short-term but not addressing the deeper, persistent development problems (Byrd 2010). The shift in thinking to promoting 'alternative livelihoods' was meant to emphasize these broader problems, however this theoretical concept has yet to be translated into realities on the ground (Byrd 2010).

While the evidence on the effectiveness of interdiction and law enforcement is limited and less detailed, that which is available suggests that these measures have only encouraged traders to diversify and divert trading routes, while also increasing violence and crime. Traders have been able to do so by capitalizing on environments where institutional structures are weak, governance is poor, corruption is widespread, and societies generally deprived – all conditions of poor socioeconomic development which lead individuals to engage in trading in the first place. Prices of illicit drugs on the other hand have not significantly changed, and in fact have actually decreased.

6.2.2 Demand side policies

On the demand side, law enforcement activities have focused on both drug users and drug dealers. These activities have further isolated users and increased riskier forms of drug use – rather than decreasing consumption. Evidence suggests that this is because law enforcement does not address and improve the macro- and micro-environmental issues which lead to drug use in the first place: poverty, education, poor housing, unemployment, and changing values, or at the other end of the income spectrum, modernization and the accompanying new norms and practices. Although more detailed research is required, data analyses by Wilkinson & Picket show that illicit drug use is higher in societies with greater income inequality, demonstrating that there are indeed socioeconomic issues which impact on drug use (2010). In contrast, evidenced-based and voluntary treatment which treats illicit drug use as a public health concern is more likely to result in positive effects on society with studies suggesting that it decreases risky behavior and HIV transmission, as well as criminal activity. Over the long-term, this may thus help to improve SED.

6.2.3 Harm Reduction

Harm reduction, which does not focus on reducing supply or demand, is also rooted in public health. While further evaluations of harm reduction programs are required to substantiate and strengthen the available body of evidence, findings suggest that drug users' risky behavior is reduced and HIV transmission is less. Strong evidence supports the claim that in Australia, prompt and effective response to HIV amongst drug users through harm reduction programs in effect "altered the course of the country's epidemic" (UNAIDS 1999). Such impacts no doubt diminish health and social costs on societies, and could thereby enhance SED. Furthermore harm reduction approaches often require sound cooperation between public health and law enforcement agencies, serving as a model for a more balanced approach between agencies concerned with both drug supply, demand and harm and those agencies concerned with improving SED.

6.3 All peoples have the right to pursue their economic, social, and cultural goals without suffering discrimination of any kind

Implementation of harsh and punitive drug policies has resulted in serious human rights violations. The most vulnerable within communities suffer and are further marginalised, especially HIV infected drug users, women, and ethnic minorities. In such settings SED is more likely to be hindered.

6.4 A need for more rigorous studies and evaluations

Having stated the above, we recognize that our conclusions mask significant gaps in data. Findings from our study are based on limited evidence, characterized by a lack of quantitative or detailed data on the impact of SED on illicit drug economies, and vice-versa, as well as an insufficiency of rigorous evaluations of drug control programs. Our expectation on data availability was therefore also validated. There were also considerable differences in the available evidence for various thematic areas. For example, there was more detailed information on the impact of illicit drugs on SED, versus the reverse relationship. Similarly, data on the impact of supply side policy on development was more abundant. These differences may reflect a real lack of awareness on the various issues and/or actual variations in the strength of the relationships.

Still, it is evident that there is a need for further research into the interrelationships between SED, illicit drugs production, trade and use, illicit drugs policies and human rights. Areas meriting further exploration are many, but include: impact of macroeconomic factors on illicit drug production, trading, and consumption; how enhanced SED affects illicit drug economies, and how the interrelationships differ depending on gender or ethnicity. Though SED, in itself, is difficult to measure, quantitative studies exploring the correlations between socioeconomic indicators and illicit drug production, trading would help to further understanding in the area.

6.5 Development policy and illicit drug policies are interdependent

Overall, findings from our literature review substantiate the fact that illicit drug economies and socioeconomic development are indeed associated in several complex ways. Factors linked to SED may lead to or deter engagement with illicit drugs, while illicit drug economies negatively impact on SED in the long-term, despite possible short-term benefits to development. Drug control policies which have rarely taken into account the SED context have, as a result, largely failed in reducing illicit drug use, trade, and production and also inflicted considerable social and economic costs on society – including human rights violations. In effect, based on our definition of 'control', these policies defeat their purpose by exacerbating the harms associated with illicit drugs. Thus, our hypothesis that '*Equitable SED is necessary for successful control of illicit drugs*, while *effective and human rights based illicit drug control is required to foster sustainable SED*' holds true based on the evidence available.

The implications of our findings are complex, and this report does not seek to provide answers. However, it is clear that illicit drugs need to be more widely regarded as a development issue, and policies designed and implemented accordingly. Illicit drug control strategies will need to be mainstreamed within broader development strategies, such as national development or poverty reduction strategies. Illicit drug control policy, as Merrill Singer argues, has largely been 'reactive' – in other words, developed and implemented in *response* to illicit drug-related problems as they have arisen in societies (Singer 2008a). In addition, policies have been designed based on narrowly defined and specific goals: either reducing demand or supply of illicit drugs, and more recently, harm from drug use (Singer 2008a).

Socioeconomic development is a complex, broad, and dynamic process, which demands 'proactive' policy with investments in many different areas as well as long-term goals. Consequently, illicit drug policies will need to be implemented with a long-term vision and strong and sustained commitment. On the other hand, development policies will need to take into account the social and economic disparities that create vulnerabilities to illicit drug economies. It is imperative for development agencies and governments of developing and transitional countries to investigate and account for the impact of development on vulnerabilities to drug production, trade, and use. All aspects of development, ranging from infrastructure projects to education programs, especially if donor funded, must consider implications for illicit drug production, trade, and use, as is often already done with respect to the environment, HIV/AIDS or gender dynamics.

6.6 Illicit drug control and development agencies need to work together

Given the above, there is a need for dialogue and collaboration between drug control and development agencies. To date, traditional development agencies, such as the United Nations Development Program (UNDP), have rarely invested in drug control, while drug control agencies, like the UNODC, lack the capacity to design and implement large-scale development programs. The development dialogue around illicit drugs has largely centered on HIV/AIDS or alternative development projects. Acknowledgement that illicit drugs and socioeconomic development are inherently linked and the resultant increased cooperation between such agencies, will enable the UNODC, for example, to capitalize on the comparative advantage that UNDP has in

implementation of development programs. Enhanced linkages between development and drug entities will, however, require widespread acknowledgement of the interrelationships between both fields.

Though the MDGs do not mention illicit drugs, there is progress being made in acknowledging the link between development and illicit drugs. Recommendations from the Executive Director's Report on the "Action Plan on International Cooperation on the Eradication of Illicit Drug Crops and on Alternative Development' presented at the 2008 Commission on Narcotic Drugs (CND) included the need for integration of alternative development strategies into broader national development strategies, as well as evaluating alternative development programs based on development indicators rather than only with crop production statistics (IDPC 2008). Similarly, a joint World Bank and the UK Department for International Development (DFID) report recommended that opium production in Afghanistan be controlled and reduced through a wide range of development and economic programs (Byrd 2010). Likewise, the Secretary General of the United Nations, Ban Ki-moon, in June 2010, acknowledged that the link between development and illicit drugs stating that effective illicit drug control was required in order to achieve the MDGs and sustainable development (Morris 2010). A recent IDPC policy paper (October 2010) by Melis & Nougier highlighted how illicit drugs are linked to various MDGs, substantiating the need to recognize that illicit drugs are a development issue (see Box 8).

Box 8: Illicit drugs are important to the Millennium Development Goals

MDG 1, Target 1.A: *Halve the proportion of people whose income is less than $1 a day*
The majority of people involved in illicit drug production are amongst the poorest of the poor. Yet, they continue to be ignored by development policies

MDG 1, Target 1.B: *Achieve full and productive employment and decent work for all, including women and young people*
Those employed by the illicit drug economy are subject to hazardous working conditions. Illicit drug economies impact on licit sectors of the economy.

MDG 3: *Promote gender equality and empower women*
Gender components are rarely include in illicit drug control programs, despite the fact that women participate in illicit production and trading, and also consume illicit drugs. Women are often subject to human rights violations such as sexual harassment, marginalization, and lack of access to maternal and sexual reproductive health services.

MDG 6, Target 6.A: *Have halted and begun to reverse the spread of HIV/AIDS*
Target 6.B: *Universal access to treatment for HIV/AIDS for all those who need it*
Injecting drug use is a risk factor that fuels transmission of HIV: around 10% of all HIV infections occur due to sharing of needles. Yet, HIV positive drug users continue to be discriminated against, and are denied access to treatment.

MDG 7: *Ensure environmental sustainability*
Eradication of illicit drug crops has negative impacts on the environment and human health.

Source: Melis & Nougier 2010; MDG website www.un.org/millenniumgoals

Thus, it is a critical that further research is done to provide a better understanding of the relationships between SED and illicit drugs, and in order to provide a strong foundation for advocacy with important stakeholders. Widespread acknowledgement of the issue will help to ensure that theory is translated into practice. The majority of countries today still implement punitive drug control measures and treat all those involved in drug economies as criminals. Adopting a development-oriented approach to drug control, underpinned by a fundamental respect for human rights, will require a major shift in mindset but likely result in both enhanced drug control and SED.

References

Adelekan, M & Stimson, G (1997), 'Problems and prospects of implementing harm reduction for HIV and injecting drug use in high risk sub-Saharan African countries', *Journal of Drug Issues*, vol. 27, issue 1, pp. 97-116.

Alexander, BK (2001), *The Roots of Addiction in Free Market Society*, Canadian Centre for Policy Alternatives, Ottawa, viewed 10 October 2010, <http://www.cfdp.ca/roots.pdf>.

Allen, C (1999), 'Africa and the Drugs Trade', *Review of African Political Economy*, vol. 26, no. 79, pp. 5-11.

Allen, CM (2005), *An industrial geography of cocaine*, Routledge, New York.

Alvarez, E (1995), 'Economic Development, Restructuring and the Illicit Drug Sector in Bolivia and Peru: Current Policies', *Journal of Interamerican Studies & World Affairs*, vol. 37, issue 3, pp.125-149.

Aramrattana, A & Jinawat, P (2006), 'Law enforcement and crop substitution in the Golden Triangle', *Development Bulletin*, vol. 69, pp. 49 – 51.

Barrett, D, Lines, R, Schleifer, R, Elliot, R, Bewley-Taylor D (2008), *Recalibrating the Regime: The Need for a Human Rights-Based Approach to International Drug Policy - Report 13:*, The Beckley Foundation Drug Policy Programme, Oxford, viewed 2 November 2010, <www.beckleyfoundation.org/pdf/report_13.pdf>.

Bartilow, AH & Eom, K (2009), 'Free Traders and Drug Smugglers: The Effects of Trade Openness on States' Ability to Combat Drug Trading', *Latin American Politics and Society*, vol. 51, no. 2.

Bastos, FI, Caiaffa, W, Rossi, D, Vila, M & Malta, M (2007), 'The children of mama coca: Coca, cocaine and the fate of harm reduction in South America', *International Journal of Drug Policy*, vol. 18, pp. 99–106.

Bastos, FI, Strathdee, SA, Derrico, M & Pina, MD (1999), 'Drug Use and the Spread of HIV/AIDS in South America and the Caribbean', *Drugs: education, prevention and policy*, vol. 6, no. 1, pp.29-49.

Becker, G & Murphy, K (2005), 'Battle Tactics: The Economics of the War on Drugs,' *The University of Chicago Graduate School of Business*, viewed 2 November 2010, <http://www.chicagobooth.edu/capideas/may05/battletactics.html>.

Bewley-Taylor, D, Hallam, C, Allen, R (2009), *Report 16: The Incarceration of Drug Offenders: An Overview*, The Beckley Foundation Drug Policy Programme, Oxford, viewed 23 November 2010, <http://www.idpc.net/php-bin/documents/Beckley_Report_16_2_FINAL_EN.pdf>.

Block, A (2001), 'Africa.: (Special Issue: The World Geopolitics of Drugs, 1998/1999)', *Crime, Law and Social Change*, vol. 36, i1-2, pp.241-284.

Buxton, J (2006). *The Political Economy of Narcotics: Production, consumption, and global markets*, Fernwood Publishing, Canada.

Byrd, W (2010), 'Responding to the Challenge of Afghanistan's Opium Economy: Development Lessons and Policy Implications', in P Keefer & N Loayza (eds), *Innocent Bystanders: Developing Countries and the War on Drugs*, World Bank, viewed 28 October 2010, <http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2010/03/25/000333037_20100325005015/Rendered/PDF/536410PUB0Inno101Official0Use0Only1.pdf>.

Calvani, S (2006), 'Global trends and key issues on illicit drugs: Drug reduction policies and alternative development', *Development Bulletin*, vol. 68, pp. 10-14.

Centers for Disease Control and Prevention (CDC) (1998), 'Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease', *Morbidity and Mortality Weekly Report (MMWR)*, vol. 47, issue 40, p.1.

Chao-Tzang, Y (1993), 'The Political Economy of the Opium Trade: Implications for Shan State', *Journal for Contemporary Asia*, vol 23, no. 3, pp. 306-327.

Chen, CY & Lin, KM (2009), 'Health consequences of illegal drug use', *Current Opinion in Psychiatry*, vol. 22, no. 3, pp. 287 – 292.

Chouvy, PA (2005a), *Morocco said to produce nearly half of the world's hashish supply*, Jane's Intelligence Review, vol. 17, no. 11, pp. 32-35.

Chouvy, PA (2009), *Opium: Uncovering the Politics of the Poppy*, Harvard University Press, Massachusettes.

Chouvy, PA, (2005b), 'The dangers of opium eradication in Asia', *Jane's Intelligence Review*, vol. 17, no. 1, pp. 26-27.

Chouvy PA & Laniel, L (2006), 'Drug Production and State Stability', SGDN *Secretariat General de la Defense Nationale, CERI Centre d'Etudes et de Recherches Internationales*, viewed 28 September 2010, <http://www.ceri-sciences-po.org/archive/sept06/rapport_ceri_sgdn.pdf>.

Chouvy, P & Laniel, L (2007), 'Agricultural drug economies: cause or alternative to intra-state conflicts?', *Crime Law Social Change*, vol. 48, pp.133–150.

Cohen, PT (2006), 'Help as a threat: Alternative development and the 'War on Drugs' in Bolivia and Laos', *Development Bulletin*, vol. 69, pp. 31-36.

Crofts, N. (2005), 'Hepatitis C associated with Injecting Drug Use', in Pates, R, McBride, A & Arnold, K (eds.), *Injecting Illicit Drugs*, Blackwell Publishing, Oxford, pp. 82-92.

Davis, S, Triwahyuono, A & Alexander, R (2009), 'Survey of abuses against injecting drug users in Indonesia', *Harm Reduction Journal*, vol. 6, no. 28.

De Franco, M & Godoy, R (1992), 'The Economic Consequences of Cocaine Production in Bolivia: Historical, Local, and Macroeconomic Perspectives', *Journal of Latin American Studies*, vol. 24, no. 2, pp. 375-406.

Denton, B (2001), *Dealing : women in the drug economy*, University of New South Wales Press Ltd., Australia.

De Souza, J and Urani, A. (2002), *Brazil Children in Drug* Trading*: A Rapid Assessment*, International Labor Organization, Geneva, viewed 18 November 2010, <http://www.ilo.org/public/libdoc/ilo/2002/102B09_83_engl.pdf >.

Dion, ML & Russler, C (2008), 'Eradication Efforts, the State, Displacement and Poverty: Explaining Coca Cultivation in Colombia during Plan Colombia', *Journal of Latin American Studies*, vol. 40, pp. 399 – 421.

Dolan, K, Khoei, EM, Brentari, C, Stevens, A (2007), *Prisons and Drugs: A global review of incarceration, drug use and drug services - Report 12*, The Beckley Foundation Drug Policy Programme, Oxford, viewed 24 November 2010, <http://www.beckleyfoundation.org/pdf/Beckley_RPT12_Prisons_Drugs_EN.pdf>.

Dupont, A (1999), 'Transnational crime, drugs, and security in East Asia', *Asian Survey*, vol. 39, no. 1999 pp. 433-455.

Elliot, R, Csete, J, Wood, E & Kerr, T, (2006), 'Harm Reduction, HIV/AIDS, and the Human Rights Challenge to Global Drug Control Policy', *Health and Human Rights*, vol. 8, no. 2, pp. 104-138.

Epprecht, M (2000), 'The Blessings of the Poppy: Opium and the Akha People of Northern Laos', *Indigenous Affairs*, no. 4, pp. 16 – 21.

Flynn, S (1993), 'Worldwide drug scourge', *Brookings Review*, vol. 11 no. 1, pp. 6-11.

Garrett, L (2000), *Betrayal of Trust: The Collapse of Global Public Health*, Hyperion, New York.

