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AFGHANISTAN'S DRUG INDUSTRY

STRUCTURE, FUNCTIONING, DYNAMICS, AND IMPLICATIONS FOR COUNTER-NARCOTICS POLICY

Edited by
Doris Buddenberg and William A. Byrd

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ACRONYMS

ACBAR	Agency Coordinating Body for Afghan Relief
ANA	Afghan National Army
ANP	Afghan National Police
AREU	Afghanistan Research and Evaluation Unit
ASNF	Afghan Special Narcotics Force
ATT	Afghan Transit Trade Agreement
CNPA	Counter-Narcotics Police of Afghanistan
CNTF	Counter-Narcotics Trust Fund
CPEF	Central Poppy Eradication Force
DAB	Da Afghanistan Bank (Central Bank)
DDR	Disarmament, Demobilization, and Reintegration
DIAG	Disarmament of Illegal Armed Groups
FAO	Food and Agriculture Organization
FATA	Federally Administered Tribal Areas
FATF	Financial Action Task Force on Money Laundering
GDP	Gross Domestic Product
GTZ	German Agency for Technical Cooperation
I-ANDS	Interim Afghanistan National Development Strategy
INGO	International Non-Governmental Organization
ISAF	International Security Assistance Force
MCN	Ministry of Counter Narcotics
MoD	Ministry of Defense
MoI	Ministry of Interior
NGO	Non-Governmental Organization
NRVA	National Risk and Vulnerability Assessment
NWFP	North West Frontier Province
PATA	Provincially Administered Tribal Areas
PRT	Provincial Reconstruction Team
SWIFT	Society for World Wide Interbank Funds Transfer
TABSF	Transnational Afghan Border Security Force
TT	Telegraphic Transfer
UAE	United Arab Emirates
UNDCP	United Nations Drug Control Program
UNODC	United Nations Office on Drugs and Crime
WFP	World Food Program

PREFACE AND ACKNOWLEDGEMENTS

Afghanistan's drug industry is a central issue for the country's state-building, security, governance, and development agenda. Recognizing the critical importance and multifaceted nature of the drug problem in Afghanistan, the United Nations Office on Drugs and Crime (UNODC) and The World Bank embarked on a program of cooperative research and policy-oriented analysis. This work covered the major elements of Afghanistan's drug industry in addition to the rural household level: opium trading, prices and market interactions, the nexus between drug trafficking and the informal financial transfer system (hawala), the organized crime dimension, and the macroeconomic implications of the opium economy and counter-narcotics measures.

This joint volume, which includes work by a number of contributors, is the main product of this fruitful collaboration. While fully recognizing the constraints hindering research on drugs in Afghanistan and the preliminary nature of many of the findings and recommendations, in our view the volume amply demonstrates that not only is meaningful research on Afghanistan's drug industry possible, but it can be highly productive and provide valuable insights for counter-narcotics strategy and policies. We hope that the volume will in addition provoke further thought, discussion, and research on this extremely important area for Afghanistan's development.

In addition to the contributors to this volume, a number of people played important roles in making this effort a success. Antonio Maria Costa, Executive Director of UNODC, strongly supported this work from the beginning, as did Francis Maertens, Director, Division for Policy Analysis. Thomas Pietschmann, Research Officer, provided insightful comments on several chapters. UNODC field office staff in Afghanistan provided invaluable support to some of the research. From the World Bank side, Alastair McKechnie (Country Director for Afghanistan), Sadiq Ahmed (Sector Director, Poverty Reduction and Economic Management Unit, South Asia Region), and Ijaz Nabi (Sector Manager, same unit) provided guidance. M. Khalid Payenda (Research Analyst, same unit) did extensive work on formatting and processing the volume for publication, which is gratefully acknowledged. Arrangements for the launch of the volume and associated publicity have been supported by Elisabeth Bayer on the UNODC side and Erik Nora and Abdul Raouf Zia on the World Bank side. A number of reviewers provided very useful comments on different chapters, which helped improve the quality of the volume. These comments are acknowledged in the initial footnote for each chapter.

Finally, this research could not have been conducted or successfully completed without the support and encouragement of numerous Afghans both inside and outside of the Government, including officials, surveyors, interviewees, and others. We hope that this volume goes at least some way toward doing justice to their insights, information, and in many cases the courageous examples they provided in the fight against drugs. Unfortunately for understandable reasons they must remain anonymous.

Doris Buddenberg and William A. Byrd

Chapter 1

INTRODUCTION AND OVERVIEW

William A. Byrd and Doris Buddenberg[1]

I. BACKGROUND AND METHODOLOGY

Introduction

The magnitude and importance of Afghanistan's opium economy are virtually unprecedented and unique in global experience – it has been roughly estimated as equivalent to 36% of licit (i.e. non-drug) GDP in 2004/05, or if drugs are also included in the denominator, 27% of total drug-inclusive GDP (see Chapter 2). The sheer size and illicit nature of the opium economy mean that not surprisingly, it infiltrates and seriously affects Afghanistan's economy, state, society, and politics. It generates large amounts of effective demand in the economy, provides incomes and employment including in rural areas (even though most of the final "value" from Afghan opium accrues outside the country), and supports the balance of payments and indirectly (through Customs duties on drug-financed imports) government revenues. The opium economy by all accounts is a massive source of corruption and undermines public institutions especially in (but not limited to) the security and justice sectors. There are worrying signs of infiltration by the drug industry into higher levels of government and into the emergent politics of the country. Thus it is widely considered to be one of the greatest threats to state-building, reconstruction, and development in Afghanistan.

UNODC's (United Nations Office on Drugs And Crime) regular surveys, extensive data, and its 2003 comprehensive report (UNODC, 2003) provide invaluable insights into the overall size and characteristics of the opium economy, and much good fieldwork has been done at the rural household level.[2] There have also been general overviews like Ward and Byrd (2004). But the opium economy beyond the rural farm and household level remains very under-explored and under-researched, despite its obvious importance for Afghanistan's security, governance, and development agenda. As a result, counter-narcotics policies and actions have had to cope with a limited evidence base, further increasing the risk of mistakes in addressing what is an enormously complex and difficult problem in the first place.

This volume, a joint effort edited by UNODC and World Bank staff and including work by a number of contributors, constitutes a first attempt to remedy this situation–by broadening the analysis of Afghanistan's opium economy to encompass, in addition to the rural farm/household level: opium trading, price patterns and pricing behavior, the drugs/informal financial transfer (*hawala*) nexus, the organized crime perspective, and macroeconomic dimensions. While it aspires to greater comprehensiveness, this is not at the expense of depth of coverage, as most of the research presented in the volume is based on newly-gathered primary data from fieldwork, or in-depth technical analysis of available information. However, while it is beginning to put together the pieces of the jigsaw puzzle–or in other words to fill in the overall picture of the opium economy in Afghanistan–this volume's findings and conclusions must be considered preliminary, subject to further verification, adjustment, or correction through additional research.

[1] The World Bank and UNODC. This chapter has been written by the editors of this volume and presents some main themes and implications / recommendations of the volume as a whole. The views, findings, interpretations, and conclusions expressed in this chapter are those of the authors and should not be attributed to the United Nations Office on Drugs and Crime or to the World Bank, its affiliated institutions, its Executive Board of Directors, or the countries they represent.

[2] See work by Mansfield, Pain, Goodhand, and others, cited in various chapters, especially Chapter 3.

After a discussion on methodological issues below, the rest of this introductory chapter briefly distills some main themes, summarizes the other chapters, and puts forward policy implications and recommendations for consideration. Chapter 2 provides an overview of the macroeconomic implications of Afghanistan's opium economy and of counter-narcotics actions, based on a simple macroeconomic model. Chapter 3 synthesizes the fieldwork conducted on the opium economy at the rural household level and draws out key findings and implications. Chapter 4 looks into the next level up–opium traders and patterns of opium trade–based on fieldwork in two provinces. Chapter 5 analyzes available data on prices of opium and opiates using various statistical and econometric techniques, to assess market patterns and trends and market integration. Chapter 6 explores the very important but murky nexus between the drug industry and the informal financial transfer system (*hawala*). Chapter 7 looks at the drug industry in Afghanistan from an organized crime perspective, focusing on its consolidation, changing internal structure, and linkages with different levels of government.

Methodological Considerations

It should be emphasized up-front that Afghanistan's opium economy is a difficult target for research. Not only is it very much in the informal sector – activities are unregistered and hence for the most part no official national data are available – but those involved in the drug industry have strong incentives to conceal their activities and roles and not to provide accurate information. The sensitivity and controversy surrounding the drug industry, in Afghanistan or in any other country, exacerbate the difficulties for research. In some respects the situation in Afghanistan is even worse than elsewhere due to insecurity, logistical constraints, and other barriers to information gathering. Moreover, the information base to start with–whether in terms of macroeconomic data or statistics on arrests and other law enforcement actions–is much weaker in Afghanistan than in most other countries. Much of the research presented in this volume represents initial forays into new areas where existing information is very limited or almost non-existent.

Nevertheless, it is certainly possible to conduct meaningful and productive research on Afghanistan's opium economy. In the first place, although it suffers from serious limitations, the quantitative data available on the opium economy is by no means insignificant, based on serious and credible efforts at information collection, primarily by UNODC. There are annual surveys of opium poppy cultivation, from which, based on yield estimates, estimates of opium production are derived, both for Afghanistan as a whole and by province. Opium price data in a number of markets are regularly collected by UNODC and can be used to develop estimates of gross revenues and the potential export value of opium (see UNODC, 2003, and Chapter 2). Some useful information and insights can be gleaned from rural household survey data and other available information not specific to the opium economy. Overall, despite its limitations, the quantitative data base for the opium economy is generally no worse, and in many respects better, than the data available on the rest of the Afghan economy.

Second, and perhaps even more important, there has been a tradition of openness and willingness to be interviewed, discuss, and provide information about the opium economy on the part of many of its actors. This is in part a legacy from the earlier period when opium was not widely seen as illegal and activities were relatively open (e.g. opium bazaars in key opium producing and trading areas). It is also related to the methodology used, exploring the

issue of opium poppy cultivation within the wider framework of rural livelihoods rather than focusing solely on drugs, which typically enhances the responsiveness of interviewees. Researchers who built up their contacts and networks earlier continue to benefit, and new researchers, provided they have suitable introductions, also can get meaningful access to some drug industry actors and knowledgeable observers. While this accessibility has been greatest at the level of rural households involved in the opium economy (i.e. farmers and wage laborers), it is also possible to meet with *hawala* dealers (in the informal financial transfer system), small opium traders, mid-level traders, and even sometimes more important actors, as well as with knowledgeable people in law enforcement and other positions. All in all, the situation in this respect appears to be considerably better in Afghanistan than in many other countries with large illicit sectors, especially those involving drug-related activities.

This openness carries its own challenges: How to distinguish valid information and perceptions from gossip, innuendo, and outright prevarication? The quality of field research and interview techniques in particular is critical in this regard. There is no substitute for painstaking legwork. Sound approaches have been developed both by researchers working on Afghanistan (see, for example, Chapters 4 and 6 as well as the fieldwork reported on in Chapter 3) and in research work on criminal activities in other countries (see the discussion and references in Chapter 7). Key elements include:

- Interviews structured around a common set of well thought-out questions, albeit open-ended and exploratory (these are the critical raw materials of research).
- A sufficient number of interviews to build up a reliable knowledge basis.
- Interviews with different types of actors and other informants so as to build up a rel atively accurate composite picture.
- Interviews in a variety of locations, as appropriate for the topic (recognizing the diver sity of the opium economy in different settings).
- An iterative approach to information collection (both during a single research project and sequentially across studies), to build confidence and trust over time.
- Meticulous recording of interviews (usually through note-taking and ex-post compila tion, as recording devices can be detrimental to the quality of responses).
- Careful sifting and cross-checking of interview materials, reconfirming through re-interviews where necessary and possible, and cross-checking with information from other sources (both contemporary and historical) to better assess veracity.
- Making observations and drawing conclusions only when there are multiple corroborations from a number of interviews (or confirmation from other sources).
- Effective training and guidance of local surveyors when they are used.

Finally, strict confidentiality and anonymity of interview sources is essential. If not assured of this, sources may withhold information or distort their responses, and the environment for future field research on the opium economy could be compromised. More generally, whereas "naming names" is essential for counter-narcotics investigations and prosecutions, it would be counterproductive in the sphere of research and analysis. Not only must the confidentiality and anonymity of interview sources be maintained, but referring in research reports to individuals who are said to be linked to the drug industry would detract from the proper focus of research and analysis which is on strategy and policies, not individual cases. Moreover, any naming of individuals could be misconstrued and might well give rise to doubts about the objectivity of research, undermining the impact of associated recommendations.

Interviews and surveys can also be a fertile source of basic quantitative information–in particular for ascertaining "stylized facts" about the topic. The field research on rural households and the opium economy, some of whose main findings are summarized in Chapter 3 (see references cited in that chapter), involves much basic analysis of simple quantitative information gathered from households (while fully recognizing that samples are not necessarily statistically representative). Moreover, combining and cross-checking information collected through interviews with quantitative data from other sources can be a powerful tool. This is done, for example, in Chapter 4 to develop a quantitative picture of opium trading flows in Helmand and Ghor provinces, and in Chapter 6 to ascertain rough percentages of informal financial transfers in different localities that are likely to be drug-related.

Turning to analysis of quantitative data, standard economic tools can be applied, but taking into account data limitations and the context of Afghanistan. A simple macroeconomic model is developed in Chapter 2 to illustrate the various macroeconomic implications of different actions against the drug industry. Chapter 5 applies several statistical and econometric techniques using available price data to shed light on the question of whether opium markets in Afghanistan are "integrated", based on a technical definition of this term. Both chapters develop policy implications from the analysis, while fully recognizing the limitations and the need to contextualize analysis and recommendations for Afghanistan.

Other tools also can be productively used in research on the opium economy, for example graphical devices like diagrams to develop ideas on structural and dynamic aspects. Chapter 7 uses this device both in the interviews conducted and to illustrate the structure of the drug industry and its evolution in recent years. Chapter 3 uses diagrams to convey analytical findings about the diversity of the rural opium economy and of its response to counter-narcotics actions. Another example is case studies (while maintaining anonymity), presented in a number of boxes in Chapter 3.

In summary, it is definitely possible to conduct meaningful and productive policy-oriented research on the opium economy in Afghanistan, as the chapters in this volume demonstrate. They are based on extensive and careful research, use credible methodological approaches, and show full awareness of the limitations and preliminary nature of the conclusions that are drawn. Moreover, the chapters don't stop with research and analysis but also strive to draw out relevant policy implications of their findings.

II. MAIN THEMES

This section outlines some of the main themes that run through the papers collected in this volume. The discussion below makes no attempt to achieve comprehensiveness in coverage; instead the approach is thematic–weaving together some of the main findings and conclusions into a coherent story.

First, the studies in this volume bring out very strikingly ***the full breadth of Afghanistan's opium economy and its multi-dimensional impacts on the national economy, polity, and society.*** Opium permeates much of the rural economy, with critical links to employment generation, access to land, and credit. Opium markets, prices, and traders populate the Afghan landscape and provide important signals to economic actors.

Drug money is a very important, often dominant ingredient in the informal financial transfer system (hawala), which is also the main vehicle in Afghanistan for payments and transfers of funds, including remittances and much aid. And through protection payments and connections the drug industry has major linkages with local administration as well as high levels of the national government.

Second, the papers shed light on the question: ***What is the overall impact of the opium economy on Afghanistan and what are the pluses and minuses?*** It is very large in aggregate, and has a macroeconomically significant effect on aggregate demand, employment, the balance of payments, and to a smaller extent government revenue. However, the macroeconomic impact of the opium economy is moderated and in some respects dampened due to its characteristics as a set of illegal export-oriented activities. Since much of the income accruing to the opium economy beyond the farm level (i) never enters into Afghanistan in the first place, (ii) may be sent out of the country, or (iii) is used for imported goods or real estate investment, its positive economic impacts appear to be considerably less than its size would indicate. By the same token, actions against the drug industry may correspondingly have less of an adverse macroeconomic impact (in particular on the balance of payments) than if this were a legal productive activity being phased out. ***Even with these qualifications, the macroeconomic impact of the opium economy is substantial, especially on rural economic activity and livelihoods.***

Third, at the micro level ***the diversity of the drug industry in Afghanistan is impressive.*** It plays multiple and different roles–vis-à-vis different actors, in different parts of the country, and changing over time. Depending on the situation of a rural household, the opium economy may be a source of land and credit, seasonal employment, a virtually guaranteed market, high financial returns, and secondary multiplier effects (e.g. demand for goods on local bazaars, construction, etc.) However, it can also exacerbate indebtedness, insecurity, and poor governance. The adverse development and poverty impacts of actions against drugs are concentrated on poorer rural households whose livelihoods and access to key assets like land and credit depend on the opium economy, and whose alternatives are fewer and more constricted than those of better-off households or households located in areas with better resources and access to markets.

Fourth, many of the papers bring out ***the flexibility of the opium economy and its ability to effectively respond to changing economic and enforcement environments across space and time.*** Opium has progressively spread to all of Afghanistan's provinces (even though its presence in some of them is only nominal). Success in reducing cultivation in one province typically translates into increases elsewhere rather than a sustained decline in total national cultivation. The different actors in the opium economy–traders, processors, wage labor, and even to a significant extent farmers–are mobile, and respond flexibly and speedily to economic opportunities as well as to changes in the law enforcement environment. Financial flows through the *hawala* system are smooth, fast, and efficient. This is not to say that the opium economy can be transplanted to any place in Afghanistan (yields, and even the ability to grow opium poppy at all, are affected by climate, altitude, knowledge of agricultural techniques, etc.). Moreover, areas with stronger licit economies and wider economic opportunities can be "weaned from" or "inoculated against" the opium economy with some effort. But nevertheless, the drug industry has demonstrated that it is "footloose" and spreads easily to many parts of the country. This flexibility is evident also in the upper

levels of the drug industry, whereby patterns of capture and corruption can shift across ministries and other institutions, and involve changing actors and changing degrees of visibility, depending on the political environment and reform of different institutions (e.g. Ministry of Defense, versus Ministry of Interior).

Fifth, as will be discussed at greater length in the final section of this chapter, ***the diversity, flexibility, and dynamism of the drug industry must be taken into account in designing the Government's and international community's responses.*** The available counter-narcotics instruments are often blunt and unwieldy, and this needs to be factored into decisions about their deployment and use. For example, strong enforcement efforts against farmers (discouraging opium poppy cultivation, threat of eradication, and actual eradication, as well as interdicting against local opium markets and traders) may be effective and sustainable in better-off localities where viable licit livelihoods are already available, whereas such efforts may be ineffective, even counterproductive in poorer, remote areas with limited resources, assets, and markets. Counter-narcotics programs (whether law enforcement or development activities) can never hope to be as nimble as the opium economy, which implies that nationwide efforts, covering both areas producing opium and those which do not but could be at risk of doing so, are required. The time horizon of interventions needs to be long enough to respond to the flexibility of the opium economy. All these considerations point strongly toward "mainstreaming" the counter-narcotics dimension in national development programs rather than relying primarily on specialized alternative livelihood projects.[3]

Sixth, in an environment of poor governance, weak capacity, and lack of rule of law, ***the significant albeit patchy eradication efforts against drugs in recent years have been having undesirable side effects,*** including most notably the following:

- ***Eradication efforts are a vehicle for corruption,*** with farmers being forced to pay in order not to have their opium poppy crop eradicated, police confiscating drugs and then selling them on and/or returning part of the seizure in return for a payment, favoritism on the part of government officials toward associates in the drug industry while cracking down on "competitors" to drive them out of the market, and more generally larger "protection payments" being exacted.
- As a result largely of corruption and other irregularities in enforcement, ***the impact tends to be felt most by the weakest and poorest actors*** involved in the opium economy (poor rural households), who lack political support, are unable to pay bribes, and cannot otherwise protect themselves.
- ***The credibility of enforcement efforts is gravely weakened*** by the corruption in imple mentation, detracting from the moral legitimacy of the fight against drugs.