Goodhand, J (2005), 'Frontiers and Wars: the Opium Economy in Afghanistan', *Journal of Agrarian Change*, vol. 5, no. 2, pp 191 – 216.

Graubner, C (2007), *Drugs and Conflict: How the mutual impact of illicit drug economies and violent conflict influences sustainable development, peace, and stability*, GTZ, Eschborn, viewed 30 September 2010, <http://www2.gtz.de/dokumente/bib/07-0470.pdf>.

Greenfield, V, Paoli, L & Reuter, P (2009), 'Is Medicinal Opium Production Afghanistan's Answer? Lessons From India and the World Market' *Journal of Drug Policy Analysis*, vol. 2, issue 1, Art 3.

Griffiths, P (2005), Transboundary flows and opiate plague in Vietnam. In K. Thomas (Ed.), *Australian Development Studies Network: Illicit drugs and development - critical issues for Asia and the Pacific*. Canberra: Australian Development Studies Network: Illicit drugs and development - critical issues for Asia and the Pacific.

Griffiths, P (2006a), 'Confluence and consequence: globalisation, viscosities and transformation of HIV risk environments in Vietnam', PhD Thesis, RMIT University, Melbourne, Australia.

Griffiths, P (2006b), 'Shot in the Arm', *Development Bulletin*, vol. 68, pp. 59-63.

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) (2003a), *Drugs and Conflict: Discussion Paper by the GTZ Drugs and Development Program*, GTZ, viewed 30 September 2010, <http://www.gtz.de/de/dokumente/en-drugs-conflict.pdf>.

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) (2003b), *Drugs and Poverty: The Contribution of Development-oriented Drug Control to Poverty Reduction*, a cooperative study of the Drugs and Development Programme and the Cooperation Project of GTZ, viewed 1 October 2010, <http://www.gtz.de/de/dokumente/en-drugs-poverty-english.pdf>.

Hacker, MA, Malta, M, Enriquez, M & Bastos F, (2005), 'Human immunodeficiency virus, AIDS and drug consumption in South America and the Caribbean: epidemiological evidence and initiatives to curb the epidemic', *Rev Panam Salud Publica*, vol. 18, issue 4/5, pp. 303–313.

Hansurabhanon T, Jiraphongsa C, Tunsakun P, *et al* (2002), 'Infection with hepatitis C virus among intravenous-drug users: prevalence, genotypes and risk-factor-associated behavior patterns in Thailand,' *Ann Trop Med Parasitol*, vol. 96, pp. 615-25.

Hoaken, P, & Stewart, S. (2003), 'Drugs of abuse and the elicitation of human aggressive behavior', *Addictive Behaviors*, issue 28, pp. 1533-1554.

Human Rights Watch (2010), *Where Darkness Knows No Limits: Incarceration, Ill-Treatment, and Forced Labor as Drug Rehabilitation in China*, Human Rights Watch, New York, viewed 24 November 2010, <http://www.hrw.org/node/87467>.

Hunt, N, Trace, M, & Bewley-Taylor, D. (2003), *Reducing Drug related harms to health: an overview of the global evidence: Report 15*, The Beckley Foundation Drug Policy Programme, Oxford, viewed 22nd November 2010, <http://www.beckleyfoundation.org/bib/doc/bf/2004_Neil_211080_1.pdf>.

Inglehart, R & Welzel, C (2005), *Modernization, Cultural Change and Democracy: the human development sequence*, Cambridge University Press, New York.

International Centre for Science in Drug Policy (ICSDP) (2010), *Effect of Drug Law Enforcement on Drug-Related Violence: Evidence from a Scientific Review*, ICSDP viewed 28 October 2010, <http://www.icsdp.org/docs/ICSDP-1%20-%20FINAL.pdf>.

Inchaurraga, S (2003), 'Drug Use, Harm Reduction, and Health Policies in Argentina: Obstacles and New Perspectives', *Clinical Infectious Diseases*, vol. 37, pp. S336-S.

International Council on Security and Development (ICOS) (2007), *Poppy for Medicine*, ICOS, London, viewed 18 September 2010, <http://www.icosgroup.net/modules/poppy_for_medicine>

International Narcotics Control Board (INCB) (2002), *Illicit Drugs and Economic Development*, Chapter 1 in the Report of the INCB for 2002, viewed 6 October 2010, <www.incb.org/pdf/e/ar/2002/incb_report_2002_1.pdf>.

International Drug Policy Consortium (IDPC) (2008), *The United Nations Review of Global Policy on Illegal Drugs – An Advocacy Guide for Civil Society* (Fourth Version), IDPC, London, viewed 6 October 2010, <http://www.drogasedemocracia.org/Arquivos/idpc_advocacyguide_june08_en.pdf>.

Irwanto, I (2006), 'Indonesia: Facing illicit drug abuse challenges', *Development Bulletin*, vol. 69, pp. 44 – 48.

Jelsma, M (2005), 'Learning Lessons from the Taliban opium ban', *International Journal on Drug Policy*, vol. 16, no. 2, pp. 98-103.

Jonglez, O & Byrd, W (2006), 'Prices and Market Interactions in the Opium Economy', Chapter 5 in *Afghanistan's Drug Industry: Structure, Functioning, Dynamics and Implications for Counter-Narcotics Policy*, Buddenberg, D & Byrd, W (eds), UNODC and World Bank Report, viewed 3 November 2010, <http://www.unodc.org/pdf/Afgh_drugindustry_Nov06.pdf>.

Keefer, P & Loayza, N (eds) (2010), *Innocent Bystanders: Developing Countries and the War on Drugs*, World Bank, viewed 28 October 2010, <http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2010/03/25/000333037_20100325005015/Rendered/PDF/536410PUB0Inno101Official0Use0Only1.pdf>.

Kimber, J, Palmateer, N, Hutchinson, S, Hickman, M, Goldber, D, Rhodes, T (2010), 'Harm reduction among injecting drug users — evidence of effectiveness', *Chapter 5 in Harm reduction: evidence, impacts and challenges Monograph series 10*, European Monitoring Centre for Drugs and Drug Addiction, Lisbon.

Klein, A 1999, 'Nigeria and the Drugs War', *Review of African Political Economy*, vol. 26, no. 79.

Kohl, B & Farthing, L (2001), 'The Price of Success: Bolivia's War Against Drugs and the Poor', *North American Congress on Latin America (NACLA)*, vol. 35, no. 1.

Kramer, T, Jelsma, M, Blickman T (2009), *Withdrawal Symptoms in the Golden Triangle: A Drugs Market in Disarray*, Transnational Institute, Amsterdam, viewed 28 September 2010, <http://www.tni.org/report/withdrawal-symptoms-golden-triangle-4>.

Kruger, P (2010), 'Financial Crisis Fuels Opium Surge in Golden Triangle', *ABC News*, 14 December 2010, viewed 15 December 2010,
< http://www.abc.net.au/news/stories/2010/12/14/3093232.htm>.

Labrousse, A (1990), 'Dependence on Drugs: unemployment, migration and an alternative path to development in Bolivia', *International Labor Review*, vol. 129, no. 3, pp. 333-349.

Lally, K (2010), 'New Alliance for U.S., Russia: Fighting Heroin', *Washington Post*, 31 October 2010.

Louw, E, Servaes, J & Thomas, P (2006), 'Drugs, development and the media: How has the media performed? Can it perform better?', *Development Bulletin*, vol. 68, pp. 36-38.

Lubin, N, Kaits, A & Barsegian, I (2002), *Narcotics Interdiction in Afghanistan and Central Asia: Challenges for International Assistance*, Report to the Open Society Institute, viewed 24 September 2010, <http://www.jezail.org/03_archive/01_narcotics_afgh.pdf>.

Lyttleton, C (2006), 'Opiates to amphetamines: Development and change in the Golden Triangle', (adapted from original article) *Development Bulletin*, vol. 68, pp. 22-26.

Lyttleton, C (2004), 'Relative Pleasures: Drugs, Development and Modern Dependencies in Asia's Golden Triangle', *Development and Change*, vol. 35, no. 5, pp. 909 – 935.

Mac Gregor, FE (ed) (1993)**,** *Coca and cocaine: an Andean perspective*, trans. Cavanagh, J & Underhay, R, Greenwood Press, Westport, Conn.

Maher, L & Dixon, D (1999), 'Policing and Public Health: Law Enforcement and Harm Minimization in a Street-level Drug Market', *The British Journal of Criminology*, vol. 39, no. 4, pp. 488 – 512.

Mansfield, D (2001), 'The Economic Superiority of Illicit Drug Production: Myth and Reality. Opium Poppy Cultivation in Afghanistan,' Paper prepared for the International Conference on Alternative Development to drug control and cooperation. Viewed 1 October 2010, <http://www.davidmansfield.org/data/Field_Work/GTZ/OpiumMythorReality.doc>.

Mansfield, D (2005), *Pariah or Poverty?: The Opium Ban in the Province of Nangarhar in the 2004–05 Growing Season and Its Impact on Rural Livelihood Strategies*, GTZ Project for Alternative Livelihoods in Eastern Afghanistan: Internal Document No. 11, viewed 28 September 2010, <http://www.davidmansfield.org/field_work.php>.

Mansfield, D (2007), *Governance, Security and Economic Growth: The Determinants of Opium Poppy Cultivation in the Districts of Jurm and Baharak in Badakhshan*, Report for GTZ/AKDN, viewed 30 September 2010, <www.gtz.de/de/dokumente/en-eod-report-Badakhshan.pdf>.

Mansfield, D & Pain, A (2006), 'Opium Poppy Eradication: How to raise risk when there is nothing to lose?', AREU Briefing Paper, Kabul, viewed 1 October 2010, <http://www.davidmansfield.org/data/Policy_Advice/AREU/Opiumpoppybriefingpaper.pdf >.

Mansfield, D and Pain, A (2007), *Evidence from the Field: Understanding Changing Levels of Opium Poppy Cultivation in Afghanistan*, Afghanistan Research and Evaluation Unit, Brief Paper Series, viewed 29 September 2010, <http://www.davidmansfield.org/data/Policy_Advice/AREU/EvidenceFromtheFieldOpiumBriefingPaper.pdf>.

Martin, E & Symansky, S (2006), 'Macroeconomic Impact of the Drug Economy and Counter-Narcotic Efforts', *Chapter 2 in Afghanistan's Drug Industry: Structure, Functioning, Dynamics, and Implications for Counter-Narcotics Policy* Buddenberg, D & Byrd, W (eds), UNODC and World Bank Report, viewed 30 September 2010, <http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/Publications/448813-1164651372704/UNDC.pdf>.

Matthews, G, Kronborg, IJ, Dore, GJ (2005), 'Treatment for hepatitis C virus infection among current injection drug users in Australia', *Clinical Infectious Disease*, vol. 4, supplement 5, pp. S325 – 9.

McCoy, A.W. (1991). The Politics of Heroin. CIA Complicity in the Global Drug Trade, New York: Lawrence Hill Books.

McKee, M (2002), 'Substance use and social and economic transition: the need for evidence', *International Journal of Drug Policy*, vol. 13, pp 453-459.

Melis, M & Nougier, M (2010), 'Drug policy and development: How action against illicit drugs impacts on the Millennium Development Goals', *International Drug Policy Consortium*, London, viewed 1 November 2010, <http://idpc.net/sites/default/files/library/Drug%20policy%20and%20development%20briefing.pdf?

utm_source=IDPC+Monthly+Alert&utm_campaign=5a7b06b62a-IDPC_October_2010_Alert10_27_2010&utm_medium=email>.

Mesquita, F (2006), 'The health and social impacts of drugs in Brazil and Indonesia: What it means for development', *Development Bulletin*, vol. 68, pp. 64-66.

Moore, LD & Elkavich, A (2008), 'Who's Using and Who's Doing Time: Incarceration, the War on Drugs, and Public Health', *American Journal of Public Health*, vol. 98, no. 5, pp. 782 – 786.

Morales E (1990), 'Comprehensive Economic Development: An alternative measure to reduce cocaine supply', *Journal of Drug Issues*, vol. 20, issue 4, pp. 629-637.

Navarette-Frías, C & Thoumi, FE (2005), 'Illegal Drugs and Human Rights of Peasants and Indigenous Communities: The Case of Peru', Policy Papers/13, UNESCO, viewed 25 October 2010, <http://unesdoc.unesco.org/images/0014/001402/140241e.pdf>.

Oliveira SAN, Hacker MA, Oliveira MLA, Yoshida CFT, Telles PR & Bastos FI 2005, 'A window of opportunity: declining rates of hepatitis B virus infection among injection drug users in Rio de Janeiro, and prospects for targeted hepatitis B vaccination', *Rev Panam Salud Publica*, vol. 18 issue. 4/5, pp. 271–277.

Open Society Institute (OSI) (2003), *Unintended Consequences: Drug Policies Fuel the HIV Epidemic in Russia and Ukraine*, OSI, New York, viewed 24 September 2010, <http://www.soros.org/initiatives/health/focus/ihrd/articles_publications/publications/unintendedconsequences_20030414/unintended_consequences.pdf>.

Open Society Institute (OSI) (2005), *Protecting the Human Rights of Injecting Drug Users: The Impact of HIV and AIDS*, OSI, New York, viewed 3 November 2010, <http://www.soros.org/initiatives/health/focus/ihrd/articles_publications/publications/rights_20050228/Human%20Rights%20IDUs%20Web%20%28Feb%202005%29.pdf>.

Open Society Institute (OSI) (2010a), *Human Rights and Drug Policy: Compulsory Drug Treatment*, briefing 6 for UN Commission on Narcotic Drugs, viewed 29 October 2010, <http://www.soros.org/initiatives/health/focus/ihrd/articles_publications/publications/briefing-notes-20100306>.

Open Society Institute (OSI) (2010b), *Human Rights and Drug Policy: Crop Eradication*, briefing 6 for the UN Commission on Narcotic Drugs, viewed 29 October 2010, <http://www.soros.org/initiatives/health/focus/ihrd/articles_publications/publications/briefing-notes-20100306>.

Open Society Institute (OSI) (2010c), *Human Rights and Drug Policy: Drugs, Criminal Laws and Policing Practices*, briefing 2 for the UN Commission on Narcotic Drugs, viewed 29 October 2010, <http://www.soros.org/initiatives/health/focus/ihrd/articles_publications/publications/briefing-notes-20100306>.

Parker, RN & Auerhahn, K. (1998), 'Alcohol, Drugs & Violence', *'Annual Review of Sociology,'* vol. 24, no. 1, pp. 291-312.

Peterson, T & Best, D. (2005), 'Overdose: Prevalence, Predictors and Prevention', in Pates, R, McBride, A & Arnold, K (eds.), *Injecting Illicit Drugs*, Blackwell Publishing, Oxford, pp. 149-160.

Petras, J (2001), 'Geopolitics of Plan Colombia', *Monthly Review*, vol. 53, issue 1, pp.30-49.

Poznyak, VB, Pelipas, VE, Vievski, AN, Miroshnichenko, L (2002), 'Illicit Drug Use and its Health Consequences in Belarus, Russian Federation, and Ukraine: Impact of Transition,' *European Addiction Research*, vol. 8, pp. 184-189.

Proctor, M & Johnston, F (2006), 'Illicit drugs and development: AusAID's efforts to combat illicit drug', *Development Bulletin*, vol. 68, pp. 27-30.

Reid, S (2009), 'Injection drug use, unsafe medical injection and HIV in Africa', *Harm Reduction Journal*, vol. 6, no. 24.

Reuter, P, Adams, JL, Everingham, SS, Klitgaard, R, Quinlivan, JT, Riley, KJ, Akramov, K, Hiromoto, S, Mahnovski, S (2004), *Mitigating the Effects of Illicit Drugs on Development: Potential Roles for the World Bank*, Project Memorandum RAND, viewed 1 October 2010, <http://www.gtz.de/de/dokumente/en-wb-effects-drug-dev-afg.pdf>.

Rhodes, T, Lilly, R, Fernandez, C, Giorgino, E, Kemmesis, UE, Ossebaard, HC, Lalam, N, Faasen, I, Spannow, KE (2003), 'Risk Factors Associated with Drug Use: the importance of 'risk environment', *Drugs: education, prevention, and policy*, vol. 10, no. 4, pp. 303 – 329.

Roberts, M, Trace, M, Klein, A (2004a), *Law enforcement and supply reduction: Report 3*, The Beckley Foundation Drug Policy Programme, Oxford, viewed 23 November 2010, <www.beckleyfoundation.org/pdf/report_lawenforce.pdf>.

Roberts, M, Trace, M, Klein, A (2004b), *Thailand's War on Drugs: Drugscope Briefing Paper Number 5*, The Beckley Foundation Drug Policy Programme, Oxford, viewed 23 November 2010 <http://www.beckleyfoundation.org/pdf/paper_05.pdf>.

Roberts, M, Trace, M, Klein, A (2004c), *Assessing drug policy principles and practice: Report 2*, The Beckley Foundation Drug Policy Programme, Oxford, viewed 23 November 2010 < www.beckleyfoundation.org/pdf/report_drugspolicy.pdf>.

Singer, M (2008a), 'Drugs and development: The global impact of drug use and trading on social and economic development', *International Journal of Drug Policy*, vol. 19, pp. 467–478.

Singer, M (2008b), *Drugs and Development: The global impact on sustainable growth and Human Rights*, Waveland Press Inc, Illinois.

Singh, IS (2006), 'Drug use, treatment and development in Northeast India: Case study of female drug use in Manipur', *Development Bulletin*, vol. 68, pp. 87 – 89.

Smith, ML, Thongtham, CN, Sadeque, N, Bravo, AM, Rumrrill, R, Dávila, A (1992), *Why People Grow Drugs*, Panos Publications: London.

Spooner, C & Hetherington, K (2005), *Social determinants of drug use: Technical Report No. 228*, National Drug and Alcohol Research Centre, viewed 4 November 2010 <http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/page/Technical+Report+228>.

Stevens, A, Trace, M, & Bewley-Taylor, D (2005), *Reducing Drug related crime: an overview of the global evidence: Report 15*, The Beckley Foundation Drug Policy Programme, Oxford, viewed 22nd November 2010, <http://www.beckleyfoundation.org/bib/doc/bf/2005_Alex_211081_1.pdf>.

Stevens, A, Bewley-Taylor, D, Dreyfus, P (2009), *Drugs Markets and Urban Violence: Can tackling one reduce the other?: Report 15*, The Beckley Foundation Drug Policy Programme, viewed 28 October 2010 <http://www.idpc.net/php-bin/documents/BFDPP_UrbanViolence_EN.pdf>.

Stöver, H & Michels, II 2010, 'Drug use and opioid substitution treatment for prisoners', *Harm Reduction Journal*, vol. 7, no. 17.

Suwannawong, P (2005), 'We Are Part of the Solution, Not Part of the Problem: Drug Users Struggle for Rights in Thailand', in *Protecting the Human Rights of Injecting Drug Users: The Impact of HIV and AIDS*, OSI Report 2005, viewed 3 November 2010, <http://www.soros.org/initiatives/health/focus/ihrd/articles_publications/publications/rights_20050228/Human%20Rights%20IDUs%20Web%20%28Feb%202005%29.pdf>.

Szirmai, A (2005), *The Dynamics of Socio-Economic Development*, Cambridge University Press: Cambridge, United Kingdom.

Taketa K, Ikeda S, Suganuma N, *et al* (2003), 'Differential seroprevalences of hepatitis C virus, hepatitis B virus and human immunodeficiency virus among intravenous drug users, commercial sex workers and patients with sexually transmitted diseases in Chiang Mai, Thailand,' *Hepatol Res*, vol. 27, pp. 6-12.

Thoumi, F 2002, 'Illegal drugs in Colombia: From illegal economic boom to social crisis', *Annals of the American Academy of Political and Social Science*, vol. 582, pp. 102-116.

Thoumi, FE 1992, 'Why the Illegal Psychoactive Drugs Industry Grew in Colombia', *Journal of Interamerican Studies and World Affairs*, vol. 34, no. 3, pp. 37-63.

Thoumi, FE 2003, *Illegal drugs, economy and society in the Andes***,** Woodrow Wilson Center Press, Washington DC, Baltimore.

Transnational Institute (TNI) (2002), *Alternative Development and Eradication: A Failed Balance*: *TNI Briefing Series No. 2002/4*, TNI, Amsterdam, viewed 27 September 2010 <http://www.tni.org/briefing/failed-balance>.

Transnational Institute (TNI) (2005), *Downward Spiral: Banning Opium in Afghanistan and Burma: TNI Briefing Series No. 2005/2*, TNI, Amsterdam, viewed 27 September 2010 < http://www.idpc.net/php-bin/documents/TNI_BP_OpiumAfghAndBurma_EN.pdf>.

Transnational Institute (TNI) (2008), *Withdrawal Symptoms: Changes in the Southeast Asian drugs market: TNI Briefing Series No. 2008/1 Debate Paper No. 16*, TNI, Amsterdam, viewed 27 September 2010 <http://www.idpc.net/publications/changes-in-southeast-asian-drugs-market>.

Transnational Institute (TNI) (2009), *From Golden Triangle to a Rubber Belt? The Future of Opium Bans in the Kokang and Wa Regions: TNI Drug Policy Briefing No. 29*, TNI, Amsterdam, viewed 27 September 2010, <www.tni.org/briefing/golden-triangle-rubber-belt>.

Tullis, LaMond 1995, *Unintended Consequences: Illegal Drugs and Drug policies in Nine Countries*, Lynne Rienner Publishers, Boulder and London.

United Nations Development Program (UNDP) (article translated from original Spanish version) (2003), Taking narcotics out of the conflict: the war on drugs, viewed 3rd November 2010, <http://www.pnud.org.co/2003/EnglishVersion/Chapter13.pdf>.

United Nations General Assembly, (2010), 'The Report of the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health,' General Assembly Resolution A/65/255, United Nations General Assembly 65th Session.

Joint United Nations Programme on HIV/AIDS (UNAIDS) (1999), *Drug use and HIV/AIDS*, UNAIDS Best Practice Collection, viewed 24 November 2010 <http://data.unaids.org/publications/IRC-pub03/una99-1_en.pdf>.

United Nations Office for Drug Control (UNODC), *Get the Facts About Drugs*, UNODC, viewed 26 October 2010 <http://www.unodc.org/documents/drugs/getthefacts_E.pdf>.

United Nations Office on Drugs and Crime (UNODC) (1994), *Drugs and Development*, viewed 18 September, <http://www.unodc.org/pdf/Alternative%20Development/Drugs_Development.pdf>.

United Nations Office on Drugs and Crime (UNODC) (1995), *The Social Impact of Drug Abuse*, paper prepared for the World Summit on Development in Copenhagen, Denmark held from 6-12 March 1995. Viewed 20 September 2010, <http://www.unodc.org/pdf/technical_series_1995-03-01_1.pdf>.

United Nations Office for Drug Control (UNODC) (2005a), *Alternative Development: A Global Thematic Evaluation*, UNODC, viewed 11 November 2010 <http://www.unodc.org/pdf/Alternative_Development_Evaluation_Dec-05.pdf>.

United Nations Office for Drug Control (UNODC) (2005b), *The World Drug Report 2005 Vol. 1*, UNODC, viewed 28 October 2010, <http://www.unodc.org/pdf/WDR_2005/volume_1_web.pdf>.

United Nations Office for Drug Control (UNODC) (2006b), *Life in the Wa Hills: Towards Sustainable Development*, UNODC, viewed 20 October 2010, <http://www.unodc.org/documents/eastasiaandpacific//myanmar/towards_sustainable_development.pdf>.

United Nations Office on Drugs and Crime (UNODC) (2006), *Opium Poppy Cultivation in the Golden Triangle*, UNODC, viewed 30 September 2010, <http://www.unodc.org/pdf/research/Golden_triangle_2006.pdf>.

United Nations Office on Drugs and Crime (UNODC) (2007a), *World Drug Report 2007*, UNODC, viewed 10 November 2010 <https://www.unodc.org/pdf/research/wdr07/WDR_2007.pdf>.

United Nations Office on Drugs and Crime (UNODC) (2007b), *Morocco Cannabis Survey 2005 Executive Summary*, UNODC, viewed 10 November 2010, <http://www.unodc.org/pdf/research/Morocco_survey_2005_ex_sum.pdf>.

United Nations Office on Drugs and Crime (UNODC) (2009), *From coercion to cohesion: Treating drug dependence through health care not punishment*, UNODC, viewed 18 September 2010, <http://www.unodc.org/docs/treatment/Coercion/Final_eBook_Sept_2010.pdf>.

United Nations Office on Drugs and Crime (UNODC) (2010), *The World Drug Report 2010*, UNODC, viewed 22 September 2010, <http://www.unodc.org/unodc/en/data-and-analysis/WDR-2010.html>.

United Nations Research Institute for Social Development (UNRISD) (2004), *Illicit Drugs: Social Impacts and Policy Responses*; *UNRISD Briefing Paper No. 2*, World Summit for Social Development, viewed 29 September 2010, <http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/4C3D0BE90FAD550480256B6400419B57/$file/bp2.pdf>.

Whynes, D (1991) , 'llicit Drug Production and Supply-side Drugs Policy in Asia and South America', *Development and Change*, vol. 22, issue 3, pp. 475-496.

Wacziarg, R & Welch, KH (2008), 'Trade Liberalization and Growth: New Evidence', *World Bank Economic Review*, vol. 22, no. 2, pp. 187-231.

Wilkinson, R & Picket, K (2010), *The Spirit Level: why equality is better for everyone*, Penguin Books, London.

Wodak, A (2006), 'The current status of harm minimisation in Australia', *Development Bulletin*, vol. 68, pp. 39-43.

Wood, E, Spittal, PM, Small, W, Kerr, T, Li, K, Hogg, RS, Tyndall, MW, Montaner, JSG, Schechter, MT (2004), 'Displacement of Canada's largest public illicit drug market in response to a police crackdown', *Canadian Medical Association Journal*, vol. 170, no. 10, 1551-6.

World Bank (2004), *Afghanistan: State Building, Sustaining Growth, and Reducing Poverty: A Country Economic Report; Report No. 29551-AF*, World Bank, viewed 29 September 2010, <http://siteresources.worldbank.org/INTAFGHANISTAN/News%20and%20Events/20261395/AfghanistanEconomicReportfinalversion909.pdf>.

Yongming, Z (1999), *Anti-Drug Crusades in Twentieth-Century China: Nationalism, History, and State Building*, Rowman & Littlefield Publishers Inc, United States of America.

Annex 1

Understanding the interrelationships between illicit drug production, trade, and consumption and socioeconomic development in the context of South Asia

Case Study 1: Manipur State, India

Case Study 2: Helmand Province, Afghanistan

Case Study 3: Punjab, Pakistan

Case Study 4: Kathmandu, Nepal

Annex 2

Understanding the interrelationships between illicit drug production, trade, and consumption and socioeconomic development in the context of South East Asia

Case Study 1: Methadone Maintenance Therapy in Vietnam

Case Study 2: Large Scale Infrastructure Projects in the Mekong Region

Case Study 3: Alternative Development in Burma

Case Study 4: Methamphetamines in South East Asia

Socio-Economic Development and Illicit Drug Use in Manipur

Introduction

Manipur, one of the seven north-eastern states of India has long been a transit route for illicit drugs originating from countries of the "Golden Triangle[7]". The states of Nagaland, Mizoram and Assam border this landlocked region on the north, south and west respectively, while to the east, Manipur shares a porous border, stretching 365.5 km, with Myanmar (Manipur Police, 2010). The total population of the state is around 2.3 million people (2001 Census provisional figure). The terrain consists of largely remote and forested hilly areas except the valley region which is relatively more developed. Access to the rest of India remains difficult owing to poor communication facilities and only two states (Assam and Nagaland) in the North-east Region have rail entries. Manipur is ethnically diverse with both affinities and conflicts existing between people living in the north-eastern states and neighbouring countries. Manipur itself remains fiercely independent from India despite being under Indian control.

Manipur has evolved from being an illicit drug trading state to a drug trading and drug consuming – and latterly, producing – state. The interrelationships between drug trading, drug using and socioeconomic development are explored in this case study.

The Myanmar Connection

The history of non-state action in Manipur dates back to 1917. This was under the leadership of Hijam Irabot[8] who wanted to introduce communism in the state but met with failure. Until the 1960s, the various groups pursued their political struggle without violence. This changed when the Nagas began training in China, followed by other non-state actor groups. The situation changed again in the 1970s when China made a foreign policy decision to stop supporting revolutionary groups around the world, including those in north-east India. As a result, non-state actor groups in the north-east turned to similar groups in Myanmar who had camps all along the Indo-Burmese border (Nepram, nd). The north-east non-state actors began being trained with the Burmese rebel groups and the development of an in illicit drug industry soon followed; the Burmese rebels obtained cover and protection for their drug production and trading activities in exchange for training non-state actor groups from the north-east (Nepram, nd). Once the Burmese and north-eastern non-state actor groups linked up, the number of these groups proliferated. In the case of Manipur, it had three such groups until the 1980s: the People's Liberation Army (PLA), then the People's Revolutionary Party of Kangleipak (PREPAK) and the Kangleipak Communist Party, which started the massive armed struggle to liberate Manipur from India. By 1986, United National Liberation Front (UNLF) emerged as a dreaded outfit in the non-state actors organizations (Singh, 2008). By the 1990s, the non-state actor groups had increased to 27 (Nepram, nd). Among many, the main violent groups operating in the state at present are the People's Liberation Army (PLA), the United National Liberation Front (UNLF), the Manipur People's Liberation Front (MPLF), the Kanglei Yawol Kanna Lup (KYKL) and the Kuki National Liberation Front (KNLF).

[7] Thailand, Myanmar and Laos

[8] Hijam Irabot Singh (30 September 1896-26 September 1951), also known as Jana Neta Hijam Irabot, was an active political and social activist during the British rule in Manipur.

The Drug Connection

Considering the underdevelopment of Manipur and the underlying political issues, control over drug trading, and more recently illicit drug cultivation, became and continues to be an important source of income (other than fines and collection of taxes from local populations). Moreover, the presence of armed groups facilitates drug-trading and villagers are at the mercy of whoever controls their area. The drug lords and traders in Manipur cooperate with the non-state actor groups and both these groups engage in a lot of exchange of drugs and weapons (Bhatia, 2009). At least two of the non-state actors groups of Manipur – the PLA and the UNLF – have been closely associated with drug trading, although outwardly they project an anti-drugs stance – such as through frequent public displays of destroying illicit drugs and harsh penalizations of drug users (Bhatia, 2009).

Consequences of Trade on Illicit Drugs

Drugs related issues started taking root in Manipur in the late seventies and early eighties with the opening of international commercial routes from India's north-east (Chauvy, 2002). Manipur was also recognized as a major alternative route for the movement of illicit products from the Golden Triangle (Lama, 2001). Trading through north-east India emerged as a response to the joint U.S.-Thai Operations in the 1990s that had negative impacts on trading of heroin towards south-east Asia (Crofts, 2000). The state's neighbouring country,Myanmar, was beginning to start a historical trail of drug production during a time when Manipur was in a transition phase- being incorporated in the Indian subcontinent, with a wave of discontent running through the local population. Many of the abused substances come from Myanmar through Moreh and find their way to other parts of north-east India.

Economic development in Manipur: A story of failure

Trends of Manipur's economy for the last two decades show that there is hardly any change in the pre-liberalisation and the post-liberalisation period. Average growth of Manipur's economy in the 80s was roughly similar to the growth trends in the nineties while that of the country has grown faster than the 80s, indicating that the economy of the state has not been able to take any advantage from the high growth rates of the national economy (Sachdeva, 2007). At the same time, central assistance has only helped to avert any major decline (Sachdeva, 2007). The entire range of territorial reorganization in the region has overlooked economic reform. Economically, Manipur is one of the most underdeveloped states in north-east India. The state depends on other states and also to a large extent on Myanmar for about 90% of its requirement for essential commodities (Verma, 2008). Apart from being a special category state, receiving 90% of funds and 10% loans as central assistance, all districts in Manipur are among "no industry" districts ever since the 1980s (Verma, 2008).

Chronic Unemployment and Corruption: Invitation to a career in Drug Use

The abysmally poor economic condition of the state results in other major challenges, especially unemployment and corruption. The opportunity of making quick money is pervasive amongst government officials including the local police, military and paramilitary officials and politicians. For example, the local police receive free drugs

and sex and are known to have close connections with drug and alcohol establishments making the sale of illegal products easy and accessible (Jaycob, 2008). The Assam Rifles, engaged in anti-non-state actor group operations on highways in Manipur have been accused of demanding bribes from passing truck drivers (The Indian News, 2008). In similar terms Bhaumik points out "*Several military and paramilitary officials have been arrested for smuggling heroin or lesser drugs in north-east India. The drug cartel has sucked in several politicians, bureaucrats and even security force officials to carry on their illicit trade*." The extent of corruption and proper functioning of the governance delivery systems has ensured that the expenditures do not get translated into results on the ground as more funding from the Central government has only meant more corruption and has not resulted in more development (Lama, p. 244). The deprivation of the people is further accentuated due to extortions and mal-administration which is rampant (Nayar, nd). Political leaders and bureaucrats have consistently used their offices to siphon off developmental funds at the cost of real development (Nayar, nd).

Drug Use in Manipur

With an estimated IDU prevalence of 8% (among age group 15-65) the state stands prominent among developing and transitional countries (Aceijas et. al, 2006). Most of the drug users get involved with drugs at a young age. Karmode *et al*. concluded that children as young as 13-15 years were prone to be exposed to drugs in Manipur in casual and social settings. The drug user population itself is young, between 15 and 30 years (Sarkar, 1991), their age (median 24 years) and sex patterns (95% male) differs from western countries (Ralte, 1992). Almost half of IDUs in Manipur (47%) are initiated into injecting before the age of 21 years (compared to 24% for India), and 86% by 26 years (compared to 56% for India) (National AIDS Control Organization, 2006).