Seventh, there are clear signs that ***the changing (and generally tightening) environment against narcotics is contributing to a consolidation of the drug industry*** around fewer, more powerful, and politically connected actors, with compromise of key institutions like the Ministry of Interior (MoI) and police and involvement by other security forces. This should not be understood as a straightforward trend toward "mafiaization", and – with many powerful actors becoming engaged in politics and distancing themselves from open association with the drug industry–trends are complex. Nevertheless, findings both at the field level (small-scale opium traders) and from interviews with knowledgeable sources point toward increasing organization of "protection" for the drug industry in a criminalized environment, with some government agencies and leaders playing an important role in this, and

[3] Individual alternative livelihoods projects can provide valuable experience on a pilot basis, serve as a vehicle for learning, and play a catalytic role and generate potential for scaling up in other development programs. But a projectized approach to alternative livelihoods (i.e. with specialized alternative livelihoods projects as the main vehicle) cannot have a significant longer-term impact on the drug industry overall – resources are too small, geographical coverage limited and scattered (allowing narcotics production to shift to areas not covered by projects), integration of interventions difficult, and sustainability questionable.

with smaller and more marginal actors increasingly being left out and often becoming targets of enforcement efforts. These trends could have potentially serious adverse implications for the future – making the fight against drugs all the more difficult.

Finally, as will be seen from the summaries below and in individual chapters, ***there is a great deal of thematic unity among chapters,*** even though they cover a variety of topics and use different techniques of analysis. While there are differences of views in some respects, much more striking is the relatedness and consistency of the findings across different dimensions of the opium economy. This should provide greater confidence in the general directions for counter-narcotics policies and actions that are put forward at the end of this chapter.

III. CHAPTER SUMMARIES

Macroeconomic Implications

This chapter analyzes Afghanistan's opium economy from a macroeconomic perspective. Although very large, the share of the opium economy in total economic activity in Afghanistan has been falling in recent years – not because it has been declining but rather because the rest of the economy has been growing rapidly while the opium economy has remained roughly constant in absolute terms. Nevertheless, opium remains the country's largest source of export earnings, and a major source of incomes and employment in rural areas. Opium GDP is estimated at in the $2.6-2.7 billion range during the last two years, equivalent to 27% of total (drug-inclusive) GDP and 36% of licit GDP in 2005/06.

The macroeconomic impact of the opium economy depends in particular on how much of the proceeds actually enter the Afghan economy, and how this is allocated between consumption, investment, and savings, as well as more generally how it translates into demand for domestic and imported goods and services. The chapter argues that whereas farmers and wage laborers could be expected to spend rather than save the bulk of their earnings from the opium economy, mostly on domestic goods and services, opium traffickers and processors are assumed to save a substantial proportion of their receipts, and to spend more on imports. Opium-related demand, along with aid inflows, is contributing to a "Dutch disease" problem for Afghanistan, whereby prices of nontradables and production factors get pushed up, with an appreciation in the real exchange rate, weakening Afghanistan's competitiveness in non-opium export markets and in competing with imports. The positive fiscal impact of the opium economy is indirect (customs duties on imported goods purchased with opium receipts, taxation of real estate transactions, etc.) and is marginal compared to its cost in terms of government spending on counter-narcotics efforts. While the opium economy has a very significant net positive impact on Afghanistan's balance of payments, this is reduced by drug-related outflows of funds (including capital flight as well as spending on imports).

A critical set of questions addressed by the chapter concern the macroeconomic impact of successful actions against drugs, and how adverse macroeconomic consequences can be managed. In this regard, the chapter makes a number of points:

- ***Counter-narcotics efforts have been intensified but have fallen short of objectives.***
- ***A well-sequenced and balanced approach is needed,*** including all of the instru ments in the counter-narcotics arsenal.
- In particular, ***more progress in implementation of alternative livelihoods programs is needed,*** with a medium-term time horizon, as opposed to focusing on quick-impact programs like short-term employment generation programs, which lack sustainability.
- A successful counter-narcotics campaign could have an adverse effect on licit GDP growth, the balance of payments, and government revenue. However, ***such effects will be smaller than the overall size of the opium economy would indicate,*** given that a large portion of opium receipts never enter Afghanistan in the first place, or leave the country through capital outflows and/or purchases of imported goods. The economic shock would also be smaller to the extent that the burden falls on drug traffickers as opposed to farmers.
- Over the medium term, ***reduction in the size of the opium economy would ameliorate the Dutch disease effect and stimulate better competitiveness and growth in the non-drug economy.***
- With respect to the macroeconomic policy mix, ***the Government should not resist a nominal depreciation of the Afghan currency, as long as this remains consistent with monetary policy objectives.***
- Second, while the balance of payments needs to be monitored in the context of counter-narcotics efforts, ***the net impact on licit balance of payments flows and on reserves may not be too large.*** The same is true of the impact on fiscal revenues.
- The macroeconomic impact of counter-narcotics efforts can best be managed if ***there are progressive, sustainable reductions in the size of the opium economy over time, rather than sudden but reversible declines*** as seen in recent years,which can be disruptive.
- And finally, ***the critical adverse development impact of actions against drugs is on poor farmers and rural wage laborers, so these should be the focus of alternative livelihoods programs.***

Responding to Diversity in the Rural Opium Economy

This chapter summarizes and develops the findings of extensive fieldwork on the role of the opium economy in rural livelihoods and household decision-making. It argues that diversity in household characteristics, assets, and access to markets means a diverse pattern of dependency on the opium economy, and of decision-making about whether to cultivate opium poppy under varying local circumstances. This in turn implies that there is diversity in households' responses to shocks like elimination of opium poppy cultivation in their locality, and in the degree to which they are able to cope and move into alternative livelihoods, or whether they will remain dependent on opium. And finally, all this diversity calls for a commensurate response in the counter-narcotics strategy, which will have to take into account the differences among households and localities in designing and implementing the strategy. Only in this way will there be a prospect to achieve sustained reductions in opium poppy cultivation in Afghanistan.

While Afghanistan in general has proven to be a favorable environment for the expansion of opium poppy cultivation, nevertheless ***opium remains a relatively minor crop in terms of relative cultivation levels,*** accounting for only around 3% of total national agricultural land. Nearly half of the 364 districts in Afghanistan still report no opium poppy cultivation (although it is found to varying degrees in all of the country's 34 provinces), and the intensity of cultivation by district can range from very small to as much as 70-80% of the agricultural land in a district. Moreover, levels of cultivation and production have fluctuated widely–nationally, by province, and by district.

Diversity and change in patterns of opium poppy cultivation reflect in large part the varying assets and opportunities available to Afghan rural households, which in turn are closely related to geographical location. Households that are smaller, have a higher ratio of able-bodied males to total household size, own significant land, have other assets like livestock, and which are located in areas with a favorable climate, good irrigation water, and access to commodity and labor markets–these have more options and greater flexibility in terms of activities and responding to shocks. For such households opium poppy cultivation is a means to maximize the returns on their assets, both directly and through mobilizing outside labor on favorable terms through share-cropping part of their land, as well as through providing credit on highly favorable terms to the creditor, and holding opium stocks beyond the harvest period so as to benefit from higher prices.

On the other hand, households with limited human capital (large household size, few able-bodied workers), no or small landholdings, limited other assets, and located in areas with poor irrigation and infrastructure and far from commodity and labor markets, have far fewer options and tend to be more dependent on opium poppy cultivation. For these households, the opium economy provides access not only to income opportunities (primarily through share-cropping and wage labor) but also to critical assets like land and credit, enabling them to make ends meet. Many poorer households carry a heavy burden of opium-related debt, with continuing opium poppy cultivation being necessary to be able to service the debt.

Under these circumstances, ***eliminating opium from their livelihood options carries grave and counterproductive implications for asset-poor households.*** Their response is likely to increase their dependence on the opium economy over the medium term (sale of livestock, mortgage or sale of remaining land), and/or could have severe adverse human consequences (marrying off under-age daughters to offset opium debts, reducing food consumption and quality, cutting expenditures on health). The chapter points to examples of poorer farmers whose opium poppy crop has been eradicated several times but who still plan to cultivate opium poppy in the next season, in particular as the only means to service their debts and gain access to land for farming.

The chapter explores the experience with the nearly complete nationwide Taliban opium ban of 2000/01 and the more recent strong and largely successful efforts to eliminate opium poppy cultivation in Nangarhar province, one of the country's largest opium producers. There is evidence that ***the Taliban ban carried the seeds of its own lack of sustainability, due to a many-fold increase in the burden of opium-related debt*** (locking many households into dependence on future opium poppy cultivation), forcing asset sales to make ends meet, etc. It also appears that the opium ban weakened the Taliban politically.

Thus the sustainability of the ban beyond the first year was highly doubtful, even if the Taliban had not been overthrown in late 2001.

In ***Nangarhar*** the emerging pattern is that ***localities with good land and irrigation resources and access to commodity and labor markets have sustained or largely sustained the elimination of opium poppy cultivation for a second consecutive year,*** something unprecedented in the history of counter-narcotics efforts in Afghanistan. At the other extreme, in the most remote, resource-poor localities the ban on opium poppy cultivation never really took hold and cultivation increased in the second year. Intermediate areas between these two extremes face great difficulties, with strong pressures to resume opium poppy cultivation but also efforts to continue the ban, and with resource-poor households caught in between and resorting to drastic coping actions like out-migration.

The chapter ends with a call for a commensurate response in the design and implementation of counter-narcotics strategy to the diversity found in Afghan rural households, in their involvement in the opium economy, and in their responses to counter-narcotics measures. Fundamentally, ***there is a need to work with the diversity that exists in rural Afghanistan rather than ignoring it,*** and to make use of the knowledge that has been gained about opium poppy cultivation and the factors that contribute to households' decisions in this regard. This would imply a more differentiated approach by locality (e.g. district), continuing field research to further build the evidence base and capture the ongoing evolution of the opium economy in rural areas, and avoiding a static mind-set and mechanical application of counter-narcotics instruments. The implication for alternative livelihoods programs (and for "mainstreaming" of the counter-narcotics dimension in development activities) is that they need to target the asset-poor households and localities with limited resources, and to begin to address the shortcomings that make these households and areas highly dependent on opium in the first place (in particular, lack of access to land and credit, lack of alternative income-generation opportunities, and distance from markets).

Opium Traders and Trading Systems

Based on intensive fieldwork conducted in 2005, this chapter studies opium traders and trading systems in two contiguous provinces of Afghanistan, Helmand in the south and Ghor toward the west, which have quite different roles in the opium economy. Helmand has long held a dominant position as an opium producer, accounting for around 25% of the total national opium poppy area in recent years, while cultivation of opium poppy in Ghor is more recent and accounts for only around 3% of the total national area. Helmand is essentially an economy of arid plains dominated by a river irrigation system, while Ghor has classic features of a remote mountain economy. In terms of climate, the irrigated parts of Helmand are almost ideal for high-yielding opium poppy cultivation, whereas Ghor is much more marginal, with crop failure always a risk in large parts of the province. These geographical differences, coupled with significant drug-related economic interactions between the two provinces, have shaped the very different size and evolution of the opium trade in Helmand and Ghor.

The chapter estimates very roughly that opium trade through Helmand–including both local production and opium from other provinces–accounts for up to half (2,000 metric tons) of Afghanistan's total opium production. Ghor on the other hand supports both a much

smaller transit trade in opium from the north (roughly in the range of 100-200 tons per years) as well as its own production, also estimated at around 100-200 tons per year.

These production and trade estimates are matched against reported numbers of opium traders and individual trade levels, generating estimates that are broadly consistent with the supply estimates determined from production data. It is roughly estimated that Helmand has some 1,000-1,500 small opium traders and 300-500 bigger traders. In Ghor the numbers are much smaller–perhaps in the range of 30-50 transit traders (bringing opium from northern provinces down to Helmand), some of whom are Helmandis, and a number of small traders dealing in Ghor's own opium production, numbering some 100-150 in Chaghcharan district with much smaller numbers elsewhere.

Attention is drawn to the issue of opium inventories and the different reasons for which they are held (although the chapter could not address this subject in detail). Ghor is characterized by an apparent absence of significant stocks of opium, but the picture in Helmand is quite different. With opium production highly seasonal and sale of opium out of Helmand taking place episodically throughout the year, larger traders in the province maintain short-run stocks in order to meet demand and take advantage of favorable prices. Various sources suggested that perhaps 40% of the purchase at harvest time would be kept as stock for trading during the year. In addition, there has been an accumulation of opium stocks during the years of high prices, which appear to have been held on to in the hope that prices would recover. Based on very rough calculations, a trader purchasing around one metric ton of opium per year could have built up a total long-term stock of opium of at least a ton over the past 4-5 years.

The development of the opium transit trade through Ghor offers insights into the expansion of Helmand-based trading networks and the dominant role they appear to play in shifting production to other provinces. At the same time, the significance of traditional informal networks in developing opium trade (virtually all of the Ghor transit traders had a background in the livestock trade) is demonstrated. More generally, the chapter argues that especially before the more recent "criminalization" of opium trading, patterns and practices in the opium trade had considerable similarities to other informal markets in Afghanistan (see AREU, 2004 and more recent publications by AREU).

Rather fragmentary data on value chains was collected, which allows only a few broad conclusions to be drawn. Price margins appear to be modest close to the farm gate, in the range of 7-10% between farmers and small traders. But there appears to be a rather larger margin for traders beyond the locality, perhaps on the order of 50%, consistent with the shift in the share of gross opium revenues in favor of traders since 2003. Margins are widely reported to increase sharply the closer to the border the trade moves.

The research obtained significant insights into trading risks. The common thread emerging from interviews is that the most important risk is price risk due to short-term (daily) price fluctuations, sometimes of up to 30%. These fluctuations appear to be driven by the episodic nature of demand from outside buyers and a degree of collusion on the part of bigger traders. Risks associated with theft and seizures were widely reported. Risk of loss due to adulteration of the product was reported but appears to be less common and greatest for inexperienced traders.

A persistent theme is the engagement of key provincial and district authorities in the opium economy, and both interdiction and eradication measures may have contributed to key drug industry actors and their sponsors gaining tighter control over distribution and trade. It was commonly reported in interviews that payments were exacted from both farmers and traders to avoid eradication of poppy fields or seizure of opium stocks and shipments.

Key conclusions of the chapter relate to the continuity of trading systems from the past, including traders moving from one product to another, and between legal and illicit goods, in response to opportunities. The chapter also argues that there is evidence of a somewhat fragmented rather than unitary market for opium in Afghanistan.

Policy implications center around the consequences of eradication and interdiction measures in an environment of weak governance and lack of rule of law, and also issues related to informal regulation of markets in general. More specifically, numerous examples were reported of harassment by local authorities, such as exacting payments from farmers to avoid having their poppy fields eradicated (and coming at harvest time to collect a further "tax"), seizing opium shipments but for re-sale not destruction, and "encouraging" small traders to move into market buildings owned by key local drug industry actors. Smaller traders without connections have been finding it increasingly difficult to stay in business.

There is a case for anticipatory action in Ghor to restrict the spread of opium poppy cultivation in that province. Note is made of comparative work on middle markets in Europe, which in certain respects resemble those of the two provinces studied. These similarities include the fragmented and regional nature of markets and the critical role of kinship and ethnic ties in trading systems, albeit with clear evidence of reaching out beyond ethnic groups as well (e.g. in the case of the Ghor transit trade).

Prices and Market Interactions in the Opium Economy

This chapter analyzes the fairly extensive data available on opium and opiate prices in (and to some extent around) Afghanistan, with a view to better understanding price structure, price trends, price behavior, and market integration. Prices are important because they are a critical determinant of the overall level of opium/opiate revenues in the Afghan economy and its distribution among different actors. Prices provide market-based signals to producers, traders, and other actors. Opium prices directly affect asset values, capital gains, and decisions on size of opium inventories, as well as opium-related debt burdens, debt distress, and associated adverse consequences including for rural poverty. Finally, price behavior may shed light on the characteristics of opium markets and of the drug industry, providing indications on how to respond more affectively.

The chapter finds that there have been large changes in opium prices (most notably associated with the Taliban opium poppy cultivation ban in 2000/01), as well as considerable volatility in prices. Supply side factors (weather, cultivation bans) have a strong influence on opium prices, albeit mediated somewhat by inventory adjustments. The maintenance of farm-gate opium prices during recent years at levels well above those prevailing in the 1990s, suggests that, despite the failure to reduce opium production, the "risk premium" associated with opium poppy cultivation has risen considerably, reflecting criminalization of the activity (it was essentially legal during the Taliban period except during the ban near the end of

their rule), significant albeit patchy and haphazard enforcement efforts, and likely greater extortion of "protection money" from farmers by various authorities.

The chapter raises serious questions about whether higher prices in themselves further broader counter narcotics-goals and should be seen as a policy objective. In particular, higher prices: (i) increase the incentives for opium production (particularly in areas where counter-narcotics pressures are less); (ii) raise the value of opium inventories (enriching large traffickers and others holding sizable inventories); (iii) increase the burden of opium-related debts on poorer farmers; and (iv) if due to eradication or cultivation bans, make those who still cultivate opium poppy better-off while leaving those who do not cultivate, or have their fields eradicated, far worse off.

An investigation of the spatial pattern of opium prices suggests that opium markets are flexible and mobile. While actions against the opium economy in a given area can be effective locally and in the short run (including having an impact on local prices), they tend to encourage a shift of production and trade to other areas. Regional (particularly cross-border) differences in prices and the potential profits from trade suggest that interdiction of opium trade, in particular at borders, may be effective, although sealing remote, mountainous and porous borders like those of Afghanistan will be very difficult.

Analysis of the "vertical" structure of opiate prices (from farm-gate through trade and processing to prices in transit countries and consuming countries) suggests that:

- The value of raw opium at one end of the chain comprises only a tiny fraction of the final retail value of heroin in Europe or the United States.[4]
- There have been great price fluctuations at the upstream end of the price chain, whereas prices appear to have been much more stable at the downstream end (although there is evidence of substantial adjustments in purity). This means that there must be absorption of price shocks from the upstream end of the value chain, in transit countries and perhaps in wholesale markets of consuming countries.
- At both extreme ends of the "value chain" (farmers and the traders who purchase directly from them, and final consumers and the retail street dealers who sell to them), markets are characterized by numerous actors who are "price-takers" and have little or no ability to manipulate prices. But at key intermediate stages there are much fewer actors, who probably can influence prices.
- There may be some premium placed by the drug industry on avoiding very sharp overall movements in wholesale and retail prices in consuming countries (with adjustments in purity playing a role instead), while at the opposite end of the value chain prices clearly adjust in the face of supply shocks–perhaps considered necessary to elicit the necessary supply and incorporate changing risk premiums.
- The absorption of price shocks implied by these patterns would appear to be pursued through inventory adjustments, adjusting profit margins at key intermediate stages, and adjustments in purity at downstream stages.

Finally, a range of statistical and econometric approaches are applied to questions about the degree to which opium markets in Afghanistan are "integrated", the technical definition of which is that prices in different markets are closely related, generally move together, and do not get too far out of line with each other. Main findings include:

- There are strong correlations between prices in some Afghan opium markets, but with

[4] This feature is common among agricultural products that go through processing, branding, and packaging before final consumption (although there is only limited branding and packaging of opiates), but it is found in extreme form in the drug industry.