HIV prevalence among IDUs in Manipur has been as high as 80%. IDUs are more likely to be well-educated, younger, unmarried and remain living with their families (Dorabjee, 2000). This is consistent with the picture of a young population with limited domestic and financial role and responsibility as adults. Work done by Kermode *et al* and many others has shown that economics (others being seeking of pleasure and influence of peers) is an explicitly stated reason for initiating drug use (Crofts *et al*., 1996; Frajzyngier *et al*., 2007; Giddings *et al*., 2003; Roy *et al*., 2002; Witteveen *et al*., 2006; Kermode *et al*., 2007). Further in the same study, drug users dependent on oral SP or chasing heroin mostly provided economic reasons such as a shortage of money and/or drugs, for the decision to start injecting. These young drug users, especially men, admitted the fact that they had a lot of time on their hands, and drug use including injecting drug use was a way of occupying time (Kermode *et al*., 2006).

Shifting patterns in drug use

The practice of injecting started in early 1980s in Manipur (Jaycob, 2008; AIDS Alert, 2001). Originally, the commonly injected drugs include tranquilizers and Methaqualone shifting to injectable Morphine and Pethidine. Later, heroin locally known as Number 4 became the most widely used drug among youth, and heroin addiction reached an explosive stage in 1984 (AIDS ALERT, 2001). By 1985, heroin

became the substance of choice in the state (Jaycob, 2008). The injecting of Spasmo-Proxyvon (SP) became more common following intensified anti narcotics activities in Myanmar which led to restricted supply and increased price of heroin in the region (Kishalaya Dodo, 2004). What is more worrying about the 'Golden Triangle' is the eight-times rise in the production of amphetamines from an estimated 100 million tablets in 1993 to 800 million tablets in 2002 (Bhaumik, 2005). Recent seizures of amphetamine tablets in north-east India clearly indicates that focus in the patterns of drug abuse in the region remains dynamic and liable to change depending on demand and supply variables.

References

Akoijam AB, 2001, "How History Repeats Itself", *Economic and Political Weekly* Vol. 36 No. 30 (Jul. 28 - Aug. 3, 2001), pp. 2807-2812

Beyrer, C., Razak, M. H., Lisam, K., Chen, J., Lui, W., Yu, X.-F. (2000). Overland trading routes and HIV-1 spread in south and south-east Asia, *AIDS*, 14:75–83.

Bhagat R, 2002, "In a Vicious Circle", *Frontline*, Volume 19 - Issue 15, July 20 - August 02, 2002, Viewed on 13th November 2010, http://www.hinduonnet.com/fline/fl1915/19150420.htm

Bhaumik S, 2005, "Guns, Drugs And Rebels", *Seminar*, June 2005. Available at http://www.india-seminar.com/2005/550/550%20subir%20bhaumik.htm

Bhaumik S, 2005, "Guns, Drugs And Rebels", *Seminar*, June 2005. Viewed on 11th November 2010, http://www.india-seminar.com/2005/550/550%20subir%20bhaumik.htm

Myanmar Prospect – Focus on Myanmar Issues, Bangkok, February 2002

Chandrasekaran P, Dallabetta G, Loo V, Rao S, Gayle H, Alexander A: Containing HIV/AIDS in India: the unfinished agenda. *Lancet Infect Dis* 2006, 6:508-21]

Chauvy, July 1, 2002, "New Drug Trading Routes in Southeast Asia", Jane's intelligence review, Systematic Transnational Crime, Viewed on 17th November 2010, http://www.geopium.org/JIR2.htm

Committee on Human Rights (CHOR), 2008, "Submission Of COHR, Manipur on Human Rights Situation in Manipur to OHCHR", The Universal Periodic Review of The Government of India, Human Rights Council, Office of the High Commissioner of Human Rights, April 2008. Viewed on 18th November 2010, http://lib.ohchr.org/HRBodies/UPR/Documents/Session1/IN/COHR_IND_UPR_S1_2008_CommitteeOnHumanRights_uprsubmission.pdf

Crofts N, 2000, "Its Everyone's Problem: HIV/AIDS and Development in Asia and the Pacific", Harm Reduction: Injecting Drug Use, Paper presented at the Australian Agency for International Development (AusAID), Special Seminar, November 22, 2000:

Dorabjee J, Samson L: A multi-centre rapid assessment of injecting drug use in India. Int J Drug Policy 2000, 11:99-112.

Hassan MS, 2006, "Explaining Manipur's Breakdown and Mizoram's Peace", Developmental Studies Institute, Working Paper NO. 7, Viewed on 18th November 2010, http://eprints.lse.ac.uk/28150/1/wp79.pdf

Hodson, TC, *The Meitheis*, London: Macmillan & Co., 1908.

Hodson, T.C., *The Naga* Tribes of Manipur, London: Macmillan & Co. 1911.

Imphal Free Press, 2010, "*Manipur tops opium seizure, Nagaland ganja*", full story headlines, Imphal free press, Viewed on 12th November 2010, http://ifp.co.in/shownews.php?newsid=9889

INCB Annual Report 2003,

Indian Millitary Forum, http://www.indian-military.org/forum/view-postlist/forum-12-strategy-doctrines-and-war-gaming/topic-146-indias-Myanmar-policy.html

Jagen, L 2003, "*SE Asia Remains Drug Hot Spot*", BBC Online, http://news.bbc.co.uk/2/hi/asia-pacific/2799629.stm

Jaycob, H 2008, *Impact of HIV/AIDS on Governance in Manipur and Nagaland ASCI Research report no. 6*, Viewed on 11th November 2010, http://asci.researchhub.ssrc.org/impact-of-hiv-aids-on-governance-in-manipur-and-nagaland/attachment

Jaycob, H 2008, *Impact of HIV/AIDS on Governance in Manipur and Nagaland ASCI Research report no. 6*

Kanglaonline, 2010, "*Unemployment about to touch 7 lakh mark*", Viewed on 11th November 2010, http://kanglaonline.com/2010/09/unemployment-about-to-touch-7-lakh-mark/

Kanglaonline, 7th November 2010, "*Incredible Manipur, Manipur's Reality*", letter to the editor from D.S.Mayanglambam, Viewed on 11th November 2010, http://kanglaonline.com/2010/11/incredible-manipur-manipurs-realities/

Kermode M, Longleng V, Chingsubam SB, Hocking J, Langkham B and Crofts N 2007, "My first time: initiation into injecting drug use in Manipur and Nagaland, north-east India" *Harm Reduction Journal*, 4:19

Kishalaya Dodo, N. (2004). *Injection Impossible, Injecting non-injectable drugs*. IHRNewsletter, 34, April. Chiang Mai: Asían Harm Reduction Network

Lintner B 2002, '*Ethnic Movements in Myanmar: From Non-state actor groups to Terrorism'*, paper deliver at seminar on Terrorism and Low Intensity Conflicts in South Asia, held in Jadavpur University

Manipur Legislative Assembly, " Address by His Excellency, the Governor of Manipur, Shri Chintamani Panigrahi to the Manipur Legislative Assembly on 22.1.1990", Summary list of Governor's address, Governor's Address, 1990 (a), viewed on 12th November 2010, http://manipurassembly.nic.in/html/gov_add90(a).htm

Manipur Police, "*Narcotic affairs of Border*", Manipur Police, Viewed on 12th November 2010, http://manipurpolice.org/nab.htm

Manipur Police,"*Narcotics and Affairs of Border*", Viewed on 12th November 2010, http://manipurpolice.org/nab.htm

Ministry of Social Justice and Empowerment, Government of India & UNODC Regional Office for South Asia, 2004.National Survey on Extent, Pattern and Trends of Drug Abuse in India

Mittal Publications, 1998, p.44.

N. Lokendra Singh, *The Unquiet Valley: Society, Economy and Politics in Manipur* (1891-1950), New Delhi:

National AIDS Control Organization: National Baseline High Risk and Bridge Population Behavioural Surveillance Survey Part II - MSM and IDUs. Ministry of Health and Family Welfare, India 2002.

National AIDS Control Organization: National Baseline High Risk and Bridge Population Behavioural Surveillance Survey Part II - MSM and IDUs. Ministry of Health and Family Welfare, India 2002

Nayar, nd, "India's Internal Security Compulsions", Planning commission Government of India, Reports, Viewed on 12th November 2010, http://planningcommission.nic.in/reports/sereport/ser/vision2025/intnlsec.pdf

Nepram, B nd, "*Gun Wars and Drug Deaths in South Asia: A Narrative of Armed Ethnic Conflict, Narco*-Trading *and the Spread of Small Arms in North-east India*", e-pao, Viewed on 11th November, 2010, http://www.e-pao.net/epSubPageExtractor.asp?src=leisure.Essays.Gun_Wars_and_Drug_Deaths_in_South_Asia

North-east Network, "Pleasure Plants or Killer Herbs" north-eastnetwork.org, Viewed on 11th November 2010, http://www.north-eastnetwork.org/newsletters/herbs.pdf

Ralte M, Sarkar S, Panda S 1992, "*Drug addiction and HIV infection in Mizoram*", paper presented at the Second International Congress on AIDS, Asia and the Pacific, held at New Delhi from 8 to 12 November 1992.

Ray, A.K 1996 "*Territorial issues in Manipur" Reorganization of the North-east since 1947*, p251 Viewed on 18th November 2010,

http://books.google.co.in/books?id=v44gVIFltgQC&pg=PA257&lpg=PA257&dq=the+Chin+Unification+and+the+Zomi+Unification+movements+implications+ray&source=bl&ots=6J-FHCQt1K&sig=3_906X1qCuABjwJhez-1qiIMcvA&hl=en&ei=clHmTImwBYTuvQOju8HCCA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CBYQ6AEwAA#v=onepage&q&f=false

Ray, DB, Agrawal SP 1996, *Reorganization of North-east India since 1947*, concept publishing company, New Delhi, Viewed on 10th November 2010, http://books.google.co.in/books?hl=en&lr=&id=v44gVIFltgQC&oi=fnd&pg=PA251&dq=manipur+merger+india&ots=6J_OKBOo4M&sig=PiL16NNi36ko4Tw_x-dElmd0NFk#v=onepage&q=manipur%20merger%20india&f=false

Roy SK, 2005, "Conflicting Nations in North-East India", Economic and Political Weekly, May 21, 2005, p. 2177.

Sachdeva G, 2007, "Preparing the north-east economy for the future- Manipur economy", Political Economy: Transformations, Challenges & Prospects, Manipur Research forum, Viewed on 11th November 2010, http://www.manipurresearchforum.org/manipur_eco_gulshan_arch3.htm

Sanajaoba, N., Manipur: A British Anthology, New Delhi: Akansha Publishing House, 2003. R Brown's account of Kuki Villages (Qouted)

Sanjay K. Roy, "Conflicting Nations in North-East India", Economic and Political Weekly, May 21, 2005, p. 2177

Sarkar MP, Roy A, Naik TN, Singh JK, Sharma AR, 1991, :Descriptive epidemiology of intravenous heroin users—A new risk group for transmission of HIV in India" *Journal of Infection* Volume 23, Issue 2, Pages 201-207doi:10.1016/0163-4453(91)92364-B.

Singh M, Singh DP, 2008,"Voilence Impact and Interventions", Atlantic publishers and distributors, New Delhi, Viewed on 11th November 2010, http://books.google.co.in/books?hl=en&lr=&id=38SwtIHR11QC&oi=fnd&pg=PA94&dq=non-state actor groups+drugs+manipur&ots=SwXaXF_s4e&sig=sOLb5Um27gN29HtSkXwYh8PstY4#v=onepage&q&f=false

Sinlung, 2010, "Manipur Becomes a Poppy Producer for the Golden Triangle", The Sangai Express, Viewed on 12th November, 2010, http://www.sinlung.com/2010/02/manipur-becomes-poppy-producer-for.html

Sinlung, March 17, 2010,"Manipur Declares War on Poppy Cultivation", Thupui blog, Viewed on 12th November 2010, http://thupui.blogspot.com/2010/03/manipur-declares-war-on-poppy.html

Talukdar S, Fighting AIDS in Manipur, The Hindu, Aug 16, 2005

Thaindian News, "Assam Rifles in Manipur Accused of Extortion", Theindiannews, Viewed on 12th November 2010, http://www.thaindian.com/newsportal/world-news/assam-rifles-in-manipur-accused-of-extortion_10018622.html

UNODC. (2006). Drug use in the north-eastern states of India. UNODC. Retrieved November 30, from http://www.unodc.org/india/en/publications.html.

Verma SB, Sharma MK, Sharma KN, *Better Quality of Rural Life, North-east Regions, Tribal Dalit Areas*, Vol 2, Swarup & Sons, New Delhi, p362-367.

Socio-Economic Development and Illicit Drug Cultivation: The Case of Helmand, Afghanistan

Introduction

The opium poppy has been grown in Afghanistan for hundreds of years, largely for medicinal and local consumption purposes (Graubner 2007). Following the invasion of the Soviets in the late 1970s the production of illicit opium increased due to the lack of viable alternatives that had been either destroyed by the conflict or suffered through political instability and poor economic development. Opium became an important cash crop for poor rural farmers and an important income source for warlords (Graubner 2007). Following the withdrawal of the Soviet troops in 1989 the country was subject to further violence through civil war and more recently through an occupation aimed at dismantling the Taliban regime. Afghanistan is currently the world's largest supplier of opium, accounting for around 66% of global production in 2009 (UNODC 2010). The cycle of opium farming in Afghanistan continues due to the combination of under-development and poor governance and ongoing war and conflict (Chouvy & Laniel, 2006; Mansfield & Pain, 2007).

In this case study, we illustrate the interrelationships between illicit drugs and development in Helmand, Afghanistan. Helmand is the largest province in Afghanistan and the country's largest producer of opium.

Helmand: A socio-economic profile

Helmand constitutes close to 8.9% of national territory, and is located in the south-eastern region of Afghanistan bordering Pakistan. (Central Statistics Office (CSO), 2005). The province is characterized by rugged mountainous or semi-mountainous and dry terrain, and its major source of water is the Helmand River (Ministry of Rural Rehabilitation and Development (MRRD), 2006). Only 2.5% of the province's land is irrigated and with an annual rainfall averaging about 4 inches. Villages are mainly concentrated around the flood plains of the Helmand River and smaller rivers in the northern areas. Helmand is the third most populous province of Afghanistan, home to an estimated 6.2% of the country's population – the majority of whom (94%) reside in rural areas (UNFPA, 2005; CSO, 2005). Correspondingly, agriculture is the main economic activity in the region, constituting the main source of revenue for 69% of households in the province (Senlis Council 2006). The main crops cultivated are wheat, corn, and the opium poppy (Senlis Council 2006). Other important economic activities include animal husbandry, running of transport companies, as well as trading of narcotics. Around one fifth of households in Helmand earn income through non-farm related labor (UNFPA, 2006).

The residents of Helmand endure substantial social and economic hardship. A quarter of all households report problems in satisfying their food requirements almost six times in a year, and only about half of the population in the province consumes the minimum daily amount of calories necessary to maintain good health (MRRD, 2005). In line with these problems of food security, the majority of loans taken by households are for the purpose of fulfilling their food related needs. The dismal situation of such households is worsened due to other acute vulnerabilities related to

poor agriculture, lack of drinking water, natural disasters and migration. In addition, educational infrastructure is weak and literacy levels are low. The vast majority of districts have no access any form of health service (MRRD, 2007).

Security in Helmand remains extremely unstable; it is considered by some as the most volatile province in Afghanistan (Provincial Development Plan, Helmand: *Provincial Profile*). The presence of insurgent groups – Al-Qaeda, foreign jihadists, the Afghan Taliban, drug lords – as well as tribal rebels is significant though the extent of activities and violence varies across areas in the province. In most areas, the government and International Security Assistance Forces (ISAF) have no or weak control (MRRD, 2005). Most of these groups are concentrated around economic centers and areas where lucrative resources are found (Dressler 2006).

Illicit opium in Helmand and attempts at socioeconomic development

Last year Helmand produced 65,045 ha of opium, 53% of total opium cultivation in Afghanistan (UNODC, 2010). The profit gained by drug dealers and traders as it reaches its consumers across the world exceeds US$1 billion (Senlis Council, 2006). Approximately 55,000 households in the province, which amounts to around 380,000 people, are dependent on opium poppy cultivation; this represents more than a third of the province's total population (Senlis Council, 2006). The border between Helmand and Pakistan forms part of the so-called Durand Line, created by the British Indian government in 1893 to divide the Afghan tribes present in the region.