Mazar-i-Sharif and especially Badakhshan appearing to be more isolated.

- For the two markets with a longer time series of price data (Kandahar and Nangarhar), based on econometric tests the markets were integrated prior to the 2000/01 Taliban opium poppy cultivation ban, but not in recent years.
- Helmand and Kandahar for all intents and purposes can be viewed as a single opium market.
- Based on analysis of price data for recent years, Helmand/Kandahar appear to be functioning as a "central market" for opium in Afghanistan.

Possible implications of these findings include, first, that significant counter-narcotics actions can disrupt opium markets and apparently reduce the degree to which they are integrated. To the extent that efficient market functioning is good for the drug industry, this disruption is a positive outcome. More concretely, such market disruption could result in higher costs, less efficient adjustment to various shocks, and other difficulties for the drug industry. However, this impact should not be overstated, particularly in the case of more localized interventions.

Second, it is doubtful whether the Taliban's opium ban was a major factor behind the reduction in market integration, since it applied to production and not trade and was applied virtually nationwide in areas under Taliban control (including Kandahar and Nangarhar). Moreover, there are signs of continuing close links between markets subsequent to the ban. The important finding that the opium markets in Kandahar and Nangarhar are no longer integrated most likely is primarily due to the sharp reduction in opium production and trade in Nangarhar in 2004/05, reflecting strong and effective counter-narcotics measures including raids on and closure of opium bazaars in that province.

A final question concerns the implications of Helmand and Kandahar functioning as a single market and also in some sense serving as a "central market" for opium in Afghanistan as a whole. Would focusing counter-narcotics law enforcement efforts–notably interdiction of trade and destruction of processing labs and large stocks of narcotics etc.–- on the Helmand/Kandahar nexus be effective in disrupting opium markets more generally in Afghanistan? This question demands further thought and analysis.

The Nexus Between the Drug Industry and *Hawala*

This chapter represents a first attempt to build a qualitative story, with quantitative estimates, on the important nexus between drugs and *hawala* (informal money transfer system) in Afghanistan. The objective is to enhance knowledge about the *hawala* system and the methods used to launder the proceeds of drug trafficking. The analysis in the chapter is based on interviews with a sample of 54 *hawala* dealers in the main centers of *hawala* activity of Afghanistan as well as during a visit to Peshawar, Pakistan. In addition, interviews were conducted with users of the *hawala* system (drug dealers, businessmen, traders, international aid workers), regulators (government officials, central bank personnel), and formal service providers (bankers, accountants). In this way a broad picture of the *hawala* system and its nexus with drug money was built up, along with some rough quantitative estimates. However, and despite careful cross-checking and other measures to ensure maximum integrity and comparability of data, the data and methodological problems in attempting a serious study of this difficult and largely clandestine topic should not be underestimated.

Nevertheless, the chapter does provide new insights into the nexus between drug trafficking and the *hawala* system in Afghanistan, and provides an initial evidence basis for policy.

The field research found substantial evidence that the *hawala* system does facilitate the transfer of drug-related funds in Afghanistan. *Hawaladars* reported turnover of the highest order during the two phases of opium cultivation and harvesting. The chapter offers a provincial breakdown by dealer size and proportion of total financial transactions related to drug money. It also confirmed that in the settlement process *hawala* dealers are heavily reliant on formal banking channels in regional countries around Afghanistan.

Each of the four localities covered by fieldwork provides a different perspective on the laundering of drug funds, which demonstrates how difficult it is to gain a sense of the aggregate drug money laundering problem in Afghanistan. The field research in Faizabad, for example, indicated that during certain times of the year close to 100% of the liquidity of the *hawala* system in the province is derived from drugs, whereas in Herat it was estimated that only 30% of the *hawala* market's overall transaction volume is directly linked to drugs. Analysis of data gathered in places like Herat was complicated by confirmed links between drug money and legitimate imports. The southern region (Helmand and Kandahar provinces) is also a key centre for money laundering in Afghanistan (about 60% of the funds are drug related and 80-90% of the *hawala* dealers in Kandahar and Helmand are involved in money transfers related to narcotics). Helmand has emerged as a key facilitator of the opium trade, both between provinces and exports, while overall estimates of the local *hawala* markets' drug-related component are of a similar order of magnitude to those in Kandahar. This finding adds weight to the notion that the major trading centers in these two neighboring provinces should be treated as essentially one market. Bearing this in mind, the study calculated that Helmand could account for roughly US$ 800 million of Afghanistan's drug-related *hawala* business and that Herat is the second largest contributor, with in the range of US$ 300-500 million of drug money laundered annually.

Furthermore, Dubai appears to be a central clearing house for international *hawala* activities (see Maimbo, 2003, and sources cited in Chapter 6). In addition, various cities in Pakistan, notably Peshawar, Quetta, and Karachi, are major transaction centers. It appears that even in the case of drug shipments to Iran, payments for them come into Afghanistan from Pakistan.

Overall, the chapter confirms that the *hawala* system has been key to the deepening and widening of the "informal economy" in Afghanistan (see World Bank, 2005), and has provided the cover of anonymity and opportunity to launder money for those wishing to abuse the system. However, these findings should also be viewed in light of the positive contributions of the *hawala* system. It has been central to the survival of Afghanistan's financial system through war and, as argued by Maimbo (2003), "integral to processes of early development and vital for the continued delivery of funds to the provinces." The *hawala* system also plays an important role in currency exchange. It participates in the Central Bank's regular foreign currency auctions, and was instrumental in the successful introduction of a new currency for Afghanistan in 2002-2003.

In drawing up an appropriate policy response to the *hawala* system, it is crucial for policymakers to:

- ***Recognize the positive impact of the hawala system*** on Afghanistan's economy and society. Without its transfer mechanisms, basic assistance could not have been delivered to people in need during the civil conflict or reconstruction process.
- ***Involve hawala dealers in the policy process,*** as their knowledge can be drawn on.
- ***Develop real incentives for compliance with current registration and taxation initiatives.*** The adversarial relationship that *hawala* dealers have had with corrupt law enforcement and tax authorities needs to be reversed through progressive building of trust between *hawala* operators and government officials.
- ***Enhance the effectiveness of the Central Bank's registration program.***
- ***Ensure that the assistance and business communities are diligent in their use of the hawala system,*** with proper checks to protect their transactions from becoming intermingled with illicit transfers.
- ***Encourage genuine anti-money laundering compliance in countries that have banking links with Afghanistan*** including Pakistan and Dubai. While they have publicly agreed to the Financial Action Task Force (FATF) standards, evidence on the ground suggests that implementation still needs to be strengthened.
- On the other hand, ***the FATF guidelines must be viewed within, and if necessary adapted to suit, the Afghan context.*** There is a risk that international banks, applying FATF guidelines in an inflexible way, could alienate the population and thereby undermine the objective of developing a formal financial sector.

Because of the cross-sectoral nature of the drug industry and its reliance on regional partners, a combination of interventions beyond the *hawala* system itself and anti-money laundering will be required, including a gradual and properly sequenced (as between law enforcement and development) strategy to reduce the size of the opium economy, rapid and sustained growth of the legal economy (which will require identification and development of international markets for Afghanistan, especially for the country's agricultural goods); and strengthening the Afghan formal financial system while enforcing anti-money laundering controls in neighboring countries.

Organized Crime and the Drug Industry

The final chapter of this volume analyzes Afghanistan's drug industry, and its recent evolution, from the perspective of organized crime. Reliable information about the "commanding heights" of the drug industry in Afghanistan (i.e. the small number of key traffickers and their associates and sponsors including in government) is even more difficult to obtain than for other segments of the opium economy. Nevertheless, based on intensive interviews over a short period of time and drawing on secondary sources, this chapter makes an initial effort to build up an understanding of the organization of the drug industry and how it has evolved in recent years, especially at the upper levels. The chapter also develops a conceptual framework for thinking about organized crime in Afghanistan, and outlines schematically the changing constellation of actors and their interrelationships in the "drug industry pyramid".

The chapter starts by reviewing the definition of organized crime groups, which encompasses a wide variety of entities ranging from loose networks of as few as three people to large, hierarchical, and structured mafia-like organizations. Thus there is a "spectrum" of organized crime entities, with those which constitute the greatest threat in Afghanistan becoming increasingly structured and hierarchical. Whereas loose criminal networks operate in larger illicit markets that they cannot influence, the more structured, hierarchical organized crime groups strive to exercise effective control over criminal markets, in particular through offering "protection" services (i.e. extorting revenues from economic actors in return for enabling and facilitating their businesses to operate). Organized crime thrives in an environment of weak governance and poor security; hence post-conflict societies are particularly vulnerable to growth of organized crime.

The chapter focuses on three parallel but closely related developments since 2001:

- ***The transformation of warlords and unofficial armed groups***–in particular warlords distancing themselves from direct involvement in narcotics (due in large part to international pressure, and their interest in taking on new roles in politics), and the process of Disarmament, Demobilization, and Reintegration (DDR) for organized militia forces and the more recently initiated process of Disarmament of Illegal Armed Groups (DIAG).
- ***The changing roles of different government agencies, notably the Ministry of Defense and Ministry of Interior,*** with the former being reformed in the context of DDR and the formation of the new Afghan National Army (ANA) and the latter remaining to a large extent unreformed, leaving it vulnerable to being compromised by the drug industry, including through senior police appointments.
- ***The evolution of the drug industry itself*** –in the direction of greater consolidation; coordination (including across ethnic groups); close association between government, business, and criminal operators; exclusion of new entrants especially at upper levels; dynamic responses to law enforcement (including higher levels of secrecy); and development of more systematic and well-organized mechanisms of criminal protection.

In an environment of criminalization of narcotics, increasing (albeit patchy) law enforcement and eradication campaigns, and ongoing efforts to rebuild state institutions, the drug industry in Afghanistan is becoming increasingly consolidated. At lower levels (farmers, small local traders, etc.) there is still freedom of entry and choice in transactions, but this becomes progressively less as one moves up the pyramid. At the top level, the chapter argues that around 25-30 key traffickers, the majority of them based in southern Afghanistan, control major transactions and transfers, working closely with sponsors in top government and political positions. A form of "checks and balances" appears to be exercised to ensure smooth flows of narcotics and protection payments.

Entry at the top level and the one below (some 200-250 large traffickers nationwide) is severely restricted, and the degree of secrecy is high. Entry also is becoming less easy for mid-level traffickers (perhaps some 500-600 of them in the country), with secrecy increasing. Southern traffickers largely control the flow of opium from northern Afghanistan to the south which has become the center of the drug industry, whereas interconnections with the Northeast (Badakhshan) appear to be much less, in part due to the latter having its own local heroin processing facilities.

A key part of this emerging pattern is the "capture" to a considerable extent of the Ministry of Interior and its use as a means of providing "protection" for and facilitating consolidation of the drug industry. At the lower levels, payments to police to avoid eradication or arrest reportedly are very widespread. At higher levels, provincial and district police chief appointments appear to be a tool for key traffickers and sponsors to exercise control and favor their protégés at middle levels in the drug industry.

The chapter emphasizes that there are no easy answers, simple formulas, or quick-fix solutions to the drug industry as an increasingly organized set of criminal activities. Three aspects are highlighted.

First, ***the emergence of organized criminal activities may require using new analytical frameworks and dispensing with pre-accepted notions*** (e.g. that different ethnic groups don't work together). In this context, it will be essential to build knowledge and monitor developments closely.

Second, ***countering organized crime in Afghanistan requires a careful balancing act:*** action that is too assertive may risk undermining the delicate political process that is underway, whereas too little action against criminal actors and activities may in the long run lead to subversion of the political process itself. This calls for, on one side, a concrete focus on ensuring higher integrity in law enforcement, with better oversight and building core groups of honest law enforcement officials. On the other side, there may be merit in prosecuting a limited number of high-profile traffickers through Afghan courts, irrespective of political or ethnic affiliation or connections. This will send an important signal and reinforce more systematic approaches at lower levels.

Third, ***improvements in specialized law enforcement agencies alone will be far from sufficient*** to tackle the drug industry, and there must also be a focus on attacking the enabling environment for such criminal activities. This will require first and foremost continuing state-building, improving governance, and instilling rule of law. Reform of the Ministry of Interior is a priority issue in this regard.

IV. CONCLUSIONS AND POLICY IMPLICATIONS

As the foregoing chapter summaries highlight, this volume includes a diversity of topics and research techniques, but there is a high degree of consistency in the main findings and themes. Although distilling policy implications from this diverse set of chapters is challenging, it is essential to do so, building on the evidence, analysis, and conclusions presented in them.

Most broadly, the chapters in this volume clearly highlight that ***a "smart" counter-narcotics strategy will be essential for the effectiveness and sustainability of the fight against drugs.*** The diversity, flexibility, and dynamic character of the drug industry (and its financial channels through the *hawala* system) have been amply demonstrated in recent years. It must be recognized that counter-narcotics efforts—whether enforcement actions or development of alternative livelihoods—inevitably cannot be anywhere nearly as nimble or quick as the activities they are targeted against, and they inevitably take time,

measured in decades rather than years in the case of alternative livelihoods programs.

This makes it all the more important to design and deploy these instruments in an intelligent manner that maximizes the prospects for them to be effective and sustainable. For example, experience strongly suggests that counter-narcotics actions against farmers are more effective and more likely to "stick" in areas where access to land and water resources is better, there is proximity to markets, land-person ratios are higher, etc.–all of which taken together mean that licit livelihoods are possible. This suggests concentrating such efforts in these areas. Experience also suggests that strengthening enforcement in areas that have not yet become dependent on drugs can pay substantial dividends in discouraging opium production in such areas. On the other hand, in remote, poor areas with limited land and irrigation water, dependency on the opium economy is much greater, and premature efforts to eliminate it will be hard to sustain and could likely prove counterproductive. More generally, geographical issues with respect to application of counter-narcotics strategy and policies are very important and need to be explicitly factored in.

In addition, the counter-narcotics strategy needs to be sensitive to issues relating to provinces and localities not currently cultivating opium poppy. Non opium-producing areas need to receive development support (in addition to enforcement actions against cultivation as it arises) that will prevent start-up of cultivation. In this way, the threat of displacement and spread of opium poppy cultivation can be reduced.

A second important implication for strategy and policy is that, with modest resources and weak institutions fighting against a diverse, flexible, mobile, and dynamic drug industry, ***expectations about what can be accomplished in the short run must be kept reasonable.*** Overly inflated expectations–whether about eradication, other enforcement measures, or alternative livelihoods–inevitably lead to disappointments, which given the political sensitivity of narcotics in turn can lead to overreaction and policy mistakes. This has been demonstrated by the experience of other countries. Thus there is no alternative to a sustained long-term effort, with success inevitably being modest and elusive in the short run.

A third, related implication is that ***sequencing and complementarity issues need to be fully taken into account*** in the design and implementation of a "smart" counter-narcotics strategy. A one-dimensional approach which focuses on a single instrument, a single time, or a single place does not make sense–the drug industry will respond dynamically, leaving such efforts endlessly chasing moving targets. For example, consistent with reasoning developed earlier in this chapter, it would make sense to target enforcement efforts against opium poppy cultivation first in better-off and less opium-dependent areas (including areas not currently cultivating significant amounts of opium poppy), and take on poorer areas which are heavily dependent on opium more gradually over time. There is a strong argument that enforcement efforts against opium poppy farmers should follow rather than precede the availability of viable alternative livelihoods.[5]

A fourth implication is that ***available data on the opium economy and analysis of such information should be utilized to inform the design and implementation of counter-narcotics strategy.*** Some data, for example satellite imagery, is already being used to some extent, but more use should be made of local data from field research (e.g. on characteristics of rural households). The National Risk and Vulnerability Assessment

[5] Areas with better land and water resources and access to markets as well as higher incomes, more household assets, and lower dependency ratios in effect already have "alternative livelihoods" available, which is why enforcement efforts can be more effective and sustainable in these areas.

(NRVA) rural household data, which covers the entire country, could also be very useful in combination with in-depth field information for selected localities. Statistics on opium prices, collected on a monthly basis, can be productively utilized. It is also important to further expand the knowledge base on opium, particularly as the drug industry continues to evolve and transform itself.

A fifth implication is that ***the design and implementation of counter-narcotics efforts need to factor in the adverse side effects of interventions.*** Some of these are well-known as developed in several of the chapters. For example, with respect to eradication and other enforcement efforts against opium poppy farmers, adverse side effects which need to be factored into the counter-narcotics equation include, among others: (i) lowered incomes for the poor (from sharecropping, wage labor); (ii) reduced access to land and credit for those lacking such resources; (iii) increased opium-related indebtedness, with tragic consequences for many rural households; (iv) reduced economic demand in the rural economy due to multiplier effects; and (v) possibly reduced political support for the government in rural areas.

Interdiction efforts can be more selective and targeted than eradication, but in the context of Afghanistan this may open up greater scope for abuse and associated adverse side effects (discussed further below in relation to governance and corruption). A key potential adverse side effect of interdiction, particularly if it goes after higher-level traffickers and their sponsors (some of whom are in or have close ties with the government), is the political fall-out. This needs to be taken into account in advance so that the government is prepared to respond as needed.

Adverse side effects relate closely to the sphere of governance, which is critical both to understanding the opium economy and in counter-narcotics efforts. While the drug industry itself constitutes a serious threat to the state-building agenda in Afghanistan, ill-considered counter-narcotics actions can be counterproductive in terms of governance, possibly exacerbating an already difficult situation. On the other hand, strengthening local government administration clearly has a role to play in fighting drugs through improving governance.

More specifically, ***the evident risk of corruption and consequent distortions in the implementation of the counter-narcotics strategy must be fully taken into account,*** as this has potentially very serious adverse consequences which go beyond the opium economy itself and could adversely affect Afghanistan's state-building and reconstruction agenda more broadly. For example, experience demonstrates that implementation of eradication programs–especially if they are partial or "targeted" within localities–inevitably is distorted by corruption, so they disproportionately affect the poor and those without local political connections. This suggests that, in areas where eradication is being pursued (for example in areas with good access to land, water, and markets as recommended earlier), it should be applied wholesale with the objective of eliminating opium poppy cultivation in the area. This will minimize the risk of favoritism and corruption in implementation–if virtually everyone is being prevented from cultivating opium poppy and/or having their poppy fields eradicated,the scope for irregularities and distortions will be less.

In relation to interdiction, the corruption issue is just as challenging. In addition to reforms in the key institutions involved (e.g. the Ministry of Interior, police, and army, the

approach to and targeting of interdiction may need to be rethought. While it may make a great deal of sense to focus interdiction efforts against higher-level elements of drug trafficking networks, these are more difficult targets because of their political connections. On the other hand, focusing interdiction on smaller actors (e.g. small and medium-sized opium traders) using unreformed law enforcement agencies runs the risk of systematic corruption in implementation with associated distortions (including not least facilitating consolidation of the drug industry). There are no easy answers, but it is clear that ignoring corruption in the implementation of drug control policies, and not taking it into account in their design and deployment, will undermine the whole effort. This also needs to be factored into discussions and dialogue on governance.

The macroeconomic implications of actions against drugs need to be closely scrutinized. Although they are likely to be less than the sheer size of the opium economy would suggest, there nevertheless could be significant complications for macroeconomic policy, which the government should be aware of and prepared for. In particular, trends in the balance of payments need to be monitored closely, with exchange rate policy responsive to any shocks that arise from counter-narcotics actions. But the biggest adverse macroeconomic impact of successful efforts to reduce the size of the opium economy (as well as the greatest effect in terms of worsening poverty) will most likely be on economic activity in some rural areas and on the rural poor. Any efforts to offset this impact (such as those in Nangarhar during the 2004/05 opium ban there) inevitably will be too little and too slow. So counter-narcotics strategy should focus not only on offsetting adverse macroeconomic and poverty impacts of actions against drugs, but also needs to re-think the size and speed of eradication and other enforcement efforts in heavily drug-dependent and poorer areas, with a view to ensuring that the adverse effects on incomes and livelihoods of the poor are manageable.

There are difficult dilemmas in dealing with the hawala system, which in addition to transferring drug industry proceeds is an indispensable mechanism for payments, deposits, and licit financial transfers including notably remittances. Thus a frontal attack on the *hawala* system is unwarranted and could be damaging. The way forward is, first, to recognize the positive impact of the *hawala* system on Afghanistan's economy and society. *Hawala* dealers should be brought into the policy process, incentives developed for compliance with current *hawala* registration and taxation initiatives, and the Central Bank registration program strengthened. Since regional banks especially in Pakistan are deeply involved in the *hawala* network, genuine compliance with money-laundering standards by such banks is required. On the other hand, very strict enforcement of FATF guidelines within Afghanistan appears to be hindering the development of the formal financial system in the short run, and discouraging Afghans from depositing their cash in banks. This may call for adapting FATF guidelines to better suit current conditions in Afghanistan. Finally, the assistance and formal-sector business communities need to be diligent in their use of the *hawala* system, for example by making proper checks on dealers to protect their transactions from becoming intermingled with illicit transfers.

The implications of the consolidation of the drug industry, and the apparent role of elements of the security forces (including police at provincial and district levels) in facilitating its activities, are potentially very serious. The credibility of the counter-narcotics strategy as a whole, the legitimacy of the government, and more generally the state-building and security sector reform agendas could be severely damaged. This

means that interdiction against high-level drug traffickers and their sponsors (inside and outside of government) would have high pay-offs in the short run, especially in terms of arresting the trend of consolidation and compromising of government institutions. But by the same token, such an effort would be all the more difficult against a consolidated, entrenched, and powerful "core" of the drug industry. These trends also call for accelerated institutional reform and strengthening of the Ministry of Interior and police force so that they can be more resistant to being compromised by the drug industry.

Although it is beyond the scope of this volume to look in detail at the drug industry beyond the borders of Afghanistan, this has been touched on in different chapters–in discussions on drug-related financial flows and the balance of payments, opium trading, opiate price patterns and trends, and the *hawala* system. ***The regional and global character of the drug industry clearly calls for a commensurate response at these levels.*** In particular, interdiction against high-level drug traffickers and those who profit from the trade needs to occur beyond Afghanistan's borders as well as within the country. The flow of drug money globally, including through financial institutions in many countries, is an essential facilitating element for the drug industry (including in Afghanistan) and hence cannot be ignored. And the demand side of the equation for global illicit narcotics in many respects is at the core of the problem, so demand reduction will comprise an essential component of an effective global counter-narcotics strategy.

Finally, it seems appropriate to close this introductory chapter by emphasizing that ***it is possible to look into the "black box" of the drug industry,*** both from its "edges"–i.e. the farm production stage at one end and final consumption at the other end–but also at some of its core elements beyond the farm level, like financial channels, trading networks, price patterns, and higher-level organizational structure, as well as the multi-faceted interactions of these elements with the rest of Afghanistan's economy, polity, and society. Although this is not easy to do, the chapters in this volume demonstrate that despite the difficulties, such analysis is not only possible but can be very illuminating. It is hoped that as a result of the research presented in this volume, further in-depth research on these and other aspects of the opium economy will be encouraged, and the evidence from good research will be fully factored into counter-narcotics strategy, policies, and actions. Only in this way will it be possible to make substantial and sustained progress in the fight against illicit narcotics in Afghanistan.

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Chapter 2

MACROECONOMIC IMPACT OF THE DRUG ECONOMY AND COUNTER-NARCOTICS EFFORTS

Edouard Martin and Steven Symansky[1]

I. THE MACROECONOMIC IMPACT OF DRUG-RELATED ACTIVITIES

The Government's and the donor community's counter-narcotics efforts have had a limited impact so far on Afghanistan's opium production, which has remained at historically high levels in the last few years. However, owing to the sustained growth of the licit economy, the size of the opium sector relative to the rest of the economy has declined significantly. Nevertheless, the opium sector remains Afghanistan's largest source of export earnings (although unrecorded) and a major source of incomes in the rural areas. Intensification of counter-narcotics efforts will therefore have a substantial economic and social impact. To explore this impact, a simple macroeconomic model has been developed. Given the uncertainty surrounding economic behavior as well as the values of a number of economic variables, the results essentially have an illustrative value. Nevertheless, this model seeks to capture, in an integrated way, the key economic transmission channels. The model suggests that even through interdiction and eradication have very different economic effects, the impact of counter-narcotics efforts on the real sector will be less pronounced to the extent that a large part of the decline in income would fall on traffickers, who have a lower propensity to consume. Similarly, both the high level of drug-related capital outflows and the large import content associated with drug-related spending could moderate the adverse effect of counter-narcotics efforts on the balance of payments. The fiscal impact would also be somewhat limited. Nevertheless, in view of the potential social impact of both eradication and interdiction, a gradual approach to the elimination of opium production, allowing the authorities to put in place the necessary sustainable income generation programs, appears warranted.

The Drug Sector in Afghanistan

Afghanistan remains, by far, the world's largest opium producer. Over the last 15 years, Afghanistan's opium production has increased steadily, from 1,570 tons in 1990 to 4,100 tons in 2004 (Table 2.1). The main disruption to this increase was the production ban imposed by the Taliban in 2001, which was successful, at least temporarily, in reducing production (but less so in reducing exports due to the existence of large inventories).

Table 2.1: Basic Indicators of Opium Production, 1986-2005

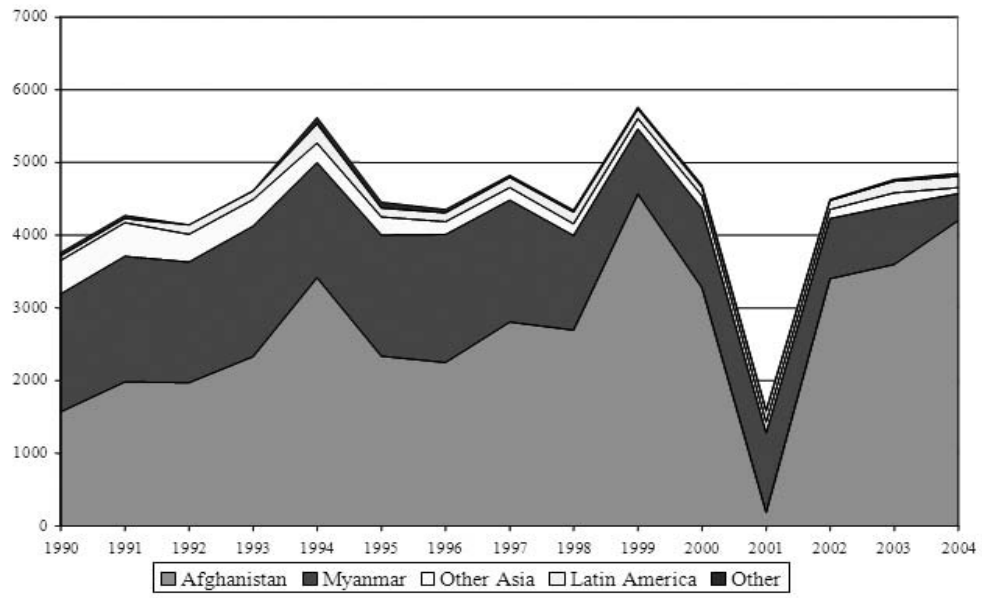
	1986	1990	1995	1999	2000	2001	2002	2003	2004	2005
Production (in metric tons)	350	1,570	2,335	4,565	3,276	185	3,400	3,600	4,200	4,100
Cultivated area (in ha)	29,000	41,300	53,759	90,583	82,171	7,606	74,100	80,000	131,000	104,000
Yield (in kilograms per ha)	12.1	38.0	43.4	50.4	39.9	24.3	45.9	45.0	32.1	39.4
Average farmgate price (in U.S. dollars per kilogram)	...	...	23	40	28	303	353	283	143	137
Gross income per ha (in U.S. dollars)	...	...	1,004	2,020	1,107	7,363	16,194	12,750	4,580	5,385

Sources: United Nations Office on Drugs and Crime (UNODC); and Fund staff estimates

[1] Middle East and Central Asia Department of the International Monetary Fund (IMF). The authors would like to thank Doris Buddenberg, William Byrd, and several UK officials of the Foreign and Commonwealth Office for their useful comments. An earlier version of this paper was published as an IMF selected issues paper (http://www.imf.org/external/pubs/cat/longres.cfm?sk=19051.0). The views, findings, interpretations, and conclusions expressed in this chapter are those of the authors and do not necessarily represent those of the IMF or IMF policy, or of the United Nations Office on Drugs and Crime or the World Bank or its affiliated institutions, Executive Board of Directors, or the countries they represent.

As the increase in production in Afghanistan coincided with a drop in production in the rest of the world triggered by strict bans and intensified counter-narcotics efforts, Afghanistan has become by far the world's main opium producer, with a share of world supplies that increased from 42% in 1990 to 87% in 2005 (Figure 2.1).

Figure 2.1: World's Opium Production (in metric tons)



Several factors have contributed to Afghanistan's prominence in opium production:

- **Favorable cultivation conditions:** Owing to favorable conditions, yields in Afghanistan have been consistently higher than in other opium-producing countries. Over the 2000-04 period, and despite adverse weather, yields in Afghanistan were more than twice those in Latin America, more than three times those in Myanmar, and more than four times those in other Asian countries.
- **A high morphine content:** In many opium producing countries, notably in Southeast Asia, about 10 kg of opium is needed to produce one kg of heroin. However, the transformation yields are much higher in Afghanistan, where on average only 6 to 7 kg of opium are needed to produce one kg of heroin.[2]
- **Insecurity and institutional weaknesses:** The almost complete collapse of central government after the Soviet withdrawal, the warring parties' need for alternative sources of financing, and the fact that opium was a crop well adapted to the prevailing circumstances, greatly contributed to the development of opium cultivation. Following the fall of the Taliban, lingering insecurity and weak central government control, along with widespread corruption, contributed to further development of illicit activities.
- **Poor infrastructure:** Opium is relatively drought-resistant, making its cultivation easier than wheat in areas where irrigation is limited. Moreover, dry opium is easy to store and transport, which, given the poor state of roads and stocking facilities in Afghanistan, gives it an advantage over other crops.
- **Rural poverty:** The decision by many farmers to cultivate opium is primarily dictated by the lack of alternative sustainable livelihoods. In particular, following the sharp increase in opium farm-gate prices in 2001-02, the gross income farmers may expect from opium production far exceeds what they would get from cereal

[2] UNODC (2004). The morphine content of opium ranges from 8-24%. The highest opium content was observed in the province of Badakhshan (slightly more than 16% on average). It is worth noting that this high morphine content may be partly offset by inefficiencies in processing opium.

production (Table 2.2). Moreover, traders/traffickers often provide farmers with the necessary inputs (seeds, fertilizers) and financing, and take delivery of opium at the farm gate, relieving farmers from transportation or storage. While some other products (nuts, orchards) may generate higher revenues, they require substantial multi-year investments and infrastructure that many farmers cannot afford.

Table 2.2: Yields and Income per Hectare for Various Crops, 2005

	Opium	Irrigated wheat	Rainfed wheat	Rice
Yield (in kilograms per ha)	39	2,510	1,230	2,030
Average price (in U.S. dollars per kilogram)	136.59	0.23	0.23	0.47
Gross revenue (in U.S. dollars per Ha)	**5,385**	**575**	**282**	**947**

The potential export value of opium production in 2005 is estimated by the United Nations Office on Drugs and Crime (UNODC, 2005a) at US$2.7 billion (Table 2.3). This was estimated on the basis of: (a) the physical transformation ratio of opium to heroin (6-7 to 1); (b) the share of opium production converted into heroin in Afghanistan (this has increased steadily over the last ten years, from 41% in 1995 to an average of 72% in 2002-04, reflecting primarily counter-narcotics efforts in neighboring countries and lingering insecurity in Afghanistan); (c) the estimated distribution of opium and heroin exports by neighboring countries (based on seizures in these countries); and (d) the opium and heroin prices observed in the main markets in the neighboring countries' border regions with Afghanistan. The UNODC estimate for 2005/06 corresponds to a potential export value of 420 tons of heroin (US$1.6 billion) and 1,169 tons of unprocessed opium (US$1.0 billion).

Table 2.3: Opium Production's Potential Export Value, 2004-05

	2004	2005
Opium Production (in tons)	4,200	4,100
Transformation rate	64%	71%
Heroin production (in tons)	414	420
Average export price (in U.S. dollars per kilogram)	4,171	3,856
Export value of heroin (in millions of U.S. dollars)	1,725	1,620
Opium available for export (in tons)	1,512	1,169
Average export price (in U.S. dollars per kilogram)	725	893
Export value of opium (in millions of U.S. dollars)	1,096	1,044
Total export value (in millions of U.S. dollars)	**2,821**	**2,663**

Sources: UNODC (2005a); and Fund staff estimates.

The share of the opium sector in the Afghan economy has declined steadily over the last few years. This largely reflects sustained growth in the licit economy rather than lower production and exports of illegal drugs, which have remained largely unchanged (Table 2.4). Between 2002/03 and 2005/06, the size of the drug sector relative to licit GDP declined from 62% to 38%, and its contribution to overall activity (including opium) from 38% to 27%. This compares with the contribution of the drug sector to overall economic activity of less than 2% in Colombia, the world's main producer of cocaine, with 57% of world supply

(the percentage remained below 2% during 1999-2001, when Colombian coca output reached its highest levels).[3] Despite its declining share in the national economy, in 2005/06, nevertheless, in 2005/06 the potential export value of opium was still equivalent to 4.8 times the value of locally-produced exports (compared with 9.2 times in 2002/03).

Gross Income Distribution

Intermediate consumption is quite limited at the farm level.[4] While production factor costs (family labor, hiring of daily workers, rental of tractors and/or of land) may be substantial, intermediate consumption, which comprises expenditure on seeds, fertilizers, and pesticides, is generally considered marginal. A microeconomic study of Pakistan's opiate industry in the early 1990s concluded that these costs amounted to about 4% of the total farm-gate value of opium (UNDCP, 1994). Intermediate consumption in Afghanistan is currently likely to be substantially lower, at about 1-2% of farm-gate value, owing to the sharp increase in opium prices, only marginally offset by rising seed and fertilizer prices.[5]

Table 2.4: Relative Size of Opium Production, 2002/03-2005/06

	2002/03	2003/04	2004/05	2005/06	2005/06		
	Est.	Est.	Est.	Proj.	Licit economy	Drug economy	
						Farming	Trading and processing
Licit GDP	4,084	4,585	5,971	7,139	7,139	0	0
Opium GDP	2,518	2,279	2,732	2,594	0	555	2,039
Opium production	2,540	2,300	2,800	2,700	0	560	2,140
Less intermediate consumption 1/	11	12	14	14	0	5	8
Less seizures	10	9	53	92	0	0	92
Total GDP	6,602	6,864	8,703	9,734	7,139	555	2,039
Income (net)	1	4	16	20	20	0	0
Gross national income	6,601	6,860	8,719	9,765	7,171	555	2,039
Current transfers (net)	1,222	2,476	2,787	3,149	3,149	0	0
Gross disposable income	7,823	9,336	11,506	12,914	10,320	555	2,039
Memorandum items:							
Drug income as as percentage of:							
Licit GDP	61.7	49.7	45.8	36.3			
Total GDP (licit and illicit)	38.1	33.2	31.4	26.7			
Gross disposable income	32.2	24.4	23.7	20.1			
Poppy farmer revenue as a percentage of:							
Licit agricultural revenue	59.6	46.7	27.3	22.1			
Total Agricultural revenue	37.4	31.8	21.4	18.1			

Sources: Afghan authroities and UNODC data; and Fund staff estimates.
1/ Estimated on the basis of UNDCP data (1994), using current seed, fertilizer, and chemical prices.

[3] These estimates are based on UNODC (2004). Steiner (1998) estimates that Colombia's net income from illicit drugs could have been 7% of GDP and 70% of exports during the first half of the 1980s.
[4] Intermediate consumption corresponds to the value of the goods and services consumed or used up as inputs in the production process, including raw materials and various other operating expenses.
[5] Mansfield (2006) estimates these costs at US$120 per ha, 2% of the farm-gate price. It is likely that in terms of farmer income, intermediate consumption is largely offset by revenue from sale of by-products.

In addition to these costs, however, many farmers have to service opium-related debts. In the absence of savings and other sources of financing, many farmers resort to borrowing, primarily from shopkeepers, traders, and relatives, to finance their intermediate consumption (seeds and fertilizers) and the hiring of production factors (such as day workers and tractors), as well as for household consumption requirements prior to the harvest. The most common form of credit is salaam, an advance on a fixed amount of expected future agricultural production, which is typically contracted at the beginning of the cultivation season and paid back, through delivery of opium, after the harvest. Even if these advances are usually reimbursed within a few months, their costs can be substantial: the amount of the advance is typically equivalent to half of the current market value. The fact that salaam credits are reimbursed through the delivery of opium protects farmers against the risk of a possible decline in farm-gate prices during the duration of the credit (while limiting potential upside gains). The 2005 UNODC survey (UNODC, 2005a) indicates that the average amount of outstanding loans for opium-cultivating farmers has stabilized over the last two years at around US$700 per farmer. High farm-gate prices, along with increased caution by lenders in the face of intensified counter-narcotics efforts, contributed to a significant decline in the number of farmers contracting new loans, from 47% in 2003 to 33% in 2005.[6]

Intermediate consumption also appears quite limited at the trafficker level.[4] In 2002-04 about 72% of Afghanistan's opium production is estimated to have been transformed into heroin in Afghanistan before being exported. The transformation process requires substantial amounts of chemicals (such as acetic anhydride, ammonium chloride, acetone, sodium carbonate, and hydrochloric acid). In Pakistan in the early 1990s, these chemicals were reported to cost about 7-8% of the heroin price (UNDCP, 1994). However, the sharp increase in heroin export prices over the last ten years has resulted in a sharp drop in the costs of these chemicals relative to heroin export receipts. In the case of Afghanistan, which produces primarily the lower-quality brown heroin, these costs are estimated to be equivalent to only 1-2% of the export price of heroin.

The income generated by drug-related activities is likely to be lower than the potential export value estimated by UNODC. The latter is the estimated total value of opium output (partly transformed into heroin), assuming it is all sold in the markets neighboring Afghanistan. This is considered a good proxy for the potential revenue accruing to Afghans, who are involved in opium production, conversion, and trade in Afghanistan and in the immediate neighboring countries, but do not appear to participate in international drug trafficking operations (UNODC, 2005a, p. 120). However, the actual income accrued by Afghan farmers and traffickers differs from this potential value due to seizures by counter-narcotics enforcement agencies and the change in inventories.

Inventories are considered to be substantial, as illustrated by the fact that the sharp fall in production in 2001 did not translate into major market disruptions.[7] While farm-gate prices rose more than tenfold between 2000 and 2002, border prices increased by a bit less than three times. Following their depletion in 2001, stocks are assumed to have increased sharply over the last few years. This has contributed, along with the decline in production in the rest of the world, to maintenance of high export prices despite bumper crops. Under the assumption that Afghanistan's opium exports have increased regularly over the last ten years, the build-up in stocks could amount to 400 tons this year

[6] Cash loans appear to have become more widespread in many areas due to fear of eradication and crop failure.
[7] Raw opium is a durable good, which is more durable than processed opiates and does not lose value, as its loss of weight in the drying process is compensated by its higher price compared with "wet" opium.