The Helmand Valley Project was one of the largest and most ambitious developmental endeavors undertaken in Afghanistan; unfortunately it was also a huge failure. During initial years of this development project anti-narcotic measures taken by the government and international agencies funding the project were by and large helpful in controlling the opium crop. Extended services for development were introduced during the 1960s. The US government and farmers especially in central Helmand had official anti-narcotics agreements and narcotics were not cultivated in US supported Irrigation project areas. The farmers to some extent were forced to plant cotton in a percentage of their land in order to promote it as a cash crop (Scott, 2007). Many alternative cash crops like vegetables and watermelons were also introduced but due to low revenue that these crops generated and lack of accessible markets, they found less interest among the farmers. Further political developments led to an increase in payments and incentives paid by the government and international organizations for the cotton crops (Scott, 2007) which led to good compliance.

The invasion of the Soviets in 1979 marked the most important event that led to a massive destabilization in Afghanistan's political as well as economical structure. The irrigation development projects suffered, infrastructure of the cotton industry on which the farmers of central Helmand were by now dependent, was progressively being destroyed as a side effect of the war and the Mujahidin rigorously propagated poppy cultivation to finance their fight against the Soviets (Scott, 2007). After the Soviets left Afghanistan in 1988-1989, efforts directed against opium cultivation were more or less ineffective in breaking the hold of poppy cultivation (Scott, 2007).

Influence of political instability and economic interests

The Taliban leader Mullah Omar banned the cultivation of opium in 1999 to which there was virtually full compliance in Helmand (Scott, 2007). This compliance can also be partly attributed to the pulling out of funding from international donors and also to lowering of opium prices (Scott, 2007). Significant reductions in opium poppy cultivated were not sustained through the second year. The ban led to a rise in farm gate prices (increasing from US$ 100 to US$ 500 per kg between September 2000 and July 2001), as well as an exponential rise in the value of opium-denominated debt on farmers (Mansfield, 2005). Advance payments of $50 per kg on the future opium crop were converted into cash debts at the prevailing market price of US$ 500 per kg. For these farmers, saddled with high levels of accumulated debt, maximizing the amount of land they allocated to opium poppy was their only means of raising enough funds for repayment (Mansfield, 2005).

The fall of the Taliban rule in 2001 and the absence of formal governance contributed to making opium poppy cultivation an attractive option across the province and with the chaos and uncertainties connected with the change in government, the farmers of Helmand took a gamble in their own interest and started planting poppy in their fields (Scott, 2007). According to the analysis by Senlis Council in the year 2005, 26,500 ha were dedicated to poppy cultivation compared to 80,000 ha dedicated to wheat cultivation (Poppy representing around 33% area compared to wheat cultivated areas). While the average dry opium yield (kg/ha) in Helmand Province was estimated at around 38 kg/ha, compared to the average yield of wheat which was estimated at 2700 kg/ha. The total opium yield reached 1,000 metric tons at a price of US$5,400 per ha –ten times more than the equivalent price of wheat. Hence, the total value of opium produced in Helmand Province reached a staggering US$143 million, compared to the total value of wheat produced at only US$44 million (Senlis Council, 2006).

Over the years, Helmand has emerged as a key area for money laundering in Afghanistan where about 60% of the funds are drug related and 80-90% of the money transfers among Helmand's *hawala* dealers are narcotics related (UNODC, 2010). In a sense, opium poppy cultivation has also become a "traded commodity" on which key power holders hedge their bets the opium is traded not just as a source of illicit opiates but as a source of development assistance and power for regional and national powerbrokers in Helmand province.

Drug control strategies in Helmand

The Afghanistan National Drug Control Strategy actually acknowledges the diversity among opium poppy cultivating households in its text, and calls for targeting interventions accordingly (Mansfield, 2005). There are even calls for targeting the opium crops of the "greedy" not the "needy" with eradication. But in practice, eradication has typically targeted the "needy", not the "greedy (Mansfield, 2005). Resources however are more focused into aggressive strategies such as crop eradication without providing alternative livelihoods programs to address the opium crisis (Senlis Council, 2006). Further, the inconsistent nature of eradication policies carried out by government and international forces throughout Helmand Province have led to increasing resentment among the local population towards the government and international donors.

Corruption

The plan to break the opium trade is vulnerable to localized corruption. While a considerable proportion of revenue from poppy cultivation goes to the Taliban, corrupt law enforcement and government officials also make use of the huge industry. Afghan National Police (ANP) and the Afghan National Army (ANA) are state institutions operating in Helmand. The ANP is also underpaid; non-trained police officers are paid approximately US$15 per month while trained officers receive US$ 64-70 per month (Senlis Council, 2006). While the Police in the provincial capital are reportedly paid regularly, police forces in more remote areas allegedly have difficulty receiving payments for many months. As a result many ANP officers live off bribes from criminal networks involved in the opium trade as well as from the insurgents (Senlis Council, 2006). Afghan police have also been accused of accepting bribes to leave certain fields alone (Associated Press, 2009).

Conclusions

As a case study, the example of Helmand highlights the many aspects of the complex relationship between illicit drugs, illicit drug policies and development. Violence, conflict, corruption, poverty and poorly considered development policies have meant that Helmand should not just be a case study of these complex interrelationships but an opportunity to consider what has not worked in the past and what is needed in the future.

References

Aghanistan Information Management Services, http://www.aims.org.af/sroots.aspx?seckeys=123&seckeyo=53&seckeyz=39

Ahmad A, 2010, "*Helmand's Poppy Growth Surges*", South Asia, Asia times online, Viewed on 20th November 2010, http://www.atimes.com/atimes/South_Asia/LE01Df06.html

Culture and Conflict Studies, 2009, *Heroin production in Afghanistan: Helmand, Nangaehar and Badakhashan*, Viewed on 20 October 2010, <http://www.nps.edu/Programs/CCS/Docs/Opium/Heroin_processing.pdf>

Cutruis, A 2009, '*The Lost history of Helmand'*, Market Oracle website, Viewed on 20 October 2010, < http://www.marketoracle.co.uk/Article14411.html>

Dressler, AJ 2009, "Securing Helmand, understanding and responding to the enemy", Afghanistan Report 2, Institute for the study of war, http://www.understandingwar.org/files/SecuringHelmandPDF.pdf

Email Memos on Helmand Counter Narcotics, 2003- present, Scotts Helmand Valley Archive, Viewed on 20October 2010, <http://scottshelmandvalleyarchives.org/main.html>

Ghotbi, N, Tsukatani, T 2002, Poppy *fields in Afghanistan and its implications for the development of a healthy agriculture*, viewed on 20 Oct 2010, <http://www.kier.kyoto-u.ac.jp/DP/DP555.pdf>

IRIN Asia, 2010, "AFGHANISTAN: War of words over Marjah displaced", Viewed on 26th October 2010, < http://www.irinnews.org/Report.aspx?ReportId=89003>

Mansfield, D 2001, *Evidence from the Field: Levels of opium cultivation in Afghanistan*

Mansfield, D 2005, *Responding to the Challange of Diversity in Opium Poppy Cultivation in Afghanistan, World Bank*, Viewed on 25 October, 2010, Responding to the Challange of Diversity in Opium Poppy Cultivation in

Mansfield, D 2007, *Counter-Narcotics Mainstreaming in ADB's Activities in Afghanistan*, 2002-2006, Viewed on 25 October 2010, < http://www.adb.org/Documents/Assessments/Other-Assessments/AFG/Counter-Narcotics-Mainstreaming.pdf>

Mansfield, D 2007, *The Economic Superiority of Illicit Drug Production: Myth and Reality Opium Poppy Cultivation in Afghanistan*, Prepared for International Confrence on Alternate Development and Drug Control, Feldafing, Viewed on 20 October 2010, www.davidmansfield.org/data/Field.../OpiumMythorReality.doc

Ministry of Rural rehabilitation and Development and Central Statistical Office, nd, Provincial Development Plan, Helmand; Provincial Profile, MRRD &CSO, Afghanistan, viewed on 20 October 2010, <http://www.mrrd.gov.af/nabdp/Provincial%20Profiles/Helmand%20PDP%20Provincial%20profile.pdf>

MRRD, Afghanistan, http://www.mrrd.gov.af/English/index.htm

Scott, RB 2008, "*Reconstruction and Opium Poppy Cultivation in Central Helmand*", Confrence on Afghanistan's Reconstruction: the future, Viewed on 20th November 2010, http://scottshelmandvalleyarchives.org/docs/cph-08-02.pdf

Scott, RB 2007, *Opium Poppy Cultivation in Central Helmand, Afghanistan: A Case Study in Bad ad Program Management*, The Society for Applied Anthropology, 67th Annual Meeting, 18 pp. Viewed 25 October 2010, < http://scottshelmandvalleyarchives.org/docs/cph-07-01-1.pdf>

Senlis Council, 2006, "*Helmand at War: The changing nature of the Insurgency in Southern Afghanistan and its effects on the future of the country*", June 2006,

Shairzai, Frydoon, Ghulam Farouq, and Richard Scott (1975). *Farm Economic Survey of the Helmand Valley, 1975*. Kabul: USAID/DP

United Nations Fund for Population Activities and Central Statistical Office, 2005, *Province of Helmand- A Socio- Economic and Demographic Profile, Household listing 2005*, viewed on 20 October 2010, <http://foodsecurityatlas.org/afg/country/provincial-Profile/Hilmand/Hilmand_files/CSO-Hilmand.pdf>

UNODC, 2006, *Afghan's Drug Industry Structure, function, dynamics and implications in counter narcotics stratergy*, Viewed 20 October 2010, <http://www.unodc.org/pdf/Afgh_drugindustry_Nov06.pdf>

UNODC, 2009, *Addiction, Crime and Insurgency: The transnational threat of Aghan opium*, viewed on 25 October 2010 < http://www.unodc.org/documents/data-and-analysis/Afghanistan/Afghan_Opium_Trade_2009_web.pdf>

World Bank, Afghanistan: *Poverty, Vulnerability and Social Protection: An Initial Assessment*, World Bank, Washington, DC: World Viewed on 25 Oct 2010, < http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&theSitePK=523679&menuPK=64187510&searchMenuPK=64187283&siteName=WDS&entityID=000012009_20050322100004>

Zakhilwal, O nd, *The Helmand Valley Project*, Institue for Afghan Studies, Viewed on 20 October 2010, http://www.institute-for-afghan-studies.org/Foreign%20Affairs/us-afghan/helmand_0.htm

Socio-Economic Development and Illicit Drug Use: A Case of Punjab, Pakistan

Introduction

The province of Punjab is located towards the north-east region of Pakistan. To its north-east is Pakistan Administered Kashmir, and to its east and south is the international border, shared by the Indian states of Punjab and Rajasthan. Punjab contains several major cities of the country including Lahore, Faisalabad, Rawalpindi, Multan and Gujranwala. It is the only province that touches every other province in Pakistan. Punjab is Pakistan's second largest province spanning 205,344 Km^2 after Baluchistan (World Gazetteer, 2010). According to estimates, the population of the Province is 81,330,531 (World Gazetteer, 2010) more than 50% of the total population of Pakistan. According to a study completed in February 2010 by economists at the Lahore University of Management Sciences (IRIN, 2010), every second household in the districts of the southern Punjab, some 17.5 million people, live in absolute poverty. Lack of education is cited as the main reason for the low skill levels of the population, a significant proportion of which is employed as wage earners. This case study illustrates the negative impact of drug use on the socio-economic development in the context of Punjab, Pakistan.

A History of Drug Cultivation

Archived reports from UNODC suggest that historically, licit cultivation of opium in Punjab can be traced back to around 1947 when Pakistan was separated from India (UNODC, 1954). Opium found "quasi-medical use", mainly to treat abdominal illnesses, pain, and some fevers, especially in rural areas, and in areas where there was excessive rainfall and flooding, to treat dysentery, malaria and kala-azar endemics (UNODC, 1954). This medical use was largely attributed to a long traditional history of drug use for ritual and medicinal purposes and poorly developed medical facilities and infrastructure in the region (UNODC, 1954). Following the India-Pakistan separation in 1947, opium cultivation was initiated in Punjab[9] in response to disrupted supply of opium from India[10] and in order to gain self-sufficiency (UNODC, 1954). A total of three wide-scale attempts were made between 1948 and 1951 period in West Punjab to grow licit opium crops.

Changing Trends of Drug Use in Punjab

Historically opium was mainly used orally or by smoking and was neither considered a problem or illegal (McGlothlin *et al*., 1978). The province of Punjab now has one of the highest prevalence rates of drug users in Pakistan. In terms of numbers, Punjab is by far the most affected province with an estimated 200,000 opiate users of whom 100,000 are IDUs (UNODC, 2006). An increasing number of chronic heroin users are shifting from smoking heroin to injecting a combination of legal and illegal drugs.
The magnitude of substance abuse among women has either been masked or largely

[9] Punjab (in Pakistan), during the time of partition from India was referred to as 'West Punjab', 'East Punjab' being the present state of Punjab in India.
[10] Most of the licit production of opium at the time was done in India.

restricted by lack of research focusing equal attention on substance abuse by women and men (Denise *et al*., 1994). All National Surveys on Drug Abuse (NSDA) until 1993 were constrained in the matter of interviewing women because the interviewing teams consisted exclusively of male researchers who were, therefore, not able to find easy access to women as a result of Pakistan's segregated society (Denise *et al*., 1994). In 1993 the National Survey on Drug Abuse showed a prevalence of 3% among females in Pakistan (UNODC, 2010).

Impact of drugs on social and economic development

Drug abuse occurs most frequently among young people in the 15-35 age groups, with a particular concentration in the 18-25 age groups (UNDCP, 1998). In Punjab, 40 % of the drug users are between 16 and 30 years of age (UNODC, 2007). Only 22% of the drug users in Pakistan are employed in full time or part time jobs while the majority are unemployed or deriving their livelihood through casual work (UNODC, 2007).

Presently more than 50% of the employed in Punjab are engaged in agricultural or unskilled occupations (Federal bureau of Statistics, 2009). The more developed a society, the more skilled jobs are created, therefore if the present trends of drug use keep pace it is likely that the province might become more vulnerable to its economic effects on the course of development with higher costs afflicted in terms of quality of labor force being generated in the society.

Drugs and the HIV epidemic in Punjab

In the case of wives of IDUs, a recent study found that only 3% of IDU spouses reported ever selling sex, but 21% of these women did inject drugs (usually diazepam) via community based medical practitioners who give therapeutic injections to community members using the same non-sterile injecting equipment (Ahmed *et al*., 2010). A recent investigation of an outbreak of HIV suggests that many of those infected received therapeutic injections from local providers but did not have any of the conventional sex or drug injection risk factors (Pasha *et al*., 1999).

There is a severe lack of awareness on safe sexual practices among women in Pakistan, compounded by major power differences among genders which rarely let the woman be able to negotiate safe sex (Shaban, 2010). Studies conducted by Punjab AIDS Control Program also reveal that majority of the wives of IDUs are in regular physical contact with each other, and 80% don't use condoms during sexual acts, and as much as 50% of wives of HIV infected IDUs were also infected. Until 2003, many studies had described high risk but no HIV among IDUs (Emmanuel *et al*., 2004) (Haque *et al*., 2004) (Kuo *et al*., 2007). Since then, HIV prevalence has steadily increased among IDUs and this group now forms the core of the HIV epidemic in the region (Khan *et al*., 2009). To compound the situation, almost half (46%) of the IDUs report sexual activity with regular non-commercial female partners and only 10% use condoms (Khan & Khan, 2010). Twenty seven percent of IDUs report commercial sex with an FSW and 13% with an MSW; <20% have ever used condoms in the last 6 months of surveys (Khan & Khan, 2010). The government's response through the Enhanced HIV/AIDS Prevention Program for high risk groups 2003-2009 funded by World Bank through the provincial health department was discontinued in 2009.

References

Ahmed, S. *et al*., 2010. *Female Spouses of IDUs in Pakistan: a bridge population of the HIV epidemic?* [Online] Available at: http://docs.google.com/viewer?a=v&q=cache:HOw8Xsi8Ye8J:resdev.org/Documents/Female%2520Spouses%2520of%2520IDUs%2520in%2520Pakistan%2520(Pakistan%2520-%2520Ahmad%25202009%252010%252011).pdf+Female+Spouses+of+IDUs+in+Pakistan:+a+bridge+population+of+the+HIV [Accessed 2010].

Denise, B.K., Warner, L.A. & Kessler, R.C., 1994. The Epidemiology of Substance Use and Dependence among Women. *National Institute of Drug Abuse*.

Emmanuel, F., Akhtar, S., A, A. & Kamran, C., 2004. HIV risk behavior and practices among heroin addicts in Lahore, Pakistan. *Southeast Asian J Trop Med Public Health*, 35(4), pp.940-8.

Haque, N. *et al*., 2004. High-risk sexual behaviours among drug users in Pakistan: implications for prevention of STDs and HIV/AIDS. *Int J STD AIDS*, 15, pp.601-7.

IRIN, 2010. *Pakistan: Sold to Sex Work*. [Online] Available at: HYPERLINK "http://www.irinnews.org/Report.aspx?ReportId=88921" http://www.irinnews.org/Report.aspx?ReportId=88921 [Accessed 1 December 2010].