(US$260 million at export prices), bringing stocks to a level equivalent to more than six months of exports.[8]

After increasing sharply following the ban imposed by the Taliban, the share of revenue accruing to farmers has declined substantially. Reflecting a substantial drop in farm gate prices, this revenue, which had increased sharply in 2001-02, declined from US$1,020 million (44% of the potential export value) in 2003 to US$560 million (21% of the potential export value) in 2005. As the estimated number of farmers involved in opium production increased from 264,000 to 309,000 over the same period, the decline in gross revenue per farmer was even sharper, from US$3,864 in 2003 to US$1,812 in 2005. A significant share of the revenue accrued by farmers must be used to cover factor costs and pay for security. While intermediate consumption is very limited, labor costs are substantial as opium is a highly labor-intensive crop, with cultivation and harvesting labor needs per hectare estimated at about 350 and 200 person days, respectively (two to three times greater than those for wheat). Hence in 2003 UNODC estimated that on average, farmers retained slightly more than half of the gross revenue they accrued from opium production, with the rest spent on production factor costs (15-20% of gross revenue) and on taxes and other levies, including bribes and payments to local commanders (25-30%).

The remaining income is divided between different actors involved in the trading of opium from the farm gate to Afghanistan's borders (see IMF, 2003 and Ward and Byrd, 2004). While the farm-gate buyers are the most numerous among these actors, they are believed to receive a relatively small part of domestic trade revenue (i.e. drug export value minus farm gate value), owing to intense competition that limits profit margins. Likewise, the share of domestic trade revenue accruing to shop owners in the regional opium bazaars and to clandestine laboratories appears relatively small. The main part of domestic trade revenue is believed to accrue to a limited number of bulk buyers and large-scale specialist traders who buy opium throughout the year and organize shipping to border areas or directly abroad, and incur large risks. To reduce these risks, a significant part of their revenue is spent on "security providers", including warlords' militias. Contrary to the Colombian drug traffickers, these bulk buyers and specialist traders do not appear to be organized in cartels.

Macroeconomic Impact

While the potential export value of opium attracts the most attention, it is only one among many factors defining the macroeconomic impact of Afghanistan's opium economy. The impact on the real sector will in particular depend on what share of this export value actually enters the economy, how this share is divided between the different actors, and how these different actors allocate their income between consumption, investment, and savings. The drug economy, which is excluded from reported GDP, generates demand for domestic products. Although not recorded in official balance of payments data, it also has a net positive impact on the balance of payments.

Farmers consume a large part of their earnings, largely on domestic goods. For many farmers, opium is the main cash crop, whereas other crops are cultivated primarily to meet subsistence needs. It is generally assumed that farmers spend most of their income, and that opium-related income contributes primarily to higher consumption, in par-

[8] These estimates are based on the assumption that opium exports have increased regularly over the last ten years and that inventories amounted to 15 months of exports prior to the ban enacted by the Taliban in 2001. These estimates may be conservative, as some experts consider that after four years of high production, stocks have likely returned to their pre-2001 level and amount to at least one year of exports.

ticular of non-subsistence goods including imported goods. This assumption is validated by field studies, such as Mansfield (2004), who estimated that in Nangarhar and Laghman expenditures of households involved in opium-related activities were, on average, equivalent to their net income. According to this study, most of farmers' consumption consisted of essential items, such as food, fuel, and health costs, while a small portion, which increased markedly with a farmer's income, consisted of "non-essential" items such as cars, televisions, motorbikes, and generators. There were disparities among opium farmers, with those cultivating more than 75% of their land saving up to one-third of their income, while the others were dissaving. A small part of spending corresponds to investment, either in productive assets (e.g. tractors) or housing, which is generally included in the official national accounts data.

In the absence of reliable data, it is generally assumed that processors and traffickers save a large part of their income.[9] Benefiting from much higher revenue than opium farmers, the other actors involved in opium trade are likely to have a lower propensity to consume. While secure processing and transport of opium and heroin require investments in arms, laboratories, and vehicles, these capital expenditures are likely to be small relative to the revenue from trading, leaving processors and traffickers with substantial resources to invest in other productive or financial assets, domestic or foreign. Domestically, opium-financed investment may have contributed to the boom in construction observed in Kabul and other major cities, including those, such as Kandahar, located in the main opium-producing areas. Some of the traffickers' income is also believed to be recycled in formal and informal activities, such as trade/smuggling. Investments abroad are facilitated by the informal financial sector in Afghanistan: money-changers (*hawaladars*) provide low-cost, largely unregulated, and efficient transfer services to other countries (see Chapter 6). It is also likely that some opium export receipts never enter Afghanistan, as foreign buyers directly transfer the money to traffickers' offshore accounts. This, along with the illicit nature of the opium trade and the uncertainty about the various actors' propensities to consume, invest, and import, make accurate estimation of the shares of opium trade allocated to consumption and productive and financial investments extremely difficult and speculative. Table 2.5, which breaks down Afghanistan's gross disposable income (including opium) into these different uses, aims to illustrate the macroeconomic impact of the drug economy.

Sources: Afghan authorities and UNODC data; and Fund staff estimates.

Opium-related demand causes, along with aid-related inflows, Dutch disease. There are two channels. First, by increasing demand for domestic goods and services, the drug economy contributes to higher consumer and asset prices. This is particularly marked for non-tradable goods and services such as rents, as their supply cannot adjust through imports. As noted above, it also explains in part, along with aid-related inflows, the increase in real estate prices observed in Afghanistan's major cities. Second, by increasing demand for production factors, the drug economy also contributes to an increase in their rates of remuneration, raising production costs for other sectors. Given the labor-intensive nature of opium production, this translates primarily into an increase in wages. Overall, these factors explain in part the significant appreciation of the real exchange rate over the last few years and contribute, along with other factors such as poor infrastructure and limited human capital, to the limited competitiveness of Afghanistan's tradable sector. While donor aid inflows also contribute to the Dutch disease through the demand for goods and labor they induce, this is partly offset by the associated increase in productivity.

[9] This is consistent with the findings of UNDCP (1994) in the case of Pakistan.

Table 2.5: Use of Gross Disposable Income 2002/03-2005/06

	2002/03	2003/04	2004/05	2005/06			
	Est.	Est.	Est.	Proj.	Licit economy	Opium economy	
						Production	Trading and processing
(In millions of US dollars)							
Gross disposable income	**7,823**	**9,336**	**11,506**	**12,914**	**10,320**	**555**	**2,039**
Consumption 1/	4,038	4,992	5,951	7,087	5,934	444	709
Net factor income	-1	-3	16	32	32	0	0
Savings (incl. grants)	**3,786**	**4,347**	**5,539**	**5,795**	**4,354**	**111**	**1,331**
Gross fixed capital formation 1/	1,409	1,928	2,696	3,078	2,757	55	266
Change in opium inventories	84	114	428	267	0	0	267
Current account (incl. grants) 2/	**2,293**	**2,306**	**2,415**	**2,450**	**1,597**	**55**	**798**
Capital account	**-533**	**-471**	**-352**	**-518**	**335**	**-55**	**-798**
Foreign Direct Investment	50	58	187	253	253	0	0
Public loans (net disbursements)	94	90	290	82	82	0	0
Drug-related capital outflows 1/	-677	-619	-829	-853	0	-55	-798
Net errors and omissions	-1,605	-1,456	-1,574	-1,474	...	...	...
Overall balance	**155**	**379**	**489**	**458**	...	...	...
Impact on the balance of payments	1,025	867	855	852	0	347	505
Drug income	2,446	2,178	2,319	2,341	0	560	1,781
Drug-related imports	-744	-692	-634	-635	0	-157	-478
Drug-related capital outflows	-677	-619	-829	-853	0	-55	-798

1/ Assuming that 80% of the farmer's gross income is consumed, 10% invested in productive assets and housing, and 10% percent invested in foreign currency; and that 40% of the traffickers/traders' income is consumed, 15% invested in productive assets and housing and 45% invested in foreign assets. 2/ The drug sector's current account corresponds to the balance of its current transactions both with foreign countries (export of drugs minus consumption of imported goods) and with the Afghan licit sector (consumption of licit domestic goods).

Drug-related activities also hinder investment. Owing to its labor-intensive nature, the drug economy does not crowd out investment in other sectors. On the contrary, it may contribute marginally to the financing of investment in activities like trade and construction. However, the drug economy affects investment primarily through its negative impact on Afghanistan's investment climate. This manifests itself mainly through insecurity; sustained growth of informal activities; very high levels of corruption particularly at provincial and district levels (either directly through participation, or indirectly through "taxation"); and weak sub-national administrations.

The balance of payments impact of drug exports is partly offset by drug related outflows (Table 2.5). As noted above, a significant part of opium-related consumption and investment is on imported goods and services. Moreover, a large part of opium export receipts, primarily at the processor/trafficker level, is believed to be invested abroad. A large part of the savings retained in Afghanistan is probably held in foreign-denominated assets, as evidenced by the high degree of dollarization (in US dollars, but also in Pakistani rupees and Iranian Rials) of the Afghan economy. This limits even further the impact of the drug economy on the balance of payments and the central bank's international reserves. Taken together, these factors could be equivalent to about two-thirds of opium export receipts.

Drug-related flows affecting the Central Bank's international reserves are not explicitly reported in the official balance of payments. As currently constructed, the balance of payments does not report the main flows directly related to drug activities, such as opium and opiate exports, or capital outflows corresponding to investment of such revenues in foreign assets (including export receipts that do not enter the country). Other activities, such as imports of vehicles by drug traffickers or of food by opium farmers, which are statistically indistinguishable from non-drug related flows, tend to be captured by the officially recorded trade data or as "unrecorded imports" which are estimated and included in official trade data. While the drug revenue financing these imports is not recorded, the imported goods purchased through illicit income are mostly captured in balance of payments data. Thus, an implicit discrepancy stems from the fact that while substantial drug-related net inflows (i.e. opium exports minus drug-related capital outflows) are not recorded in the current presentation of the balance of payments, this does not translate into substantial positive errors and omissions.

The fact that as currently constructed the official balance of payments does not have a large statistical discrepancy is potentially worrisome and points to under-estimation of net outflows. This apparent absence of a discrepancy is not surprising given that the evaluation of some components of Afghanistan's balance of payments rests critically on informed guesses rather than on reliable statistical estimates. This is particularly the case for inward and outward smuggling (excluding the drug trade); aid related outflows (e.g. the share of aid-financed wages invested abroad); and drug-related outflows. The non-reporting of drug-related outflows may therefore be largely offset in the current presentation of the balance of payments by an underestimation of the licit trade deficit and/or an underestimation of capital outflows. From a national accounts point of view, the former would likely be largely counterbalanced by an underestimation of private consumption, which, in the absence of any reliable household expenditure data, is estimated as a residual. Table 2.5 attempts to integrate drug-related flows in the official balance of payments. By doing so, it makes explicit the aforementioned discrepancy.

The positive impact of the opium economy on fiscal revenue is marginal compared to its cost in terms of government spending. Owing to their illicit nature, most drug-related activities (production, processing, trade) are not directly taxed. Their primary impact on fiscal revenue results, therefore, from indirect taxation of consumption and imports financed by drug receipts, mainly through import duties. Even under the assumption that effective taxation of drug-related imports is similar to that of imports related to licit activities, duties collected on drug-related imports would amount to no more than US$25 million annually. This amount represents only a small fraction of the government spending aimed at improving security and eliminating the drug economy.

II. THE GOVERNMENT'S COUNTER-NARCOTICS STRATEGY

A Multi-Pronged Approach

Counter-narcotics efforts have relied on a multi-pronged approach, aimed at combating cultivation and trafficking through eradication and interdiction while providing farmers with alternative livelihoods. Eradication involves destruction of

opium growing in fields and may be associated with sanctions against opium farmers. Interdiction consists of arresting drug traffickers and processors, seizing opium and heroin, destruction of processing laboratories, and closing opium markets. In its narrow definition, the concept of alternative livelihoods encompasses a number of programs aimed at providing farmers leaving the opium economy with short- and/or long-term alternative livelihoods. However, the concept of alternative livelihoods has been widened to cover all components of rural development, including farm and off-farm income.

In 2003 the Government adopted a multi-year counter-narcotics strategy, which aimed at reducing opium production by 75% in five years and completely eliminating it within ten years, while emphasizing the importance of alternative livelihood programs (Transitional Islamic State of Afghanistan, 2003). This strategy has since been updated, and now centers on four key priorities: targeting the traffickers and top end of the trade; strengthening and diversifying licit rural livelihoods; reducing demand for opium; and developing state institutions at central and provincial levels.

In the Interim Afghanistan National Development Strategy (I-ANDS), the Government redefined its counter-narcotics objectives and strategy. Counter-narcotics was identified as a fundamental cross-cutting issue for national development. Accordingly, the Government intends to mainstream counter-narcotics efforts in the overall development and reconstruction program, with the goal of securing a sustained decline in poppy cultivation, drug production, consumption of illicit drugs, and trafficking. More specifically, the Government intends to intensify and better coordinate efforts, with a view to: (i) building strong institutions; (ii) enhancing law enforcement and interdiction; (iii) continuing eradication efforts; (iv) reducing demand for narcotics and increasing treatment of drug addicts; (v) strengthening criminal justice; (vi) increasing public awareness; (vii) promoting international and regional cooperation; and (viii) developing sustainable alternative livelihoods.

Implementation and Results

Key institutions have been established. The Ministry of Interior, with help from the international community, has established the Counter-Narcotics Police of Afghanistan (CNPA), which comprises three sections: investigation, intelligence, and interdiction. The Central Poppy Eradication Force (CPEF) was established in May 2004 to carry out eradication. In November 2004 the position of Deputy Minister for Counter-Narcotics was created in the Ministry of Interior to oversee and coordinate counter-narcotics enforcement activities. A Criminal Justice Task Force was established and has convicted over 90 traffickers since May 2005. And in December 2004, the Government established the Ministry of Counter Narcotics(MCN)to coordinate and oversee its counter-narcotics policies. Moreover, a Counter Narcotics Trust Fund (CNTF) has recently been created to provide coordinated financing and improve resource allocation at central, provincial, and district levels. There is also a continuing effort to develop government capacity and coordination.

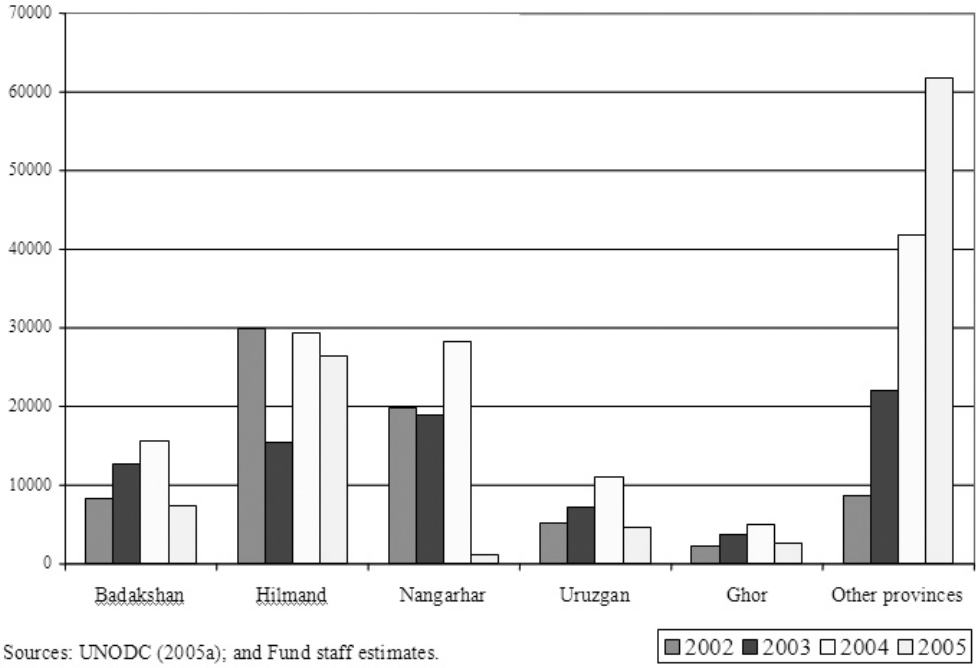
The counter-narcotics regulatory framework has been strengthened. The Government recently approved a new counter-narcotics law, which lays out significant penalties for corruption and bribery associated with drug trafficking; establishes the procedures for investigating and prosecuting major drug-trafficking offences; establishes the MCN as the

leading body to monitor, evaluate, and coordinate all counter-narcotics activities; and provides for creation of new tribunals for drug traffickers and drug regulation commissions. The enforcement of the Anti Money Laundering/Combating the Financing of Terrorism legislation and regulations should make the use of the formal and informal financial systems for opium-related transfers more difficult.

Results of counter-narcotics efforts have fallen short of objectives. UNODC estimates indicate that opium output declined by 2% in 2005 to 4,100 tons: a 21% drop in cultivation was largely offset by a rebound in yields due to favorable weather. The decline in opium cultivation was largely due to decisions by many farmers not to plant in anticipation of intensified government counter-narcotics efforts, and promises of alternative livelihoods programs. The decline was particularly marked in the five largest opium producing provinces, which accounted for 68% of production in 2004, and where output declined by 53%. Cultivation in other provinces increased by 48%, reflecting the drug economy's ability to relocate in response to counter-narcotics efforts (Figure 2.2). Reflecting a slight decline in prices, export and farm-gate values declined by 4% and 7%, respectively, to US$2.7 billion and US$560 million. Although counter-narcotics efforts so far have not had the desired degree of success, the expansion of the drug economy over the last few years might well have been more vigorous in their absence.

Interdiction increased sharply in 2004-05, albeit from a low base. In 2005, 86.6 tons of opium and 7.7 tons of heroin were seized – about 3.4% of opium output. This compares with seizures equivalent to 0.4% of output in 2002 and 2003 (UNODC, 2005b). The sharp increase in 2005 reflected strengthening of the Afghan Special Narcotics Force (ASNF) assigned to interdiction, and greater activity and effectiveness by the counter-narcotics police. Law enforcement organizations, including ASNF, CNPA, and Customs, have been authorized to carry out operations against drug trafficking.

Figure 2.2: Opium Cultivation by Province, 2002-2005 (in ha)



Sources: UNODC (2005a); and Fund staff estimates.

Eradication amounted to 5,100 ha in 2005, equivalent to about 5% of cultivated area. Some 4,000 ha were eradicated by provincial authorities, the majority in Nangarhar (46%) and Helmand (26%). In addition, 1,100 ha were eradicated by the central government agencies (CPEF and Afghan National Police). This latter figure was lower than targeted, owing in part to an exceptionally harsh winter which delayed CPEF's operations; strong opposition from local farmers; and limited cooperation from local authorities. Eradication worked more efficiently as a deterrent to planting, since it contributed significantly to "voluntary eradication" – i.e. decisions by many farmers not to plant because their production might be eradicated (Table 2.6). A new system (including a central Eradication Planning and Monitoring Cell within MCN) has been established to help governors and eradication forces plan, execute, and monitor eradication efforts.