Janjua, N.Z., Akhtar, S. & Hutin, Y.J., 2005. Injection use in two districts of Pakistan: implications for disease prevention. *Int J Qual Health Care*, 17, pp.401-8.

Khan, A.A. *et al*., 2009. Large sharing networks and unusual injection practices explain the rapid rise in HIV among IDUs in Sargodha, Pakistan. *Harm Reduction Journal*, 6(13).

Khan, A.A. & Khan, A., 2010. The HIV epidemic in Pakistan. *J Pak Med Assoc*, 60(4). http://resdev.org/Documents/HIV%20Epidemic%20in%20Pakistan.pdf.

Kuo, I. *et al*., 2007. Factors associated with recent-onset injection drug use among drug users in Pakistan. *Subst Use Misuse*, 42(5), pp.853-70. PMID: 17613949 [PubMed - indexed for MEDLINE].

Mahmood, K. & Cheema, M.A., 2004. Empirical Analysis of Juvenile Crime in Punjab, Pakistan. *Pak. j. life soc. sci*, 2(2), pp.136-138.

McGlothlin, W.H., Mubbashar, M., Shahique, M. & Hughes, P.H., 1978. *Opium use in two communities of Pakistan 1 - a preliminary comparison of rural and urban patterns*. [Online] Available at: HYPERLINK "http://www.unodc.org/unodc/en/data-and-analysis/bulletin/bulletin_1978-01-01_4_page002.html" \l "n15" http://www.unodc.org/unodc/en/data-and-analysis/bulletin/bulletin_1978-01-01_4_page002.html#n15 [Accessed 1 December 2010].

Nai Zindagi, 2005. The Lethal Overdose [Online] Available at: HYPERLINK http://www.naizindagi.com/Reports/The%20lethal%20overdose.pdf [Accessed 1 December 2010].

Nai Zindagi, 2008. *Hidden Truth*. [Online] Available at: HYPERLINK "http://www.naizindagi.com/Reports/The%20hidden%20Truth.pdf" http://www.naizindagi.com/Reports/The%20hidden%20Truth.pdf [Accessed 1 December 2010].

Nai Zindagi, 2009. Rapid Situation Assessments [Online] Available at: HYPERLINK

http://www.naizindagi.com/reports/rsabsmall.pdf [Accessed 1 December 2010].

Pasha O, L.S.K.A.S.S.M.J.F.-H.S., 1999. Household members of hepatitis C virus-infected people in Hafizabad, Pakistan: infection by injections from health care providers. *Epidemiol Infect*, 123, pp. 515-8.

Punjab, G.o., 2010. *Punjab Gateway*. [Online] Available at: HYPERLINK "http://pportal.punjab.gov.pk/portal/portal/media-type/html/user/anon/page/default.psml/js_panename/ContentViewAdmin;jsessionid=0a00000230d768121c3c64284faf8cdcc801ef6ab1f1.e34Ma3iPcheLci0La3mLaNiPbNmPe6fznA5Pp7ftolbGmkTy/portal/306/nav/right/punjabcms/ser" http://pportal.punjab.gov.pk/portal/portal/media-type/html/user/anon/page/default.psml/js_panename/ContentViewAdmin;jsessionid=0a00000230d768121c3c64284faf8cdcc801ef6ab1f1.e34Ma3iPcheLci0La3mLaNiPbNmPe6fznA5Pp7ftolbGmkTy/portal/306/nav/right/punjabcms/ser [Accessed 1 December 2010].

Shaban, S., 2010. *Unequally Yoked: Women Highly Vulnerable To HIV In Pakistan*. [Online] Panos AIDS Available at: HYPERLINK "http://www.panosaids.org/2010/Left_read.asp?leftStoryId=63&leftSectionId=1" http://www.panosaids.org/2010/Left_read.asp?leftStoryId=63&leftSectionId=1 [Accessed 1 December 2010].

Strathdee, S.A. *et al*., 2003. Rise in Needle Sharing among Injecting Drug Users in Pakistan during Afghan War. *Drug and Alcohol Dependence*, 71(1), pp.17- 24.

UNDCP, 1995. The Social Impact of Drug use. In *World Summit for Social Development, 6-12 March*. Copenhagen, 1995.

UNDCP, 1998. *Economic and Social Consequences of Drug Abuse and Illicit* Trading. [Online] Available at: HYPERLINK "http://www.unodc.org/pdf/technical_series_1998-01-01_1.pdf" http://www.unodc.org/pdf/technical_series_1998-01-01_1.pdf [Accessed 1 December 2010].

United Nations International Drug Control/ Joint United Nations Program on HIV AIDS, 1999. *Base line study of relationship between Injecting Drug Use, HIV and Hepatitis C among male Injecting Drug Users in Lahore*. Islamabad: UNDCP UNDCP & UNAIDS.

UNODC, 1954. *Opium in Pakistan*. [Online] Available at: HYPERLINK "http://www.unodc.org/unodc/en/data-and-analysis/bulletin/bulletin_1954-01-01_3_page003.html" http://www.unodc.org/unodc/en/data-and-analysis/bulletin/bulletin_1954-01-01_3_page003.html [Accessed 1 December 2010].

UNODC, 2006. *National Assesment Report on the Problem of Drug Abuse*. UNODC country office, Pakistan.

UNODC, 2007. *Illicit Drug Trends in Pakistan*. [Online] UNODC country office, Pakistan Available at: HYPERLINK "http://www.unodc.org/documents/regional/central-asia/Illicit%20Drug%20Trends%20Report_Pakistan_rev1.pdf" http://www.unodc.org/documents/regional/central-asia/Illicit%20Drug%20Trends%20Report_Pakistan_rev1.pdf [Accessed 1 December 2010].

UNODC, 2010. *Female Drug Use in Pakistan-Mapping Estimates, Ethnographic Results & Behaviourial Assessment*. UNODC country office, Pakistan.

UNODC, 2010. *Social and Economic Impact of Drug Use on Families*. UNODC country office, Pakistan.

World Gazetteer, 2010. *Pakistan Administrative Divisions (population and area)*. [Online] Available at: HYPERLINK "http://world-gazetteer.com/wg.php?x=&men=gadm&lng=en&des=wg&geo=-172&srt=pnan&col=abcdefghinoq&msz=1500" http://world-gazetteer.com/wg.php?x=&men=gadm&lng=en&des=wg&geo=-172&srt=pnan&col=abcdefghinoq&msz=1500 [Accessed 1 December 2010].

Socio-Economic Development and Illicit Drug Use: The Case of Kathmandu, Nepal

Introduction

Kathmandu is the capital of Nepal and its largest metropolitan city. It represents by far the largest urban settlement in Nepal, accounting for 20% of the urban population in an area of 5,067 hectares and is inhabited by 671,846 people (CBS census, 2001) (Kathmandu Metropolitant City Office, 2010). According to Central Bureau of Statistics (CBS Census 2001), the Kathmandu valley with its districts has a population density of only 97 per square km whereas the Kathmandu metropolitan city has a density of 13,225 per square km (Kathmandu Metropolitant City Office, 2010). Kathmandu is considered as the backbone of the country's economy. In 2007, Nepal generated a GDP of $30.17 billion (The Odora, 2010) while that generated by Kathmandu alone in the same year was $10.12 billion (UNIDO, n.d.). With the most advanced infrastructure among urban areas in Nepal, Kathmandu's economy is tourism centric. The capital city forms Nepal's tourist gateway with almost 90 percent of the foreign visitors arriving by air.

This case study illustrates the interrelationships between illicit drugs and socio-economic development within the context of Kathmandu, Nepal, where the enormous growth in the tourism industry and other economic developments been influenced by the availability of illicit drugs.

The growth of tourism and development, and its influence

The first passport issued by the government was in 1955 and gradually tourism started taking roots in this formerly isolated country (Liechty, 2005). Tourism was a major source of foreign exchange earnings with the Himalayas attracting large numbers of mountaineers and hikers. Tourism was strengthened with the opening of airways to Kathmandu and other parts of the country, easing the travel restrictions. During early 1960s the tourist coming were older in age and rarely stayed long in the country while in the period between 1965 -70 Kathmandu saw a rise in tourism with the average growth rate in terms of tourist arrivals shooting up to around 40% (Liechty, 2005). There was also a shift in the characteristics of the tourists who not only belonged to younger age groups (in some years almost half were in age group of 16-30) but were also staying longer in the country than before (Liechty, 2005). Between 1985 and 1988, the number of tourists increased from approximately 181,000 to about 266,000 (Mongabay, n.d.). More than 80 percent of the tourists arrived in the country by air. In 1985, more than US$40 million worth of foreign exchange was earned through tourism (Mongabay, n.d.). By 1988, this amount had increased to more than US$64 million (Mongabay, n.d.). In 1989, tourism accounted for more than 3.5 percent of GDP and about 25 percent of total foreign exchange earnings (Mongabay, n.d.).

Increased drug use in the 'Hippie era' - a developmental side effect

Seeing the increasing potential of this newly acquired advantage from tourism and consequent growth of their economy the indigenous population was quick to adapt to the changing circumstances and cater to the arriving tourists. In 1950s, there was a shortage of hotels. Beginning in 1960s, the government encouraged the building of

hotels and other tourist facilities through loans. According to government statistics, between 1985 and 1988 the number of hotel rooms increased from below 22,000 to more than 27,000 (Mongabay, n.d.). In addition, there was an accompanying rise in the number of food shops, restaurants and hotels. Before 1973 cannabis consumption was legal in Nepal and was sold in Government shops. In 1970 there were about 30 shops and cafes in Kathmandu specializing in cannabis sales (Liechty, 2005). This period saw a major rise in drug use among the masses with most of the commercial establishments supporting the use and sale of an unregulated supply of drugs. “One thing that all of these cafes had in common, and one of the main attractions of Kathmandu, was pot smoking” (Liechty, 2005). “There is so much *charas* being smoked here that you could get stoned just sitting here”, said a local resident. “The atmosphere is more like a tribal gathering” (Colaabavala, 1974). During the so called "hippie era," a person could easily get by in Kathmandu for less than a dollar a day. The major *hashish* supply regions of Morocco, Lebanon, Turkey, Afghanistan, India, and Nepal literally map out the road to Kathmandu, which was also known as the "drug trail" (Liechty, 2005).

"Geopolitical Drug Watch" organization described Nepal as the source of "an ocean of cannabis" flowing to the West (Geoeopolitical Drug Watch, 1996). Cannabis was only illegal to export and people caught at the airport were fined $100 USD and deported on the next flight out of Kathmandu (Pietri, 2005). At that time there was not much opium use in Kathmandu nor was opium grown or heroin produced in Nepal (Pietri, 2005) although cheap, unregulated supplies of opium, heroin, and especially five-rupee vials of pure morphine and Methedrine became increasingly available(Liechty, 2005).

Development of national economic trade and the parallel growth of the drug industry

Opening up of trade and connections to other countries further enhanced drug movement in the country. In 1963 a treaty was signed between Pakistan and Nepal to promote free trade, military ties were also initiated with Afghanistan and heroin was now much more freely available in Kathmandu (Pietri, 2005). Nepal had become a major player on the global heroin trade. In recent years there has been evidence that the Tribhuvan International Airport (TIA) in Kathmandu is being used for the trans-shipment of drugs, mainly heroin and cannabis (UNODC, 2005). TIA has direct flight connections with Thailand, Bangladesh, India (five destinations), the Middle East (three destinations), Singapore, Hong Kong, China, Bhutan, the Netherlands, Germany, Austria, Russia and the U.K. (UNODC, 2005). Although heroin was introduced in Nepal in the mid 1960s when “hippies” entered the region, it was not thought of as a problem (Bhandari & Subba, 1992; Jutkowitz, Spielmann, Koehler, Lohani, & Pande, 1997).

In 1973 the United States of America also established the new "Drug Enforcement Administration" with major powers to enforce US drug policy overseas. Apparently Richard Nixon and his recently formed Drug Enforcement Administration paid 50-70 million dollars to the new king- Mahendra to promote outlawing pot, this was due to the fact that Nepal being a Hindu country had a cultural relation with cannabis (Pietri, 2005). The US had also begun linking foreign aid to drug suppression programs in Nepal (Pietri, 2005). The official end of the “Hippie era” came on July 16, 1973 when

the government of Nepal outlawed buying and selling cannabis (Liechty, 2005). Overnight the hash shops and smoking cafes were shut down and thousands of people were trucked to the border and deported (Pietri, 2005). During the 1980s price of *hashish* escalated 20-30 times compared to 1970's rates but a new low grade smokable type of heroin found its way on the streets (Pietri, 2005). The first case of heroin abuse in Nepal was reported in 1976 (Jha & Maddison, 2010). By 1981 the country started to have a heroin problem (Shrestha, 1990, Peitri, 2005). '

The government's Situation Analysis notes that illicit drug users could be found "…from all family backgrounds, caste, socio- economic status or educational status," which suggests that drug use is not confined to the poor or the disadvantaged in Kathmandu Valley (Pokharel *et al.*, 2001). There are between 40,000 to 50,000 drug users in Nepal, of this figure it is estimated that 20,000 people could be IDUs (Jha & Maddison, 2010). The number of IDUs in the Kathmandu Valley alone is estimated to be 5000 (Jha & Maddison, 2010).

Influence of tourism on local youth

Over the years the use of drugs among arriving tourists in Kathmandu has become less common but the drug market has evolved to focus on harder drugs like heroin and unregulated pharmaceuticals (Leichty, 2002). A study carried out in Kathmandu in 1992 showed lifetime prevalence for cannabis (6.1 per cent) and heroin (2.5 per cent) among students (age range 12-22 years) (UNODC, 2006) (UNODC, 2005). Thamel is a district in Kathmandu frequented by tourists every year for "Adventure Tourism". Being a tourist spot the area attracts young workers from around Kathmandu to work as cooks, waiters, dishwashers, etc. in the many restaurants and cafes situated in the area. According to Leichty, the Nepali crowd that is generally "hanging out" in the area is either tourist hustlers (who mostly use drugs) or middle class men (Leichty, 2002). Although few tourists are aware of Thamel's reputation in terms of drugs, for many of Kathmandu's young people, to frequent Thamel is to claim the "tough guy" reputation associated with drugs, danger and illicit activities (Leichty, 2002). Tourism now holds an indirect relation to drugs in the area; tourists help finance the local user. With the prospects of getting a job, which is difficult even for the privileged youth, most drug users end up pursuing the tourists for quick money- acting as tour guides and making profits by selling drugs (Leichty, 2002).

References

Anon., 2000. Harm reduction program in Nepal. In *Seminar on harm reduction, April 9-10*. Jersey, UK, 2000.

Burrows, D., Panda, S. & Crofts, N., 2001. *HIV/AIDS Prevention Among Injecting Drug Users in Kathmandu Valley*. Centre for Harm Reduction. http://www.hivpolicy.org/Library/HPP000561.pdf.

Colaabavala, F.D., 1974. In *Hippie Dharma*. p.Hind pocket books.

Express India, 2005. *Kathmandu humming, its young spending big on drugs, disco, drink*. [Online] Available at: HYPERLINK "http://www.expressindia.com/news/fullstory.php?newsid=50677" http://www.expressindia.com/news/fullstory.php?newsid=50677 [Accessed 1 December 2010].

FHI Nepal 2009, Integrated Biological & Behavioral Surveillance 2009, Round IV, Injecting Drug Users [IDUs] Fact Sheet. Available at: HYPERLINK http://www.fhi.org/NR/rdonlyres/ezr3gnm5qn7l3ndo7v2hef4stb6txd5g7rcthhrvht7rjc4qg327punn3lv4yl7n3za2pyq6bzj7lj/IDUfactsheet.pdf [Accessed 1 December 2010].

Geoeopolitical Drug Watch, 1996. The Geopolitics of Drugs. Boston: North-eastern University Press. p.132.

Jha, C.K. & Maddison, J., 2010. The Voices of Injecting Drug Users: Harm Minimisation in Nepal. *Internet Journal of Criminology*. http://www.internetjournalofcriminology.com/Kant_Madison_Voices_Of_Injecting_Drug_Users.pdf.

Kathmandu Metropolitant City Office, 2010. *Kathmandu Facts*. [Online] Available at: HYPERLINK "http://www.kathmandu.gov.np/index.php?cid=2&pr_id=2" http://www.kathmandu.gov.np/index.php?cid=2&pr_id=2 [Accessed 1 December 2010].

Leichty, M., 2002. Out here in Kathmandu: Youth and Contradictions of Modernity in Urban Nepal. USA: Indiaa university press. pp.37-47. http://books.google.co.in/books?id=QFhYnt2rL6YC&pg=PA37&lpg=PA37&dq=Kathmandu+youth+and+drugs&source=bl&ots=ig_LT-qGFQ&sig=4cZH7PzTCSwgdPijkAq55NsCijg&hl=en&ei=qFbSTJ20HJD-vQO7j4jiDw&sa=X&oi=book_result&ct=result&resnum=2&ved=0CB4Q6AEwAQ#v=twopage&q=Kathm.