Table 2.6: Main Factors Influencing Farmers' Decisions to Cultivate Opium, 2005

Main reasons for reducing opium cultivation	34.8%	Higher sale price	25.8%
Fear of eradication	19.7%	Personal consumption	20.6%
Fear of imprisonment	15.7%	High cost of wedding	15.7%
Forbidden by Islam	15.3%	Higher demand	14.5%
Poppy ban	4.9%	Expected compensation for eradication	7.3%
Lower opium prices	4.7%	"Salaam"	5.6%
Less demand	2.8%	Low cost of inputs	5.6%
Higher input costs	1.6%	Sufficient water	2.8%
No more "salaam"			

More progress in implementation of alternative livelihood programs is needed. Owing to capacity and security constraints, implementation of these programs, as in the case of most other development expenditures, has been lagging behind projected plans and budget estimates. Moreover, a large number of interventions labeled as alternative livelihood programs have been of a short-term nature, focused on a single sector (such as microfinance or infrastructure), and insufficiently coordinated geographically and between donors.

III. MACROECONOMIC IMPACT OF A COUNTER-NARCOTICS CAMPAIGN

The macroeconomic effects of a counter-narcotics campaign depend on policies, as different policies create different incentives/disincentives for farmers and traffickers. Eradication tends to raise farm-gate prices, while interdiction tends to lower farm-gate prices by reducing demand from traffickers. Moreover, development of sustainable alternative livelihoods is key to convincing farmers to quit, or not to return to opium. The impact of counter-narcotics efforts will also vary substantially among provinces.

To simulate the possible macroeconomic impact of the opium economy and counter-narcotics efforts, a simple macroeconomic model was developed. This model, which is based in part on the Corden and Neary model of Dutch disease, seeks to capture the key transmissions channels described above (see Annex A). Given the uncertainty surrounding various economic relationships and the values of a number of economic variables, the model aims primarily at illustrating, through normative simulations, the potential economic impact of different counter-narcotics strategies.

A successful counter-narcotics campaign could adversely affect licit GDP growth, the balance of payments, and government revenue. Based on the transmission channels described earlier, a decline in drug income would, at least temporarily, lead to a slowdown in real growth of the non-drug economy and a deterioration in the balance of payments, putting downward pressure on the real exchange rate. The size of the shock to GDP would be less pronounced to the extent that the burden falls on traffickers, owing to their lower propensity to consume. The large capital outflows and large import content associated with drug revenue suggest that the impact on the balance of payments would be substantially less than the total decline in drug revenue. The slowdown in growth and the decline in imports will in turn have an adverse effect on government revenue.

Long-term Impact: Reducing Dutch Disease

In the long run, reallocation of resources to the non-drug sector will allow higher growth in the licit economy. In macroeconomic terms, elimination of the drug economy has some similarities to a drop in oil revenue in an oil-producing country, with the decline in the risk-adjusted profitability of opium production leading to a shift of capital and labor toward the non-drug economy. The loss of income from elimination of the opium economy will also contribute to a reduction in aggregate demand.

Over time, the increase in opium production costs resulting from an effective counter-narcotics effort would affect the comparative advantage of Afghanistan in opium. Thus opium production is likely to move, at least partly, to other countries, reducing Afghanistan's opium export receipts. Moreover, reallocation of labor to the licit economy, combined with a decline in aggregate demand, will contribute to a depreciation of the real exchange rate and an improvement of the non-drug trade balance. The elimination of opium-related activities should also contribute to improving the business environment, and thereby to increasing domestic and foreign investment.

Short-term and Medium-term Impact

The short- and medium-term effects of the government's counter-narcotics efforts will differ substantially according to the strategy implemented, as discussed below.

In the short run, eradication will lead to a reallocation of opium income from traffickers to some farmers (Table 2.7). The primary impact of eradication is a decline in opium supply at farm gate due to decisions by farmers not to plant due to a higher risk premium and the direct impact of eradication. This may be partly offset by drawdown of inventories which, together with higher border prices, would limit somewhat the decline in overall export revenue. Given the observed low elasticity of traffickers' demand to farm-gate prices, higher farm-gate prices resulting from lower supply would increase the share of revenue accruing to non-eradicated farmers, at the expense of traders.

The increase in farm gate-prices may partly offset the impact of eradication on opium production. Eradication will result in a significant increase in farm-gate prices, which could induce some farmers to return to opium cultivation even in the face of a higher risk premium, especially if eradication is not accompanied by sustainable alternative livelihood. While export prices may increase, overall drug revenue is likely to decline, squeezing

the share accruing to traders/traffickers. Although the social impact on eradicated farmers will be serious (see Chapter 3), the overall adjustment of wages and prices should gradually contribute, along with alternative livelihood programs, to development of on-farm and off-farm employment. The overall increase in farmers' revenues would contribute to higher aggregate demand and to further deterioration in the trade balance. This deterioration would be partly offset by a substantial decline in the financial outflows corresponding to traffickers' investments in foreign assets and by higher growth in the tradable goods sector.

Table 2.7: Simulation of the Potential Macroeconomic Impact of an Eradication Campaign, 2006 - 2010

	2006	2007	2008	2009	2010
		(Change relative to 2005; in percent)			
Cultivation (in hectares)	-5.0	1.9	0.6	6.4	8.6
Inventories	-25.0	-48.0	-75.1	-91.6	-97.8
Drug production	-20.0	-23.1	-34.4	-38.6	-41.4
Drug exports	-7.5	-11.6	-20.9	-30.4	-38.4
Drug export price	5.0	8.1	15.7	24.9	34.5
Farm gate price	38.3	51.3	99.1	136.3	172.4
Drug export value	-2.9	-4.4	-8.5	-13.0	-17.1
Opium trade revenue	-7.1	-11.0	-20.8	-31.3	-41.3
Farm gate revenue	10.7	16.4	30.6	45.1	59.6
Labor in opium economy	-20.0	-23.1	-34.4	-38.6	-41.4
Labor in tradable sector	0.6	1.2	2.2	3.3	4.5
Labor in nontradable sector	0.4	0.8	1.5	2.2	3.0
Total employment	-1.8	-1.7	-2.2	-1.8	-1.1
Wages	-1.9	-4.0	-7.2	-10.5	-14.0
Price of non tradables (i.e. real exchange rate)	-0.5	-1.0	-1.8	-2.8	-3.7
Real GDP (excl. opium)	0.5	1.0	1.9	2.8	3.7
Real GDP (incl. opium)	-5.1	-5.6	-8.1	-8.6	-8.7
		(Change relative to 2005; in millions of U.S. dollars)			
Impact on balance of payments	-4	-14	-23	-34	-47
Impact on trade balance	-65	-107	-200	-301	-399
Change in opium exports	-67	-104	-198	-305	-401
Change in licit trade balance	2	-3	-2	4	2
Change in demand for tradables	-19	-48	-82	-117	-162
Change in production of tradables	21	44	80	121	163
Change in capital outflows	61	94	177	267	352

Source: Fund staff simulations.
1/ Based on the assumption that 15% of cultivated areas would be eradicated in 2006, and then 25% in 2007, 35 % in 2008, 45 % in 2009, and 50% in 2010.

Although targeted at traffickers, interdiction would also affect opium farmers through lower farm gate-prices (Table 2.8). By increasing the risk premium associated with opium trading and bringing to an end the activities of some traffickers, interdiction would contribute to a reduction of both demand at the farm gate and supply at the border. Overall, traffickers able to continue their operations would benefit from higher border prices, especially if they dispose of inventories. On the other hand, the decline in demand at the farm gate would lead to a reduction in farmers' income.

Table 2.8: Simulation of the Potential Macroeconomic Impact of an Interdiction Campaign, 2006-2010

	2006	2007	2008	2009	2010
		(Change relative to 2005; in percent)			
Cultivation (in hectares)	0.0	-1.8	-4.9	-9.1	-14.0
Inventories	-9.4	-25.6	-47.4	-71.6	-90.4
Drug production	0.0	-1.8	-4.9	-9.1	-14.0
Drug exports	-2.8	-6.2	-11.5	-19.5	-29.6
Drug export price	1.9	4.3	8.2	14.7	24.3
Farm gate price	-6.5	-17.0	-30.3	-44.2	-57.8
Drug export value	-1.0	-2.2	-4.3	-7.7	-12.5
Opium trade revenue	0.7	2.9	5.0	5.4	3.6
Farm gate revenue	-6.5	-18.5	-33.7	-49.2	-63.7
Labor in opium economy	0.0	-1.8	-4.9	-9.1	-14.0
Labor in tradable sector	0.1	0.2	0.5	1.0	1.6
Labor in nontradable sector	-0.2	-0.5	-0.8	-1.2	-1.6
Total employment	0.0	-0.2	-0.4	-0.7	-0.9
Wages	-0.2	-0.8	-1.8	-3.3	-5.3
Price of non tradables (i.e. real exchange rate)	-0.7	-1.8	-3.3	-5.4	-7.8
Real GDP (excl. opium)	-0.1	-0.1	-0.1	-0.1	0.0
Real GDP (incl. opium)	-2.1	-4.0	-8.1	-8.7	-10.7
		(Change relative to 2005; in millions of U.S. dollars)			
Impact on balance of payments	-2	-8	-15	-23	-30
Impact on trade balance	4	17	27	23	1
Change in opium exports	-23	-52	-100	-180	-293
Change in licit trade balance	27	69	127	203	293
Change in demand for tradables	25	61	108	167	234
Change in production of tradables	3	8	19	36	59
Change in capital outflows	-6	-24	-42	-46	-31

Source: Fund staff simulations.
1/ Based on the assumption that 15% of drug production would be seized in 2006, and then 25% in 2007, 35% in 2008, 45% in 2009 and 50% in 2010.

The interdiction campaign should lead to a substantial improvement in the balance of payments. The decline in farmers' income should result in a substantial reduction of aggregate demand, including for traded goods. Moreover, the decline in labor costs relative to the price of tradable goods should boost investment and production in the tradable goods sector. Overall, the resulting improvement in the licit trade balance would largely offset the deterioration in the illicit balance of payments. The threat of seizure could induce further capital flight by encouraging some traffickers to move their existing assets abroad. This is, however, likely to be limited, as most of the traffickers' assets are either foreign assets or real estate, which might prove somewhat illiquid.

Policy Response

Successful implementation of eradication and interdiction is predicated on the Government making a serious effort to address corruption, requiring a strong political commitment. Corruption has been a major factor explaining the limited success of counter-narcotics efforts thus far. Intensification of counter-narcotics efforts could temporarily exacerbate the problem, as traffickers will likely use all possible means to oppose them.

Sustainable income generation programs are required to support eradication and interdiction. A campaign based solely on eradication and interdiction would result in an increase in unemployment (Table 2.9). While farmers may in the short-term implement coping strategies, such as borrowing and selling assets, in the medium-term their decision to remain outside the opium sector will depend on development of sustainable alternative livelihoods.

In line with the National Drugs Control Strategy and I-ANDS, the Government needs to develop and implement, in collaboration with the donor community, programs to address these social needs. While contributing to the growth of the licit economy, the development of credible and sustainable alternative livelihoods would help convince farmers to stay away from, or quit, opium production. By increasing farmers' income, these programs would also limit the decline in aggregate demand. Rather than quick fixes providing short-term employment to farmers, these programs should aim to create sustainable alternative livelihoods over the medium term. Given the limited capacity of line ministries and other implementing agencies, developing these programs will take time. This supports the argument for a gradual approach to combat the opium economy advocated by Ward and Byrd (2004), who argued for an "appropriately-sequenced" approach that focuses on interdiction first while working to improve alternative livelihoods, and then focuses efforts against farmers who continue to cultivate opium poppy even with viable alternatives.

Consistent with monetary policy objectives, the Government should not resist a nominal depreciation of the currency. Although prices and wages appear to have some downward flexibility in Afghanistan (see Box 2.1), the depreciation of the real exchange rate associated with elimination of drug-related activities, as demonstrated in these scenarios, might require a nominal depreciation of the Afghani. It should, however, be ensured that depreciation does not trigger a marked, permanent increase in inflation.

Assuming gradual elimination of the opium economy and strict implementation of tax policy and administration reforms, the impact on fiscal revenues should be limited. The decline in import duties should be partly offset by an increase in tax revenues stemming from the increase in licit activities.

Table 2.9: Simulation of the Potential Impact of a Counternarcotics Campaign Combining Eradication and Interdiction, 2006-10 1/

	2006	2007	2008	2009	2010
		(Change relative to 2005; in percent)			
Cultivation (in hectares)	-2.5	0.1	-2.3	-1.9	-3.2
Inventories	-17.2	-36.9	-62.0	-83.4	-95.5
Drug production	-10.0	-12.4	-19.8	-24.4	-28.2
Drug exports	-5.2	-8.8	-15.9	-24.9	-34.7
Drug export price	3.4	6.1	11.6	19.6	29.9
Farm gate price	15.9	14.3	22.1	22.1	17.6
Drug export value	-1.9	-3.2	-6.2	-10.2	-15.1
Opium trade revenue	-3.9	-4.3	-7.5	-11.1	-15.0
Farm gate revenue	4.3	0.2	-2.1	-7.6	-15.6
Labor in opium economy	-10.0	-12.4	-19.8	-24.4	-28.2
Labor in tradable sector	0.3	0.7	1.4	2.2	3.2
Labor in nontradable sector	0.1	0.2	0.3	0.4	0.5
Total employment	-0.9	-0.9	-1.3	-1.3	-1.1
Wages	-0.2	-2.4	-4.5	-7.1	-10.1
Price of non tradables (i.e. real exchange rate)					
Real GDP (excl. opium)	0.2	0.5	0.9	1.3	1.8
Real GDP (incl. opium)	-3.6	-4.8	-7.2	-8.8	-9.8
		(Change relative to 2005; in millions of U.S. dollars)			
Impact on trade balance	-35	-47	-83	-126	-172
Change in opium exports	-44	-76	-144	-240	-354
Change in licit trade balance	9	29	61	114	181
Change in demand for tradables	-2	3	12	34	66
Change in production of tradables	11	26	49	80	115
Change in capital outflows	33	37	64	94	128

Source: Fund staff simulations.
1/ Based on the assumption that eradication and interdiction efforts are equivalent to 50 % of those envisaged under Tables III.7 and III.8, respectively.

Box 2.1: Impact of the Counter-narcotics Campaign in Nangarhar [1]/

Combining moral suasion and eradication, the counter-narcotics campaign was highly successful in reducing opium cultivation in Nangarhar province. While Nangarhar was the largest opium producer in 2004,2/ opium cultivation in the province declined by 96%, from 28,213 ha in 2004 to 1,093 ha in 2005. Although eradication directly affected only 1,860 ha, this sharp decline reflected mainly the decisions of many farmers not to plant opium poppy, owing to fear of eradication or imprisonment, as well as relatively low farm-gate prices (especially in relation to wheat, whose price had increased following the poor 2004 crop). The decline in opium cultivation was much more pronounced than in other provinces owing to the local authorities' strong involvement in the counter-narcotics campaign, with particular emphasis on prevention. Informed by the provincial governor that they would be held responsible for the level of opium poppy cultivation in the areas under their responsibility, district administrators and security chiefs called tribal elders and the shura members from each village to the district centre and informed them that they should not cultivate poppy. These admonitions were accompanied by promises of development assistance.

The sharp decline in production had a substantial social and economic impact. While slightly offset by a rebound in yields, opium production fell by about 95%. This translated into a sharp decline in farmers' incomes. Moreover, as most farmers shifted to cultivation of wheat (the area planted with wheat increased from 36,000 to 51,000 ha), much less labor intensive than opium, demand for hired labor fell sharply. The consequent decline in aggregate demand from farmers and other drug industry actors led to a sharp reduction in activity in other sectors, in particular construction. In response to lower demand for labor and goods, wages and prices declined significantly, and some skilled workers moved to other provinces.

Many farmers had to rely on short-term coping strategies. The income loss from the reduction in opium production was only partly offset by additional revenue from alternative crops and work opportunities, including alternative livelihood programs. While this revenue was in some cases complemented by sale of assets (primarily livestock) and, less often, by some borrowing, most farmers had to reduce consumption substantially, including for food and health expenditures.

In the absence of credible alternatives, many farmers might return to opium production in 2006 or subsequently. Most of the coping strategies of farmers, such as sale of assets or borrowing to finance subsistence consumption, are not sustainable. Moreover, contrary to vineyards or orchards which require multi-year investments, planting of wheat and opium does not entail sunk costs, so returning to opium would not be costly. Finally, most farmers consider that the opportunities provided by the alternative livelihood programs are insufficient and fall far short of the authorities' promises. Faced with the need to replenish their assets, service debts, and fund spending, many farmers may choose to produce opium in 2006 or later. Preventing such a reversal will depend crucially on the continued involvement of the local and central authorities and development of credible and sustainable alternative sources of revenue.

[1]/ Based on the estimates of UNODC (2005a) and the findings of Mansfield (2005).

[2]/ While the cultivated area was slightly higher in Helmand province, in Nangarhar higher yields translated into higher production.

ANNEX 2A
MODEL OF THE MACROECONOMIC IMPACT OF THE OPIUM ECONOMY

A model has been developed to simulate the possible macroeconomic impact of the opium economy and of counter-narcotics efforts. This model is based in part on the Corden and Neary model of Dutch disease (see Corden and Neary, 1982). There are three sectors: nontradable (NT), tradable (T), and a booming third sector, which in Afghanistan is the opium sector (D). All production of opium is exported, and labor is perfectly mobile between the three sectors. To model the impact of different counter-narcotics efforts (eradication, interdiction, alternative livelihoods, prevention) on the licit economy, the drug sector is further divided between farmers and traffickers. Given its large share in the world supply of opium, Afghanistan is not considered a price taker on the opium market (i.e. the opium export price depends on Afghan supply). The model is dynamic, allowing opium price developments to affect farmers' decisions to cultivate in the following year.

As in the Corden and Neary model, the opium economy influences the licit sector equilibrium through: (a) resource movement which induces a reallocation of labor between sectors; and (b) a spending effect corresponding to the impact of change in opium-related income on the demand for tradables and nontradables. The traded good is the numeraire.

Exogenous variables:

rpi: risk premium for traffickers, increasing function of interdiction efforts;
rpe: risk premium for farmers, increasing function of eradication efforts;
alt: incentives related to the development of alternative livelihood programs;
eradication: opium directly eradicated;
interdiction: opium seized;
Yield: opium yield.

Endogenous variables:

PD: opium price at the border (in terms of tradables);
YD: opium supply by the traders/traffickers;
Inv: opium inventories, which are assumed to be held by traders and traffickers;
DD: Demand for opium outside Afghanistan;
PFG: opium farm gate price(in terms of tradables);
Cult: opium cultivation;
Yfg: opium supply at the farm gate;
Dfg: Demand for opium by the traffickers/traders (at the farm gate);
w: wage rate;
Y: real GDP, including opium income staying in Afghanistan;
L: total employment;
LT, LNT: labor in tradable and nontradable sectors, respectively;
PNT: price of the nontradables (in terms of tradables–can be interpreted as the real exchange rate).

1. The opium sector

Equilibrium at the border

- The demand for opium declines with the opium export price:[10] $D_D(\overset{-}{P_D})$;
- The supply of opium at the border by traffickers increases with the opium export price and declines with the farm gate price and the risk premium (which is related to interdiction efforts): $Y_D(\overset{+}{P_D}, \overset{-}{P_{FG}}; \overset{-}{rp_i})$;
- The propensity of traffickers to deplete their inventories will depend on the level of current prices compared to average historical prices: $\Delta Inv(\overset{+}{P_D})$
- The opium market equilibrium of the at the border reads: $D_D = Y_D + \Delta Inv - interdiction$

Equilibrium at the farm gate

- The demand for opium by traffickers is equivalent to the amount they want to supply: $(P_D, P_{FG}; rp_i) = Y_D$;
- Cultivation rises with increases in farm gate prices and declines with the premium related to eradication efforts and with wages: $Cult(\overset{+}{P_{FG}}, \overset{-}{w}; \overset{-}{rp_e})$;
- The supply of opium at the farm gate increases with the cultivation and the yield, and declines with direct eradication. $Y_{fg} = Cult * Yield - eradication$;
- The opium market equilibrium at the farm gate reads: $D_{FG} = Y_{fg}$

2. The licit economy (tradables and nontradables)

Tradable sector

- The demand for labor in the nontradable sector is an increasing function of nontrad able prices and a declining function of wages: $L_{NT}(\overset{+}{P_{NT}}, \overset{-}{w})$
- The production of nontradables is an increasing function of labor employed in the sector: $Y_{NT}(\overset{+}{L_{NT}})$
- The demand for nontradables, which are consumed domestically, declines with non tradable prices and increases with the real income: $D_{NT}(\overset{+}{Y}, \overset{-}{P_{NT}})$
- The equilibrium in the nontradable sector reads: $D_{NT} = Y_{NT}$

Tradable sector

- The demand for labor in the tradable sector is a declining function of wages:[11]
- The production of tradables is an increasing function of labor employed in the $L_T(\overset{-}{w})$ sector: $Y_T(\overset{+}{L_T})$
- The domestic demand for nontradables increases with the real income, corrected for the share of the traffickers' revenue staying abroad: $D_T(\overset{+}{Y})$

3. Overall equilibrium

The completion of the model comes from the equilibrium of the labor market.

- It is assumed that, in the absence of alternative livelihoods, the farmers/workers leaving the drug sector will be likely to experience unemployment for some time. $\Delta L(\Delta \overset{-}{L_D}, \Delta \overset{+}{L_D}(-1), \Delta \overset{+}{L_D}(-2), \ldots)$
- The equilibrium on the labor market reads: $L_T + L_{NT} + L_D = L$

[10] While overall demand may be somewhat inelastic, Afghanistan is competing with other providers.
[11] The tradable good is used as the numeraire, which implies that its price is constantly equal to 1.

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Chapter 3

RESPONDING TO THE CHALLENGE OF DIVERSITY IN OPIUM POPPY CULTIVATION IN AFGHANISTAN

David Mansfield [1]

I. INTRODUCTION

This chapter provides an overview of what has been learned about the role of opium poppy in rural livelihoods in Afghanistan over the last decade. It charts both the development in our own understanding of what influences households in their decisions on cultivation of opium poppy, and the evolution of the role of opium in rural livelihoods, particularly in the wake of the Taliban prohibition on opium poppy cultivation in 2000 and concerted efforts to reduce cultivation in Nangarhar province in 2005.

In documenting these shifts in both the situation on the ground and our analysis of it, this chapter highlights the move by commentators away from a narrow economic rationalist model in which opium poppy cultivation is seen as simply a function of price, toward understanding a more complex picture in which the motivations and factors governing decisions on opium poppy cultivation differ by location and socio-economic group. In this latter model, the focus is on the multi-functional role opium plays in rural livelihood strategies and how a household's dependency on opium poppy cultivation varies according to its access to assets, including local public goods like governance and security. This evolution in our understanding of what influences households' decisions on whether to engage in opium poppy cultivation, and to what degree, is critical for developing both drug control and development polices that are more appropriate to the different actors involved in opium production.

The focus of the chapter is very much on the rural household. While any illicit economy presents fundamental research problems, currently the rural household continues to be the most accessible unit of analysis when looking at the opium economy in Afghanistan and offers a wide range of literature and research for cross referencing findings.[2] Debates regarding the previous collapse of governance in Afghanistan and how it allowed traffickers to operate without restraint and has allowed corruption to flourish, though important for understanding the wider environment in which opium poppy cultivation occurs, are not discussed here (see in particular Chapters 6 and 7).

It is important to note that this chapter does not seek to offer a definitive account of opium poppy cultivation in Afghanistan, as the situation is far too dynamic for that. Instead it presents the current state of knowledge regarding opium poppy cultivation and how different types of households have responded to the evolving environment in their particular regions and settings.

The overall theme of the chapter is diversity. The next section provides an overview of diversity in the incidence of opium poppy cultivation across provinces, regions, and districts, emphasizing its localised nature. The third section discusses diversity in rural livelihood strategies in Afghanistan and how these vary based on the different assets and capabilities rural households are able to draw upon. The fourth section documents diversity in

[1] This chapter owes a debt of gratitude to the organisations that have supported this work over the years including the Afghan Drugs Interdepartmental Unit of the UK Foreign and Commonwealth Office, the Afghanistan Research and Evaluation Unit, GTZ, the World Bank, and the United Nations Office on Drugs and Crime. Comments on this chapter by William Byrd are also gratefully acknowledged. The views, findings, interpretations and conclusions expressed in this chapter are those of the author and do not necessarily reflect those of the United Nationsl Office on Drugs and Crime or the World Bank, or the latter's affiliated institutions, Executive Board of Directors, or the countries they represent.

[2] See, in particular, Pain (2004), Mansfield (2002, 2004a, 2004b, 2005a, 2006), Ward and Byrd (2004), Byrd and Ward (2004), and Mansfield and Pain (2005).

motivations and factors that influence households in their decision to produce opium and how this differs by socio-economic group. It outlines a broad typology of households engaged in opium poppy cultivation and shows an inverse relationship between the level of dependency on opium production and an individual household's access to assets. The fifth section uses this typology to sketch out the diversity in the responses households have adopted in reaction to efforts to curb opium poppy cultivation, drawing heavily from detailed fieldwork carried out by the author in Nangarhar province in eastern Afghanistan. The final section looks at the diversity in policy and operational responses required to address the complex nature of illicit opium poppy cultivation in Afghanistan if a sustainable solution is to be found.

The chapter concludes that there is a need for policy makers and development practitioners to better recognise in their work the diversity that is so evident both among opium poppy cultivators and across rural Afghanistan. To do otherwise would not only undermine the basic principles of equitable development but could work against the wider state-building and security efforts. For households with diverse livelihood opportunities and who are not dependent on opium production, eradication or the threat of it, combined with the establishment of the necessary governance and security conditions needed for longer-term economic growth, can raise the opportunity cost of opium poppy cultivation and facilitate its abandonment. However, in areas where opium poppy cultivation is most concentrated and where legal livelihoods are limited, eradication can serve to further marginalise already vulnerable socio-economic groups, resulting in pauperisation, migration, and damage to the nascent relationship between citizen and state. Based on the analysis presented in this chapter, it is evident that it would be an error to pursue a uniform approach, either in development or in drug control work, which ignores the realities faced by particular socio-economic groups involved in opium poppy cultivation and the varying degrees of their dependency on the crop.

II. LEVELS OF OPIUM POPPY CULTIVATION: DIVERSITY AND CONTRASTS IN PROVINCIAL AND DISTRICT TRENDS

Afghanistan has proven to be a favourable environment for opium poppy cultivation. In 2004, UNODC estimated that 131,000 ha of opium poppy was cultivated in Afghanistan, representing almost 90% of total global cultivation of illicit opium, and significantly more than the previous peak in cultivation of 91,000 ha in 1999.[3] While in 2005 cultivation was reported to have fallen by 21% to 104,000 ha, it was still the second highest level ever recorded in the country. Furthermore, over the last decade opium poppy has spread geographically from 54 districts in 1994 to 194 districts in 2005 (out of a total of 364 districts in Afghanistan). It is now present in all 34 of Afghanistan's provinces, compared with only eight in 1994.

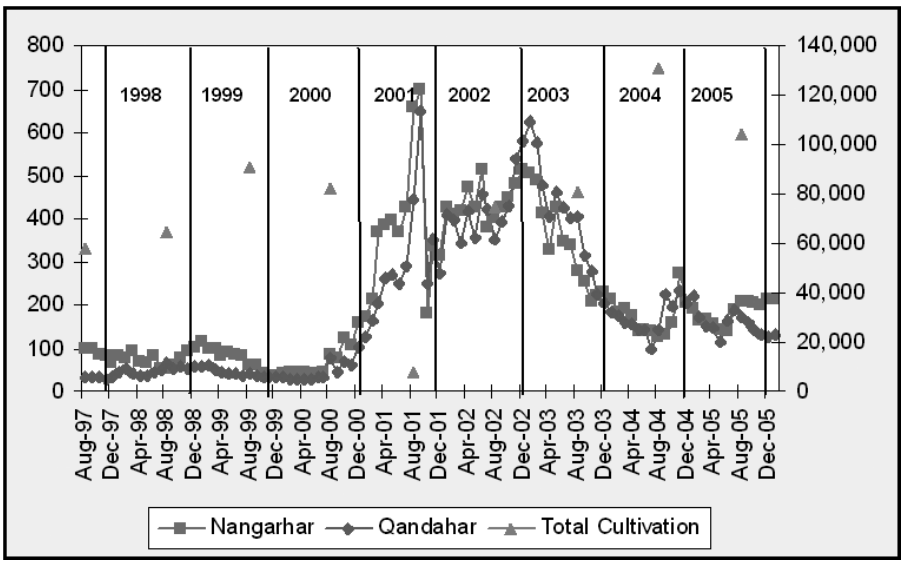
Yet opium poppy is still very much a minor crop in terms of overall cultivated area, trailing behind wheat, barley, rice, and even maize. For example, in 2002/03 29% of cultivable land was dedicated to wheat and only 1% to poppy.[4] Even in 2004, the peak year of cultivation, opium poppy only occupied 2.9% of total agricultural land. If opium poppy is as profitable as many suggest, why is it not more popular and why is cultivation not more uniform across the country?

[3] The United States Government also produces an estimate of opium poppy cultivation in Afghanistan. For convenience the statistics referred to in this chapter are UNODC estimates.

[4] These figures are derived from the Food and Agriculture Organization (FAO) assessment that only 12% of Afghanistan's 652,000 sq km of land area is arable. In 2003, FAO/WFP estimated that 22,940 sq km was dedicated to wheat: http://www.reliefweb.int/library/documents/2003/fao-afg-13aug.pdf.

Cultivation at the national level has certainly fluctuated widely and irrespective of price trends (see Figure 3.1). UNODC estimated that national cultivation rose from 54,000 ha in the 1994/95 growing season to almost 91,000 ha in 1998/99. It then fell to approximately 82,000 ha in 1999/2000 and subsequently collapsed under the Taliban ban to around 8,000 ha in 2000/01. Following the fall of the Taliban, cultivation again returned to mid-1990s levels – 74,000 ha in 2001/02 and 80,000 ha in 2002/03. In 2003/04 predictions of a dramatic increase in cultivation were realised despite considerable reductions in the price of opium prior to planting. But by 2004/05 opium poppy cultivation had fallen to 104,000 ha.

Figure 3.1: Cultivation and Prices of Opium, 1997-2005



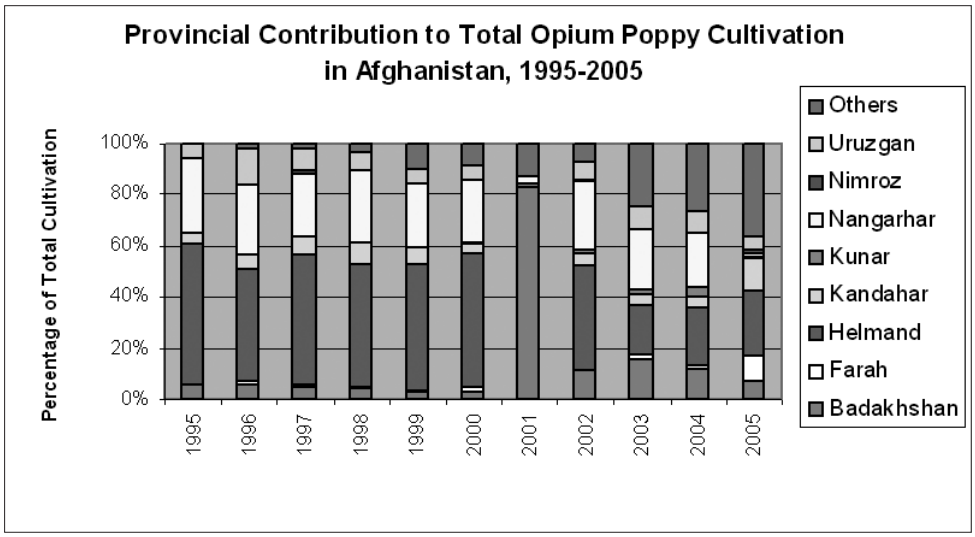
It is also important to recognise that national figures mask pronounced fluctuations and diversity among provinces. For instance, in the province of Helmand cultivation fell from a peak in 1998/99 of around 45,000 ha (and a post-Taliban ban level of 30,000 ha) to 15,000 ha in 2002/03, only to rebound again to 30,000 ha in 2003/04, and then fall slightly to 26,500 ha in 2004/05. Over the same period, cultivation in Nangarhar fell by only 4,000 ha from around 23,000 to 19,000 ha between 1998/99 and 2002/03. As in Helmand, cultivation rose to an unprecedented 28,000 ha in 2003/04 despite the fall in farm-gate prices at planting time that occurred, from around US$ 475 per kg to US$ 210 per kg over this twelve-month period. However, in 2004/05 the level of cultivation fell by a dramatic 96% to only 1,100 ha after a concerted effort by provincial authorities to eliminate opium poppy cultivation across the province. In Badakhshan province, cultivation rose dramatically every year until 2003/04, when it was almost five times the level of 1998/99, before subsequently dropping by an estimated 50% to 7,500 ha in 2004/05. In the provinces of Kandahar, Balkh, and Farah, levels of opium poppy cultivation did not falter in 2004/2005 but increased for the third consecutive year, expanding by between 160% and 350% in that year alone.

The new entrants into opium poppy cultivation also have had widely contrasting experiences. The provinces of Jawzjan, Kapisa, Kunduz, Kabul, and Takhar were reported to have begun cultivation in the 1998/99 growing season, followed by Faryab, Samangan, Sari Pul, and Badghis in 1999/2000, Ghor in 2000/01, and more recently Bamyan, Nuristan, Khost, and Wardak (2002/03). Some of these provinces have seen meteoric rises in levels of cultivation. The province of Ghor is perhaps the best example, with no opium poppy report-

ed in UNODC's 2001 estimates (despite reports of cultivation dating back to 1998), 2,200 ha in 2002, 3,782 in 2003 and 4,983 in 2004. Takhar province has seen cultivation increase from 201 ha to 1,364 ha in the seven years since cultivation began. In Jawzjan province cultivation has actually fallen from 2,593 ha when cultivation was first reported in 1998/99 to 1,748 ha in 2004/05. There is no simple explanation for the differing years of entry or rates of change in cultivation among these provinces.

The emergence of these new areas of cultivation has contributed to a shift in the distribution of cultivation, with the top seven opium producing provinces in 1999, responsible for 96% of total cultivation that year, accounting for 74% of total cultivation in 2003 and by 2005 only 63% (partly due to the substantial reductions in cultivation achieved in Nangarhar province). By 2003, there were nine more provinces cultivating opium poppy than in 1999, but there were 11,000 fewer ha planted nationally. Moreover, in 2003 the province of Helmand no longer headed the list of provinces responsible for the largest amount of opium poppy cultivation, having been superseded by Nangarhar, and accounted for less than 20% of total cultivation compared to around 50% in the mid- to late 1990s (see Figure 3.2). The reduction in cultivation in Helmand in 2003 was attributed to the Governor of the province, keen to show action against opium and perhaps interested in exploring the potential for gaining donor assistance for his efforts (UNODC, 2004). But as we have seen, this reduction proved short-lived, and moreover cultivation in 2005/06 is expected to increase sharply. Some of these provincial trends are illustrated in Figure 3.2.

Figure 3.2: Contribution of Some Provinces to Total Cultivation, 1995-2005



At the same time that Helmand was on the wane, the province of Badakhshan gained increasing prominence, contributing an estimated 15% of total national opium poppy cultivation in 2003 compared with less than 5% during much of the 1990s. Isolated, mountainous Badakhshan, where the Taliban were never able to consolidate their control, was relatively unaffected by the drought, and profited from the Taliban ban that affected the rest of the country. Despite a three-fold fall in farm-gate prices, opium poppy cultivation rose again in 2003/04, only to fall by 50% in 2005. Indeed, the increase in Badakhshan and the reductions in Helmand were so pronounced in 2003 that the district of Keshem in Badakhshan was listed as the district cultivating the largest area of opium poppy in Afghanistan. Nad-e-Ali, the district in Helmand that so frequently featured as either first or second during the mid to late 1990s, did not even register in the top 20 opium poppy cultivating districts in 2003.

[5] Also see Hurd and Masty (1991) for some historical background.

At the district level the picture is even more complicated. Despite the rapid increase in the number of districts cultivating opium poppy, 45% of all districts in Afghanistan did not cultivate any opium poppy in 2005 (see Evans et al, 2004). Among those that did, the intensity of cultivation could vary from less than 10% of total agricultural land to nearer 80%. For example, on average 70% of cultivated land was dedicated to opium poppy in the districts of Musa Qala and Nawzad in northern Helmand in 1999, compared to only 46% in the central districts of Nad-e-Ali and Marja, where the average landholdings are much larger and irrigated by the Helmand River canal system (see ACBAR, 2002).

Similarly, opium poppy cultivation is more concentrated in the southern districts of Nangarhar province, where landholdings are small and access to both irrigation water and markets is more problematic. For example, in Achin district of Nangarhar, where the mean household landholding is less than 0.5 ha, 76% of cultivated land was dedicated to opium poppy in the 2002/03 growing season. This contrasts sharply with the situation in Surkhrud (near the provincial center of Jalalabad), where the farmland is considered rich, crop yields are high, and population density lower, and where even in 2004–a peak year for Nangarhar when UNODC estimated that 28,000 ha of opium poppy were cultivated, less than one-quarter of cultivated land was dedicated to the crop (see Mansfield, 2004c).[5]

Explanations for the emergence of opium poppy cultivation in new areas also vary from district to district. For instance, in Pasaband district in Ghor, the initiation of opium poppy cultivation is attributed to the impact of the drought, the displacement of the opium trade during the Taliban ban, and the knowledge Ghor's itinerant opium poppy harvesters gained in neighbouring Helmand. Yet in the neighbouring district of Chaghcharan, Pashtoon farmers mainly from the southern region (but also the east) are blamed for the introduction of opium poppy cultivation, along with traders from Helmand province looking for new sources of supply.

Clearly Afghanistan has the right conditions for widespread opium poppy cultivation not only in agronomic terms (hence the particularly high yields obtained) but also socio-economically and politically–i.e. weak governance, insecurity, and the lack of viable legal livelihoods. However, although these characteristics are prevalent across the country, opium poppy occupies a small part of total agricultural land in Afghanistan. Cultivation levels and trends are also far from uniform: in some areas the level of cultivation rises exponentially even while falling in the neighbouring province or district; in another district opium poppy will be a long-established crop, while right next door cultivation will have just begun, or is still non-existent.

Perhaps we should not be surprised by these different patterns and trends in opium poppy cultivation at the provincial and district levels. After all, Afghanistan is a country of great diversity in language, terrain, climate, and culture. In particular, political structures, economic opportunities, and livelihood strategies are highly localised. Given such diversity, it would be wrong to assume that households from different socio-economic groups in different areas would respond to the opportunities that opium poppy cultivation might offer in the same way.

[6] See the Report on Findings from the 2003 National Risk and Vulnerability Assessment (NRVA) in Rural Afghanistan by the Vulnerability and Mapping Unit of the World Food Program and the Vulnerability Analysis Unit of the Ministry of Rural Rehabilitation and Development, December 2004. Also see Grace and Pain (2004), and Christopolos (2004).