Liechty, M., 2005. Building the Road to Kathmandu: Notes on History of Tourism in Nepal. *Himalya)*, 15(1-2), pp.19-28. http://digitalcommons.macalester.edu/cgi/viewcontent.cgi?article=1287&context=himalaya.

Mongabay, n.d. *Nepal - The Economy*. [Online] Available at: HYPERLINK "http://www.mongabay.com/reference/country_studies/nepal/ECONOMY.html" http://www.mongabay.com/reference/country_studies/nepal/ECONOMY.html [Accessed 1 December 2010].

National Centre for AIDS and STD Control, 2009. *Integrated Biological and Behavioural Surveillance, IDUs, round IV Fact Sheet*. National Centre for AIDS and STD Control. http://www.fhi.org/NR/rdonlyres/ezr3gnm5qn7l3ndo7v2hef4stb6txd5g7rcthhrvht7rjc4qg327punn3lv4yl7n3za2pyq6bzj7lj/IDUfactsheet.pdf.

Pietri, J., 2005. *Golden Tar Heroin and the Black Prince, The Drug Trail Ends Here*. [Online] Available at: HYPERLINK "http://www.counterpunch.org/pietri03012005.html" http://www.counterpunch.org/pietri03012005.html [Accessed 1 December 2010].

Pokharel, B.R. *et al*., 2001. *Situation Analysis of HIV/AIDS in Nepal (Final Draft)*. Teku, Kathmandu: National Centre for AIDS and STD Control. http://www.unaids.org.np/uploads/publication/20060111041431.pdf.

Shrestha, N., 1990. *HIV infection and drug abuse in Nepal*. WHO Working Group on HIV infection and drug abuse in the Western Pacific.

The Odora, 2010. *Nepal economy 2010*. [Online] Available at: HYPERLINK "http://www.theodora.com/wfbcurrent/nepal/nepal_economy.html" http://www.theodora.com/wfbcurrent/nepal/nepal_economy.html [Accessed 1 December 2010].

UNDOC, 2005. *South Asia Regional Profile: Executive Summery*. [Online] Available at: HYPERLINK "http://www.unodc.org/pdf/india/publications/south_Asia_Regional_Profile_Sept_2005/12_nepal.pdf" http://www.unodc.org/pdf/india/publications/south_Asia_Regional_Profile_Sept_2005/12_nepal.pdf [Accessed 1 December 2010].

UNIDO, n.d. *Kathmandu/ Nepal*. [Online] Available at: HYPERLINK "http://www.unido.org/fileadmin/user_media/Services/LDC_SSC/Asia_P_LD/Nepal.pdf" http://www.unido.org/fileadmin/user_media/Services/LDC_SSC/Asia_P_LD/Nepal.pdf [Accessed 1 December 2010].

UNODC, 2005. *South Asia Regional Profile: Executive Summery*. United Nations Office of Drugs and Crime.

UNODC, 2006. *orld Situation With Regard to Drug Abuse, With Perticular Reference to Children ans Youth*. United Nations Office of Drugs and Crime. http://www.unodc.org/pdf/document_2000-12-06_1.pdf

ANNEX TWO

LARGE-SCALE INFRASTRUCTURE PROJECTS IN THE GREATER MEKONG REGION

"Social impact assessment is the process of analyzing (predicting, evaluating and reflecting) and managing the intended and unintended consequences on the human environment of planned interventions (policies, programs, plans, projects) and any social change processes invoked by these interventions so as to bring about a more sustainable and equitable biophysical and human environment."[i]

Background

The Asian Development Bank, the World Bank and bilateral donors have embraced the development of large-scale infrastructure projects in South East Asia as a way of increasing the social-economic development of both individual countries within the region and the region as a whole[ii]. Examples of these projects include the north-south and east-west corridor highway systems that are near completion. The highway systems have been funded and built to connect the countries of the Mekong to improve transport, trade and therefore economic development. A second example of large-scale infrastructure projects is the Nam Thuen hydropower dams in Laos.

While donors and governments are quick to point to the positive impacts of these infrastructure projects, critics have also highlighted the real and potential impact of these projects on the environments, in mobile migrant work forces, in forced resettlement of communities and in the lack of civil society involvement in decision-making processes around the construction of infrastructure projects. Furthermore, the links between the infrastructure projects and HIV vulnerability and infection are becoming clear, while at the same time HIV prevention responses have lagged and been insufficient. The impact of these large-scale infrastructure projects on drug use trends has also been documented, although far less well.

Social Impact Assessments

Social impact assessments have gradually become part of the processes involved in designing, funding and building infrastructure projects. Some of the social impact studies assess impact on environment, on gender, on culture or on HIV vulnerability. Social impact studies are often funded by both donors and by NGOs; resulting reports often contradict each other in conclusions arrived at and positions taken. The social impact of infrastructure projects on illicit drug use vulnerabilities – both production and consumption – has until now not been concretely included in the social impact assessment framework. While a clear link has been demonstrated between the success of opium eradication and the concomitant rise of heroin production and eventually injection, the impact of infrastructure projects on illicit drugs is less well understood – but clearly major.

The ADBI recently released a report which examined 26 infrastructure projects in the Mekong, spanning transport, energy and information technology projects. In addition to citing the positive impacts of the infrastructure projects on enhanced development opportunities, their report also suggests multiple negative social impacts. These impacts have included increased HIV/AIDS vulnerability, increased numbers of casinos, increases in human trading, drug trading and illegal logging. The impact on drug use has not been explicitly measured but the report notes that the poor and

vulnerable people living around transport intersections are vulnerable to turn to drug trading. Furthermore, the report notes that migrant workers are susceptible to drug abuse, particularly methamphetamines, given by their employers in order to improve "strength" associated with the labour intensive nature of the infrastructure building.

In 1997, a highway was constructed between Mandalay and Muse; the UNDP noted that a year after the construction had finished, HIV prevalence among injecting drug users in three towns along the highway had significantly increased. While it was known that drug use was rampant in these three provinces prior to the road building, the road enhanced the drug trade which expanded along the highway – one year after construction ended, HIV prevalence in three provinces along the highway in Myanmar - Mandalay, Lashio and Muse - rose from 51% to 88%, 34% to 74%, and 86% to 92%, respectively[iii].

Social Impact Assessments on the impact of infrastructure projects on illicit drug production, trading and use?

That these reports implicating infrastructure projects with increases in vulnerabilities associated with illicit drugs have been documented for over ten years, it is unfortunate that public health responses to illicit drug use associated with infrastructure projects have not been forthcoming. The responsibility for documenting the potential impact on illicit drug use must come from the donors and implementers. The design and implementation of a social impact assessment that alerts to the potential implications of large-scale infrastructure projects on illicit drug use trends would shed much light on the issue. Donor agencies, contractors, the UN and NGOs would then be in a much better position to design systems and programs that mitigate against the negative implications of illicit drug use associated with infrastructure projects. Considering the billions of US dollars associated with the design and implementation of these projects, donors need to also fund not only the social impact assessments on illicit drug use but contribute to the necessary required thinking and resources for optimum public health and human rights based responses.

"***The goals of SIA are quite straightforward. By identifying potential impacts in advance of a large project, agencies and individuals can make better decisions about which interventions should be undertaken, and how. Furthermore, mitigation and compensation measures can be undertaken to minimize the undesirable impacts of development interventions. This is in line with Principle 1 of the Rio Declaration (1992), which affirmed that, "human beings are at the center of concerns for sustainable development."***[iv]

[i] Vanclay, F. (2003). International Principals for Social Impact Assessments. Impact assessment and project appraisal. 21(1). March 2003. Available at http://www.adb.org/Water/topics/dams/pdf/IAPA.pdf

[ii] Adhikari, R and Fujimura M (2010). *Critical evaluation of cross border infrastructure projects in Asia.* Asian Development Bank Institute. Available at http://www.adbi.org/working-paper/2010/07/06/3930.evaluation.crossborder.infrastructure.projects.asia/introduction/

[iii] UNDP-SEAHIV. (2001). *Building an Alliance with Transport Sector in HIV Vulnerability Reduction.* Thailand.

[iviv] Vanclay, F. (2003). International Principals for Social Impact Assessments. Impact assessment and project appraisal. 21(1). March 2003. Available at http://www.adb.org/Water/topics/dams/pdf/IAPA.pdf

DRUG ERADICATION AND ALTERNATIVE DEVELOPMENT IN BURMA

Background

Opium eradication is a traditional keystone of anti-drug efforts in South East Asia, traditionally driven by drug enforcement agencies. While motives are usually imported – eradication of the crop at source will decrease availability in consumer countries – the common parochial justification for the opium eradication strategy is that illicit drug production creates a negative environment for socio-economic development.

To support and bolster opium eradication strategies, "alternative development" strategies have increasingly been viewed as a way of creating alternative economic opportunities, in order to prevent relapse, as it were, to the farming of illicit drugs. The reality is different: in the pursuit of "alternative development" models, livelihoods have often been significantly worsened, and social and economic development of whole communities disastrously impaired. The following example from Burma highlights the negative impacts of an "alternative development" approach to opium eradication on the socio-economic development of affected communities.

Impact of opium eradication on household economies

After ASEAN declared its aspirations to be drug free by 2015, the Burmese government announced a 15-year opium cultivation elimination plan, in 1999. With significant support from the UNODC, phased opium eradication began in northern Shan State 1999-2004, eastern Shan State and Wa region in 2004-2009, and parts of southern Shan State in 2009-2014 (TNI, 2009). The bans have had devastating effects on those farmers who cultivate opium as their main cash crop – nearly two million people in Shan State lost their primary source of income (TNI, 2005). In Kokang, it is estimated that 90% of the population were making a living from opium sales (UNODC, 2010). In the Wa region, 82% of farmers use money from opium poppy cultivation to buy food and 73% of household income is attributed to sales of opium (TNI, 2009).

In the Shan State, many farmers have only enough rice to feed their family for from 6 to 8 months of the year, and are therefore dependent on opium as a cash crop to finance food, medicines, clothing, and access to education. This is also the case in the Wa region where farmers are able to grow enough rice for 4 to 6 months while some have only enough food for 1 to 3 months (UNODC, 2006b); 90% of all people in the Wa region report food insecurity (UNODC, 2006a). After the bans, in Kokang, half of the population had only enough food for 6 months.

The broad consequences of this are that communities and families have less food to eat, children are taken out of school and access to health care becomes limited, resulting in high levels of stress and health problems (TNI, 2009). An assessment in Kokang found that some 60,000 people had migrated to other areas to seek alternative livelihoods, some moving to areas such as the Wa region, where opium is still cultivated (TNI, 2005).

Famers have adopted several strategies to cope with the loss of cash income. Ex-poppy farmers have tried to grow alternative crops such as corn, tea and sugarcane. Mountainous geography, lack access to land, irrigation, and sedimentary and nutrient poor soil make it impossible to grow corn successfully (Kramer, 2009). Unlike corn, opium can grow easily in mountainous area without irrigation, and farmers do not have to worry about access to market as opium traders from other places will come and buy opium right at the farm gates. Lengthy yield times and the prohibitive cost of initial capital investment have meant that the long-term sustainable development of these crops is uncertain.

Farmers additionally turn to non-timber forest products (NTFP), such as roots and tree bark from forests, to sell to Chinese traders. This is not a sustainable solution either since the NTFPs become depleted and difficult to find (Kramer, 2009). Some famers in Wa region have sold livestock, such as pigs and cattle, to generate income, but lack credit and animal husbandry technologies limit their possibilities (UNODC, 2006).

Since the bans were endorsed there has been a stark lack of investment in "alternative development". In Kokang, there was almost no implementation or economic investment in "alternative development" in 2003. In the Wa region, local authorities believed that it was easier to relocate ex-farmers from mountainous northern areas to lowlands where people can find alternative livelihoods, than providing infrastructure such as roads, school, clinics to mountainous and scattered villages in the region (UNODC, 2010a). The relocation itself resulted in a larger number of people dying from malaria. In Song Khie villages, 108 people out of an original population of 370 died in first three years of the resettlement (TNI, 2009). When arriving at the lowlands, many people did not have enough seed and other resources to make a living, leading to prolonged suffering from food insecurity (UNODC, 2010a).

Not enough capital investment in "alternative development"

While UN agencies and international NGOs have tried to address the food insecurity issues, and have initiated "alternative development" programs to help ex-poppy farmers in the Kokang and Wa regions, levels of assistance are vastly insufficient compared to the magnitude of affected population. The World Food Program (WFP) provided food to nearly 160,000 people in the Wa region in 2004, and 100,000 people in the Kokang region in 2003 (TNI,2009). However, the WFP acknowledged that this assistance reached only 40% of the people in need (UNODC, 2007). In 2003, UNODC, in collaboration with 18 international UN agencies, initiated The Kokang and Wa Initiative (KOWI) to provide food security, health care, water sanitation, infrastructure, and education to vulnerable ex-farmers. This is a sustainable development approach with a 15–year program comprising three five-year cycles: The Pre and Post Emergency cycle (2004-2008), the Enhancement Cycle (2009-2013), and the Sustainability Cycle (2014- 2018), (TNI, 2009). A report in 2009 has claimed that the project is not operating well, is facing inadequate funding and has closed its office in Wa region, partly resulting from political situation in Burma (Kramer, 2009).

A complex scenario

The relationship between the ongoing political situation in Burma and drug production is both ingrained and recursive. Large-scale efforts to eradicate drug production have failed due to the ongoing power struggles between the military

government and the ethnic armed forces engaged in independence struggles. It has been widely reported that the military has significantly profited from involvement in the illicit drug economy; it is equally the case that ethnic armies are involved in illicit drug production and sales in order to fund their armed struggle against the military regime.

The SHAN Drug Watch has reported recently that the military is forcing many townships in Shan State to pay heavy taxes to the military, with farmers noting that it is impossible to meet the tax load without growing opium. Diversification of drug production has led to the widespread production of methamphetamine tablets. Burma is the largest producer of methamphetamine tablets in Asia; the tablets are traded throughout the region with a host of deleterious effects across many countries in the region and beyond.

The case of Burma highlights the challenges of human development in a fragile state where basic fundamental human rights are simply not being met. In Burma a military government opposes any opposition forcibly, and sales of narcotics form the basis of a black market economy both to fund the military's oppression and to fund the struggle of pro-independence armies. "Alternative development" in the context of opium eradication programs in Burma has primarily been conducted by law enforcement agencies without the involvement of other development-orientated agencies. Furthermore, unless there are increased and ongoing efforts to bring about a stable political environment, where fundamental human rights are recognized, opium eradication and "alternative development" will continue to fail.

References

Kramer, T 2009, *From Golden Triangle to Rubber Belt? The Future of Opium Bans in the Kokang and Wa Regions,* viewed October < http://www.tni.org/sites/www.tni.org/files/download/brief29.pdf >

Kramer, T 2010, *An assessment of the impact of the global financial crisis on the sustainable alternative development*, viewed October < http://www.unodc.org/documents/alternative-development/Impact_Assessment.pdf >

The Palaung Women's Organization 2006, *Poisoned flowers, the impacts of spiraling drug addiction on Palaung women in Burma*, viewed October < http://www.burmalibrary.org/docs3/PoisonedFlowers_final1.pdf >

Transnational Institute 2003, *Drugs and Conflict in Burma: Dilemmas for policy responses,* viewed October < http://www.tni.org/sites/www.tni.org/files/download/debate9.pdf>

Transnational Institute 2005, *Banning Opium in Afghanistan and Burma, viewed October* < http://www.tni.org/sites/www.tni.org/files/download/debate12.pdf >

Transnational Institute 2006, *HIV/AIDS and drug use in Burma/Myanmar*, viewed October < http://www.tni.org/sites/www.tni.org/files/download/brief17.pdf >

Transnational institute 2009, *Withdrawal symptoms in the golden triangle a drugs market in disarray*, viewed October 2010, <http://www.tni.org/sites/www.tni.org/files/download/withdrawal.pdf>

UNODC 2006a, *Life in the Wa Hills: Towards Sustainable Development*, viewed October < http://www.unodc.org/documents/eastasiaandpacific//myanmar/towards_sustainable_development.pdf >

UNODC 2006b, *Opium cultivation in South East Asia* ,viewed October < http://www.unodc.org/pdf/research/Golden_triangle_2006.pdf >

UNODC 2007 , *Opium cultivation in South East Asia* ,viewed October < http://www.unodc.org/pdf/research/icmp/south_east_asia_report_2007_web.pdf>

UNODC 2009, *Opium cultivation in South East Asia*, viewed October < http://www.unodc.org/documents/eastasiaandpacific//2009/12/opium-poppy/SEA_Opium_survey_2009.pdf >

UNODC 2010a, *Mainstreaming Alternative Development in Thailand, Lao PDR and Myanmar: A Process of Learning*, viewed October < http://www.unodc.org/documents/alternative-development/Final_Published_version_Mainstreaming_AD.pdf >

UNODC 2010b, *Sustaining Opium Reduction in Southeast Asia: Sharing Experience on Alternative Development and Beyond*, viewed October < http://www.unodc.org/documents/alternative-development/Sustaining_Opium_Reduction_in_South_East_Asia.pdf >

METHAMPHETAMINES IN SOUTH EAST ASIA: PUBLIC HEALTH AND PUBLIC SECURITY RESPONSES - IMPLICATIONS FOR DEVELOPMENT

Background

The enormous production, trade and use of ATS continues unabated, and globally has emerged as an area of major concern over the past two decades.[iv] It is estimated that up to 25 million people use some form of ATS worldwide, 60% of whom reside in South East and East Asia.[iv] Large-scale production of ATS in SE Asia has led to increased availability and a dramatic increase in recreational use among young people. Increasing the complexity of the issue in SE Asia is the fact that the description of ATS is broad and covers many different forms of ATS including methamphetamine in tablet (*yaba*) or crystalline form (*ice*), and ecstasy in tablet or powder form.

By 2005, ATS was the leading illicit drug used in Brunei, Cambodia, Japan, the Lao PDR, the Philippines and Thailand.[iv] This trend has continued and ATS in either its pill or high purity crystalline form continues to be the dominant drug in Cambodia, Lao PDR, Myanmar, Thailand, Brunei Darussalam, Republic of Korea, Japan and New Zealand.[iv] While ATS in SE Asia is predominantly available in tablet form (*yaba, shabu shabu*), there has been a documented increase in the availability and use of the more potent crystalline form (*ice*).[iv] The mode of use also varies: methamphetamine tablets are generally heated before vapourising and the resultant fumes inhaled;[iv] crystal methamphetamine is smoked, snorted or injected and ecstasy is predominantly ingested.

The physical manifestations of ATS use can include a loss of appetite, insomnia, rapid heartbeat, jaw tension, grinding of teeth, palpitations, irritability, a desire to urinate and tremors.[iv] Adverse psychological consequences of ATS are usually rare and short lived, typically lasting a few hours to a few days and can include mental confusion, paranoid ideation, and auditory hallucinations and, in some cases, toxicity can mimic a functional psychosis such as paranoid schizophrenia.[iv] However, the severity of adverse psychological events is dependent upon the amount used, the pattern of use, other substances used and the presence of pre-existing psychiatric illness.[iv] Regular use of ATS does not automatically equate with the development of dependence, nor of psychological problems for the user.

The implications of ATS use for HIV transmission are less well understood. There have been several studies investigating aspects of HIV transmission among ATS users through risky sexual practices particularly among both heterosexual men and men who have sex with men[iv] but there is a dearth of literature on the issue in SE Asia. It has, however, become clear that ATS is becoming more frequently injected in some areas[iv] and cohorts of ATS users across several countries in the South East Asian region including Thailand, Laos and Cambodia, are presenting with alarmingly high rates of STIs.[iv,iv] In addition to this, regional research has shown that ATS users often self-report high rates of depression and alcohol consumption,[iv] psychosis,[iv] and harmful interactions with law enforcement officials, often resulting in a period of incarceration in either a prison, a compulsory drug treatment center or both.[iv,iv, iv] Those detained are at a significantly greater risk of contracting communicable diseases including HIV, tuberculosis, hepatitis C, and skin infections.[iv]

Public health and public security responses to ATS in South East Asia

Current public health responses to illicit drug use and related HIV transmission have focused on the introduction and scale-up of harm reduction responses particularly to injecting drug use (including the provision of opiate substitution therapy) – mainly in response to the injecting of opiates. While the direct implications for HIV of ATS use are somewhat unclear, ATS users have multiple HIV risk behaviours including high rates of unprotected sex, high rates of STIs and potential for transition to injection of ATS. The predominant law enforcement approaches to ATS has been to arrest and incarcerate and as a result many prisons in the region are overcrowded with ATS users and small-time dealers. Increasingly, ATS-related cases are clogging judicial systems and occupying significant police resources.[iv] Through their detention in prison or compulsory drug treatment centers, ATS users are increasingly exposed to the risk of HIV infection.

Compulsory Drug Treatment Centres

The default response has been the funding and building of an exponentially increasing number of compulsory drug detention centres, where ATS users are often held in administrative detention in violation of international law and even sometimes contrary to the respective national law, such as in Cambodia.[iv] This response is widely recognised as being inhumane, lacking in an evidence-base and placing vulnerable people at further risk of infectious and other disease through their interactions in prison and compulsory drug treatment centre environments. Exacerbating this issue is the fact that in national and regional fora there appears to be almost no distinction made between recreational ATS users and ATS users who would be considered dependent. There is little or no activity in any such centre which has any resemblance to any accepted definition of ‘drug treatment’.

Implications for Development

ATS in South East Asia is primarily viewed as a public security issue evidenced by the high numbers of ATS users arrested and sent to prison and/or compulsory drug treatment centres. Considering that the majority of the people placed into detention are young people, the implications for their social development are dire. Removing young people from their communities and families and placing them in detention also removes them from formal education systems and workforces, placing further pressures on fragile labour markets. While more in-depth analysis is required to quantify the effect on socio-economic development of youth in South East Asia, it is clear that alternative solutions, particularly concerning drug policy, are in desperate need of being devised and implemented.

Regionally, UNODC has become the UN focal point for ATS, both anti-trading and treatment. This approach means that what is essentially a public health and development issue is dominated by not health and development experts but by agencies whose mandate is primarily law enforcement. Unless a multi-sectoral approach is championed between health, education and law enforcement, this situation will only continue to get worse and solutions will be further away, not closer. Focussing on community-based drug use and sexual risk reduction will help foster an environment where young ATS users can manage and cease their use without being placed in detention, lost to the education system or being rendered invalid by the workforce.

[iv] UNODC (2007). *Patterns and Trends in ATS and Other Drugs of Abuse in East Asia and the Pacific 2006:* United Nations Office on drugs and Crimes Regional Center for East Asia and the Pacific.
[iv] Ibid.
[iv] UNODC (2007). *Patterns and Trends in ATS and Other Drugs of Abuse in East Asia and the Pacific 2006:* United Nations Office on Drugs and Crimes Regional Center for East Asia and the Pacific; 2007.
[iv] UNODC (2010). *Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs in East and South-East Asia (and neighbouring regions) 2009.* A report from the Global Smart Programme.
[iv] UNODC (2007). *Patterns and Trends in ATS and Other Drugs of Abuse in East Asia and the Pacific 2006:* United Nations Office on Drugs and Crimes Regional Center for East Asia and the Pacific; 2007.
[iv] Thomson N. *Detention as Treatment: Detention of Methamphetamine Users in Cambodia*, *Laos*, *and Thailand*. 2010, New York: Open Society Institute.
[iv] WHO (1997). Amphetamine-like stimulants: a report from the WHO meeting on amphetamine, MDMA and other psycho stimulants. Geneva: Substance Abuse Department, WHO.
[iv] Winstock A. (2006). Amphetamines: dependence, depression, withdrawal and psychosis. Training kit developed for Australian General Practice Network.
[iv] Ibid.
[iv] Hurt, C. *et al* (2010) . Methamphetamine use among newly diagnosed HIV positive men in North Carolina, United States, from 2000-2005. PloS, June 2010 available at http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0011314
[iv] Barret M, Thomson, N. (2010). Rapid Assessment and Response: Preparation for the scale up of comprehensive harm reduction services in Thailand. Asian Harm Reduction Network.
[iv] Celentano D, Sirirojn M *et al* (2008). "Sexually Transmitted Infections and Sexual and Substance Use Correlates Among Young Adults in Chiang Mai, Thailand." Sexually Transmitted Diseases, April, Vol 35 (4): 400-405.
[iv] Thomson N. Presentation Bangkok, International Harm Reduction Conference (2009). "Implications and Responses of Methamphetamine Use in Southeast Asia".
[iv]Celentano D, Arramrattana A, *et al* (2008) "Associations of Substance Abuse and Sexual Risk with Self-Reported Depressive Symptoms in Young Adults in Northern Thailand." Journal of Addiction Medicine, June, 2(2):66-73.
[iv] Farrel M., Marsden J, *et al*. (2002). "Methamphetamine: drug use and psychoses become a major health problem in the Asia Pacific region". Journal of Addiction. Jul, 97(7): 771-2
[iv] Thomson N, Sutcliffe C *et al* (2009). "Correlates of Incarceration among Young Methamphetamine Users in Chiang Mai, Thailand". American Journal of Public Health, Jul 99 (7), 1232-1238.
[iv] Thomson N. Presentation Bangkok, International Harm Reduction Conference (2009). "Implications and Responses of Methamphetamine Use in Southeast Asia".
[iv] WHO (2009). Assessment of compulsory treatment of people who use drugs in Cambodia, China, Malaysia and Viet Nam: an application of selected human rights principles.
[iv] Thomson N. *Detention as Treatment: Detention of Methamphetamine Users in Cambodia*, *Laos*, *and Thailand*. 2010, New York: Open Society Institute.
[iv] Thomson N. Detention as Treatment: Detention of Methamphetamine Users in Cambodia, Laos, and Thailand. 2010, New York: Open Society Institute.
[iv] WHO (2009). Assessment of compulsory treatment of people who use drugs in Cambodia, China, Malaysia and Viet Nam: an application of selected human rights principles.

METHADONE MAINTENANCE THERAPY AND SOCIAL AND ECONOMIC DEVELOPMENT IN HAI PHONG, VIETNAM

This case study documents the impact of methadone maintenance therapy (MMT) on social and economic development in Hai Phong.

Background

Hai Phong is the third most populous city in Vietnam (population about 2 million), located on the coast 120 km east of Hanoi. It is a large seaport, and the most important commercial and transportation hub for northern Vietnam. With significant economic reform over the past decade, Haiphong has seen strong economic growth: average annual GDP growth for the decade 2000 to 2009 was 10.25%. The mainstays of the economy over this period have been construction and industrial production (42.2%), agriculture, forestry and fisheries (13.7%), and services (44.1%) (Chemonics 2010).

Over this same decade, Hai Phong has also been significantly affected by dual epidemics of injecting drug use and of HIV infection. HIV rates among people who injected drugs exploded in 1997: 72% of them infected with HIV by 2001 (Pers Comm, Hai Phong Peoples AIDS Committee). More recent data suggest that HIV prevalence is reducing, but still in 2009 50% of people who injected drugs were HIV infected (IBBS).

The People's Committee of Hai Phong estimated that there are 7,000-8,000 people regularly injecting drugs in Hai Phong (Pers Comm, Hai Phong Peoples AIDS Committee); other reports suggest that there could be as many as 10,000 to 15,000 people injecting drugs in the City (UNAIDS 2010).

MMT and Socio Economic development

As demonstrated throughout the report, drug use and HIV impact on socio-economic development in many profound and interrelated ways. One significant impact is the cost borne by the community due to illness and lost productivity. This case study investigates whether high coverage evidence based drug treatment can reduce this burden.

We look at three specific issues; the role of methadone in reducing HIV transmission; the economic impacts of MMT including both capital investment and changes in clients economic activities; the impact of MMT on social amenity.

The cost of HIV

Total lifetime cost per case of HIV in Vietnam has been estimated at US$22,861. This is made up of:

- **Health costs** – $3,069 per HIV/AIDS case (including $1,908 for antiretroviral therapy and $1,161 for hospital treatment (inpatient and outpatient); and
- **Productivity losses** – $8,611 per HIV/AIDS case (including reduced employment for caregivers ($351) during the most severe phase of illness, and permanent reduction in employment ($8,260) due to premature death as a result of AIDS) (Baldwin, 2009).

MMT's role in reducing HIV transmission

The reduction in the use of illicit drugs brought about by MMT correspondingly reduces HIV risk. International studies consistently find a 70-90% reduction in HIV risk for people on MMT programs compared to those who continue to inject (Gowing, Farrell, Bornemann and Ali, 2006). A study in Hai Phong and Ho Chi Minh City followed 956 clients stable on methadone treatment for 9 months – and observed only 1 new HIV infection (Nguyen, 2010).

Assuming (conservatively) an HIV incidence of 6 new infections every 100 person years among drug injectors in Vietnam without MMT (Pers Comm, Ted Hammett, APT Consulting Group) and a HIV incidence of 0.1 per 100 person years for those on MMT a crude cost saving can be calculated: for every US$10,000 spent on MMT, 598 HIV cases will be averted each year, leading to a lifetime cost-saving of over US$12 million. Further, it is well documented that reducing community viral load and the prevalence of HIV in the community also leads to a reduction in HIV incidence – further strengthening the impact of MMT in HIV prevention, and thus in social and economic development.

MMT and the economy

The cost of drug use has not been estimated in Vietnam but based on data collected in the Methadone Cohort study referred to above it is possible to estimate the amount of money clients "save" from reducing their drug intake in associated with MMT. This figure is estimated by subtracting the amount of money clients reported spending on drugs before entering the methadone program to the amount they spend now they are stabilized on methadone and out of the drug scene.

On average participants reported spending US$10.50 per day on heroin prior to treatment. When stabilized on maintenance treatment, the average daily expenditure on heroin reduced to less than 10 cents per day. It can therefore be estimated that MMT reduces heroin expenditure by approximately US$3,832 per person on the program per year. At the time of writing , there were 2,271 people on MMT in Hai Phong - resulting in a reduction of US$8.5 million dollars being spent on heroin.

Although not researched in Hai Phong, international evidence suggests that when MMT reaches enough drugs users it can significantly shrink the drug market (Bell and Zador, 2000) – the logic being that as clients move out of the market the market shrinks. New drug users find it harder to access a smaller market, therebv continually reducing the size of the market.

Program data from Hai Phong suggests that over half of the drug users in the program have move from informal (often antisocial) occupations, and especially criminal activities, to more formal jobs. They report having more disposable income compared with when they were injecting drugs. The shift away from informal economic activity to more formal activity is accompanied by a significant reduction in crime. According to police data presented at the national HIV conference in Hanoi in December 2010, crime has been reduced by 80% in areas with MMT clinics in Hai Phong (Nguyen, 2010).

The cohort study also found that self-reported involvement in crime reduced from 41% to only 0.8% after 9 months, and that family conflicts (and conflicts with

neighbors and friends) dropped from 20% prior to treatment to 3.6% after 9 months (Nguyen, 2010).

MMT has also impacted on the economic development of Hai Phong through investment made by the international donor community: while perhaps minuscule in comparison with GDP, money spent on renovations and long-term employment for staff within the health sector are locally enormously significant.

MMT and social amenity

Internationally MMT has been shown to improve social amenity as well as improve clients' social functioning; the Vietnam data support these findings (Nguyen, 2010). Qualitative data collected as part of the MMT cohort study shows a strong correlation between MMT and social development – clients and their families report better relationships, as does the community at large. Social integration is very important in Vietnam; the study found that people previously socially isolated from the community due to their drug use – even seen as social enemies – are now honoured and promoted as role models. (Nguyen, 2010).

Improvements in social functioning and reductions in crime are both extremely important in community development. MMT is therefore making a major contribution to social development in Hai Phong.

Conclusion: MMT and development

While MMT is a relatively small-scale intervention in Hai Phong when considered at the population level, it has had a significant role in improving the social and economic development of a very vulnerable group of people, and the communities in which they live.

- MMT significantly reduced HIV risk by reducing both individual injection risk and the amount of HIV in the community, by reducing the overall number of injectors and helping HIV positive injectors adhere to ARV.
- MMT reduced the size of the heroin market by reducing the number of clients injecting and has contributed markedly to a reduction in drug related crime and social disturbance.
- MMT has changed community attitudes towards people who use drugs: rather than facing arrest and non-judicial incarceration in compulsory detention centers, people who use drugs can now access an evidenced-based form of treatment that is underpinned by human rights principles.

References

Baldwin (2009). Cost Effectiveness of Harm Reduction Interventions in Vietnam. Presentation at the International Harm Reduction Conference Bangkok Thailand

Bell, J and Zador, A (2000) A Risk-Benefit Analysis of Methadone Maintenance Treatment, Drug Safety, Volume 22, Number 3, March 2000 , pp. 179-190(12)

Chemonics (2010) Job Market Analysis in Hai Phong and Ho Chi Minh City. Unpublished Report commissioned for FHI, Vietnam 2010

Gowing L, Farrell M, Bornemann R, Ali R. Substitution treatment of injecting opioid users for prevention of HIV infection. The Cochrane Database of Systematic Reviews, Issue 4, 2004.

Integrated Biological and Behavioral Surveillance (2009). Data sharing workshop, 20th October 2010, Hanoi, Vietnam

Nguyen, N (2010). The impact of methadone on mental health, quality of life and social intergration of injecting drug uers in Vietnam, presented at the National AIDS conference in Hanoi Vietnam 2010

UNAIDS (2010) Size Estimation Workshop, 15th April, 2010, Hanoi, Vietnam