III. RURAL LIVELIHOODS: DIVERSITY IN ASSETS AND OPPORTUNITIES

It is clear that poverty is prevalent in Afghanistan. In 2003 it was estimated that 3.5 million rural Afghans were extremely poor, 10.5 million were vulnerable to extreme poverty, and among the rest, a further 3.5 million were less poor but nonetheless still vulnerable to poverty (World Bank, 2005, p. ii). While some improvements have been achieved, it does not appear that the situation for the majority of rural Afghans has changed considerably in the last three years.

Despite the prevailing level of poverty, rural livelihoods in Afghanistan have proven resilient in the face of more than two decades of war and a protracted drought. Rural households in Afghanistan have been found to draw on a range of different strategies to manage the risks and uncertainties that they face as part of their day-to-day life. A number of rich sources of data suggest that rural livelihood strategies in Afghanistan are complex and diverse[6] and that they vary not only across the country but within the same province or even district. Even within a single village, different households draw upon diverse income sources depending on their specific assets and capabilities as well as on seasonal opportunities.

The distribution of assets in rural Afghanistan is closely related to geography. Provinces such as Nangarhar and Helmand have far better natural conditions than the more mountainous provinces of Ghor and Badakhshan. Nangarhar in particular, given its temperate climate and its close proximity to markets in both Kabul and Peshawar in Pakistan, offers households a large number of livelihood options. Possibilities include, for example, production of a range of agricultural crops including high-value horticulture and fruit production; sale of livestock and livestock products; the transportation and trade of agricultural and non-agricultural goods; skilled and semi-skilled employment in the construction industry (in Jalalabad, Kabul, and Peshawar); as well as income from the smuggling of licit and illicit goods. The range of livelihood options, and the number of opportunities in each sector, are much more limited for the inhabitants of Ghor province, who find themselves cut off by snow for up to five months of the year and for whom livestock and remittances from Iran form the bedrock of their livelihood strategies.

However, it would be wrong to assume that even in relatively resource-wealthy provinces, such a wide range of livelihood options is available for all. Even in Nangarhar there are considerable differences in the assets households have at their disposal, and consequently in the nature and composition of their livelihood strategies. Take the case of a landowner in the district of Kama with a large amount of well-irrigated land and a shop in the local bazaar managed by one of his sons, while his other son collects a government salary. The livelihood options available to him are very different from those available to a landless farmer in Rodat district, where the prevailing drought has reduced the farmer's already limited yield on the land he sharecrops, and where his four children under five years of age and his sick wife can offer no real assistance on the farm. The comparison would be even starker in an area like Upper Achin where as many as 30 family members, owning only one jerib of land, might try to earn sufficient income to meet their basic needs through a combination of wage labour opportunities. These might include working in Gorroko bazaar in Dur Baba; transporting licit goods across the Pakistan border by mule; foraging for wood in the mountains to sell as fuel in Jalalabad; and cultivating opium poppy on their limited landholdings. Indeed, from the perspective of assets the remote southern districts of the province, such as

Achin, appear to have more in common with the northern districts of Helmand than they do with the better-off districts of Surkhrud and Behsud in Nangarhar province.

While geography is an important factor in determining the different livelihood options available in an area, ultimately it is the portfolio of assets and capabilities within each household that determines which particular opportunities are available to them. At the level of the household there is considerable diversity. For example, rural households in Afghanistan typically are large and may contain a number of families. While national statistics suggest that the median size of rural households was seven persons in 2003, it is certainly not uncommon to find twelve to fourteen family members living within the same compound. Moreover, in areas where it is traditional for the extended family to reside together, household sizes can often exceed 20 members. It is not unusual to find 20-35 household members in districts such as Achin, Shinwar, and Pacha Wa Agam, where the Shinwari tribe are concentrated.

Throughout Afghanistan dependency ratios are high and poverty is found to increase as the percentage of household members able to work diminishes. The very poor are the least likely to have a household member available for productive work. Much depends on the demographics of the household. Typically it is the males of the household that migrate in search of work. However, there has to be a sufficient number of them that one male member can be left at home to ensure the security of the family. In a family of eight it is not uncommon to find only one member of the household working full time, either on the land or generating cash income through daily wage labour. A household with a number of men who are able to find non-farm income can increase its income significantly. Households in close proximity to labour markets can send members there daily, incurring minimum transport, accommodation, and food costs (especially important on days when they do not find work). On the other hand, those located at a greater distance will migrate seasonally in search of wage labour so as to minimise their overhead costs.

The size of landholdings also varies considerably by region and of course by socio-economic group. For example, a particularly wealthy landowner in parts of Kandahar province may own as much as 300 jeribs of land. His equivalent in the province of Nangarhar is more likely to own nearer 30 jeribs. For the very poor, the most common land tenure arrangement is sharecropping. In most provinces the amount of land sharecropped is typically lower than the amount owned. The most comprehensive survey undertaken in Afghanistan to date, covering 11,757 households and 85,577 individuals, found that one-quarter of those interviewed were landless.

Clearly, agricultural production is a key component of rural livelihood strategies. While poorer households may limit vegetable cultivation to a small number of crops for household consumption, the relatively resource-wealthy are more likely to produce a range of high-value vegetable and fruit crops for both consumption and sale. Landholdings of this latter group may be such that they not only produce sufficient wheat for household consumption but also have a surplus for sale. This differs markedly from the situation faced by households with small landholdings and large numbers of household members.

Livestock can also represent an important asset and source of income for the rural population. Typically, wealthier socio-economic groups are not only more likely to own livestock

[7] "Off-farm income typically refers to wage or exchange labour on other farms (i.e. within agriculture) while non-farm income refers to non-agricultural income sources." (Ellis, 1989).

but they have larger herds of animals of greater value. Ultimately this provides a guarantee against food insecurity, a source of revenue, and in some areas a means of accessing credit. This is true of all types of livestock, but particularly oxen and dairy cows. The sale of dairy products, such as milk, yoghurt, and cheese, by households in close proximity to urban areas can provide significant income. The very poor generally own very few livestock, with the exception of poultry.

Off-farm and non-farm income also comprise an integral part of rural livelihood strategies for the vast majority of rural households.[7] For the relatively resource-wealthy, non-farm incomes are not only higher than for other socio-economic groups but also they are more secure and diverse, including drawing on government salaries, transport, and working in the retail trade. In contrast, the resource-poor are more dependent on relatively low-paid and insecure wage labour opportunities compared to the relative security (and patronage) associated with government salaried posts. Even in areas with the greatest proportion of land dedicated to opium poppy, off-farm and non-farm income opportunities provide valuable sources of cash income. However, much of this is insecure wage labour that is often derived from working as hired labour during the opium poppy harvest. In accessing off and non-farm income opportunities, including cross-border migration, households draw upon an extended family and tribal networks where they can.

It is in this context, where households in different areas and from different socio-economic groups draw on different assets and income streams, that opium poppy cultivation has become an important component of rural livelihood strategies. Just as decisions on allocation of household assets to, for example, high-value fruit growing or non-farm income earning opportunities are informed by the assets a household has at its disposal and the opportunity costs of that investment, so too are decisions on the scale and nature of a household's engagement in opium poppy cultivation. Thus opium poppy cultivation cannot be isolated from the wider livelihoods milieu.

IV. OPIUM POPPY CULTIVATION: DIVERSITY IN ASSETS AND DEPENDENCY

From Homogeneity to Heterogeneity

Within the drug control community there has been in the past a tendency to see Afghanistan in the context of "opium poppy growing households" and "non-opium poppy growing households". Too often this analysis focuses on estimates of the economic returns on opium poppy per unit of land. In this context, drug control analysts and commentators typically refer to the gross returns per hectare from opium poppy cultivation. In turn, these aggregate figures are often compared with the economic returns on wheat, and reference is made to the significantly higher profitability derived from opium poppy cultivation.

Typically, this kind of analysis does not place opium poppy within the context of the wider household economy and rural livelihoods strategies. It does not take into account the different rural actors involved in opium poppy cultivation and how the aggregate economic returns for a unit of land are distributed among them; how these returns vary considerably depending on the different inputs that each group contributes to opium production; and how the final return on their input will be a function of the other assets at the disposal of each of these different actors. Perhaps most important of all, the analysis focuses primarily on the

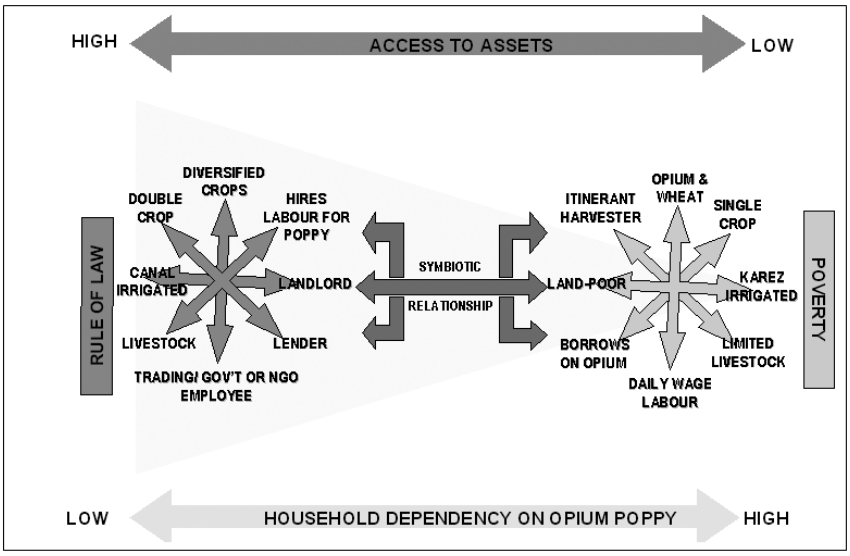
potential on-farm income that might be derived from opium poppy cultivation and neglects the other assets that households gain access to through their engagement in opium poppy cultivation.

Over the last ten years, development analysts and policy makers have come to a better understanding of how opium poppy cultivation fits in the wider socio-economic, political, and environmental context within which household decisions are made in rural Afghanistan. This represents a shift away from the narrow model where households simply respond to market price signals, toward one where access to assets and decisions regarding them are a function of complex social and political processes.

The more informed model of household decision making in rural Afghanistan that has emerged suggests that opium poppy cultivation is both contingent and contextual–a function of where, who, and when–and therefore highly dependent on local factors. Indeed, it suggests that opium poppy cultivation is dependent on the specific assets that the individual household has at its disposal and is not simply a function of the prevailing price of opium in the market. Moreover, it recognises that as the range of legal livelihood strategies available to households is a function of the assets and capabilities they can draw upon, so too is a household's dependency on opium.

There is an inverse relationship between household access to assets and dependency on opium poppy cultivation, illustrated in Figure 3.3. While representing a simplified depiction of households at the two extreme ends of a spectrum, this diagram illustrates both the diversity in assets that different households have at their disposal and, in turn, the diversity in their dependency in opium poppy cultivation as a means of meeting their basic needs. It also highlights the symbiotic relationships that can exist between the different asset groups involved in opium poppy cultivation and the role that opium plays as a means of exchange between them.

Figure 3.3: Access to Assets and Dependency on Opium



On the right-hand side of the diagram are households with limited access to assets and whose dependency on opium poppy cultivation to meet their basic needs is most acute. These are households in areas where opium poppy cultivation has been found to be at its most concentrated and where poverty is not just income-related but also represents poverty of opportunity. Households at this end of the asset/dependency spectrum are typically found in the most inaccessible areas, where labour and agricultural commodity markets are constrained by poor infrastructure and limited purchasing power; where landholdings are typically small and access to irrigation problematic, and where population densities per unit of agricultural land are particularly high. In these areas legal livelihood options are severely restricted and opium poppy cultivation is largely supplemented by off-farm and non-farm daily wage labour opportunities, many of them associated with opium production.

At the other end of the spectrum are households with greater access to assets and low dependency on opium poppy cultivation as a means of meeting their basic needs. Here it is the absence of rule of law that has led to a shift into opium poppy cultivation. These households would typically be found in the more fertile river basins in close proximity to the provincial center, where facilitated by better access to physical infrastructure, as well as improved governance and security, they would have access to functioning labour and commodity markets. These households would typically be relatively land-wealthy and would have the opportunity to double crop. For this group, opium poppy cultivation would be combined with greater diversity in on-farm, off-farm, and non-farm income opportunities to raise household income and reduce uncertainty and vulnerability to shocks. Opium sales, while still a significant proportion of total cash income, are pooled with the income derived from the sale of other agricultural products and livestock. Non-farm incomes are not only higher but also more secure and diverse, including in some cases government salaries, and possibly income from transport and retail trade.

However, it is not merely the dependency on opium poppy cultivation that differs according to a household's access to assets, the economic returns on the crop also vary. For the resource-rich, opium can generate relatively high incomes. As Figure 3.3 illustrates, access to cheap labour through the prevailing unequal land tenure arrangements ensures that landowners accrue a disproportionate share of the final opium crop. Those with sufficient financial assets further increase their profits by purchasing opium on a "distress sale" basis through the provision of advance payments on the crop prior to its harvest. Finally, by being able to retain their opium crop and sell it some months after the harvest when prices have risen, those households that are least dependent on opium poppy as their sole source of income are most able to benefit.

The income that the resource-rich derive from opium is in sharp contrast to the earnings of the resource-poor. Circumstances require that the poor provide relatively low-paid labour through the prevailing land tenure arrangements; they are also compelled to sell their opium at low prices prior to the harvest as means of accessing credit; and it is the poor that are most dependent on opium poppy due to limited on-farm, off-farm, and non-farm income opportunities.

V. FROM MAXIMISING ON-FARM INCOME TO ENHANCING ACCESS TO ASSETS

Fieldwork over the last decade has highlighted the multi-functional role of opium in rural livelihood strategies, providing access to land, credit, and an important source of off-farm income for households with insufficient land to satisfy their basic needs. Even the by-products of opium poppy have been found to have a high use-value.[8] Consequently, in contrast to the relatively asset-rich, for the resource-poor the income that households accrue for their work on opium poppy is only one motivation for its cultivation.[9] Understanding the multi-functional role of opium poppy cultivation in rural livelihood strategies and how this differs by socio-economic groups is critical to developing appropriate development and drug control policies.

Access to on-farm income. It is clear that the on-farm income earned from cultivating opium poppy can be significant; however, these high economic returns are not available to all. Indeed, the returns to opium poppy cultivation can be so marginal in some areas of Afghanistan that the opportunity cost of production is simply too high to justify its production.

For example, in many parts of Ghor province, limited and intermittent irrigation supply, the incidence of frost, and poor plant husbandry have resulted in low yields. Food security, for both household members and livestock, and the importance of remittances from family members working in Iran, have meant that households are reluctant to allocate land and labour to a potentially low-yielding opium poppy crop. Consequently, in 2005 opium poppy cultivation in the districts of Chaghcharan and Sharak in Ghor province was marginal: typically cultivated by family members, particularly the young and women; largely restricted to the upper and middle valleys where access to water was more secure; and occupying only a small proportion (less than 10%) of agricultural land. Similarly, in the main Kunduz river basin it is thought that particularly high ground water levels (the nemesis of opium poppy cultivation), combined with good rice, wheat, and vegetable yields, have made opium poppy cultivation an unattractive option for most farmers in the area. It appears to be far better for household members to earn off-farm income from harvesting opium poppy in Badakhshan rather than to cultivate it on their own land in Kunduz province.

Even in areas where opium poppy cultivation has been concentrated, returns vary considerably by economic group. For those who obtain land under a sharecropping arrangement and accrue only one-third of the crop, and who typically sell some, if not all, of their crop in advance at lower than the harvest price, opium poppy cultivation makes an important contribution to the household economy but does not lift them out of poverty. For this group the gross return per ha in 2005 was not the US$ 5,400 estimated by UNODC, but nearer to US$ 900.[10] When we further consider that the actual amount of land cultivated with opium poppy is typically significantly smaller than a hectare[11] – perhaps only one-third of a hectare – gross returns derived from opium poppy can fall to as low as US$ 300 for a sharecropping house-

[8] By-products include seed, capsules, and stalks. The stalks would appear to have the highest use-value as these provide an important source of household fuel in a country where firewood is becoming increasingly scarce. Anecdotal evidence suggests that one hectare of opium poppy will provide fuel for a household of 20 people until the onset of winter. See UNDCP (1998, p. 32).

[9] Opium poppy plays a similar function in the household strategies of the highland communities in South East Asia. For instance in Laos, "In addition to [opium's] good marketability it is relatively easy to exchange directly against rice, and it is a common payment for wage labourers. Also annual food shortages can be so bridged, at least partly, less land is needed to support a relatively high population density and the frequency of necessary migration can be lower." (Eprecht, 1998, p. 45). In Thailand: "To date opium fulfils an insurance function, as evidenced by the fact that farmers may revert to opium poppy cultivation when they lose their cash crop production due to natural hazards, or when they are unable to market their produce. A number of commercially attractive crops (e.g. tomatoes, beans, coffee etc.) are often relatively perishable and susceptible to pests and diseases. They rely on high inputs and efficient marketing systems. Therefore although some crops offer income opportunities that are more attractive than opium poppy cultivation, they expose farmers to higher risks." (Dirksen, 2001, p. 6).

hold.Given the household sizes in many of the areas in which opium poppy cultivation is at its most concentrated, it seems clear that the on-farm income derived from opium must be used to meet basic needs among the resource–poor and not invested in capital accumulation.

The picture is very different, however, for those who own land and sell the opium they cultivate on it some time after the harvest season when prices have risen. Those with relatively large landholdings may employ a number of sharecroppers on their land to cultivate opium poppy, along with other crops. Consequently, instead of having only one-third of a hectare this group may have in total one hectare of opium poppy, cultivated by three separate sharecropping households. By accruing two-thirds of the final crop from each of those households, the landowner can earn US$ 3,600 from the one hectare of opium poppy cultivated on his land, if the crop is sold at harvest time. If the crop is sold later in the season, the landowner might double the on-farm income derived from opium poppy to US$ 7,200. Moreover, for this socio-economic group– especially those with the capital to provide advance payments on opium, as well as the contacts and perhaps the vehicles to engage in trading of the crop, and able to move opium between regional and border markets–there is even greater potential for increasing the cash income derived from opium poppy.

Access to off-farm income. Current estimates suggest that opium poppy requires weeding as many as three times and needs as much as 200 labour days per hectare during harvesting. This provides an important off-farm income opportunity for the rural population, which currently has few attractive alternatives. For example, in Nangarhar province almost 85% of reported cases of hired labour were for opium poppy cultivation. During the weeding season the labour force might be more localised, drawn mainly from within the province, and could also include young boys working either within the village or in neighbouring villages, who would be paid around US$ 2.50 per day. However, in the harvest season labourers are paid at much higher rates and as a result are willing to travel greater distances, even coming from Pakistan to take advantage of such off-farm income opportunities.

The staggered nature of the opium poppy season, varying by altitude even within a single province, extends the labour opportunities for those willing and able to travel from areas like southern Helmand to central Ghor or Badakhshan. The harvest season alone represents a period of up to ten weeks paid work. Indeed, the labour inputs are such that it is estimated that the employment generated by opium poppy cultivation in Nangarhar in 2004 represented the equivalent of 9.8 million labour days, of which 3.4 million labour days were daily wage labour opportunities, valued at approximately US$ 11.7 million.

For some farmers, the off-farm income derived from opium poppy can actually exceed what they might earn from the opium they obtain from farming their own land. Clearly this is true for those who do not own land and do not have access to land under other land tenure arrangements but only work on opium poppy fields as wage labourers. This is also the case for households that do own land but for a variety of reasons do not cultivate opium poppy on it. Members of such households may work as itinerant labourers during the opium poppy harvest elsewhere. However, it may also be true for households that sharecrop land and have more than one male family member available to travel and work during the weeding and harvesting season in other areas. So much so that fieldwork has revealed that this group is more likely to cultivate varieties of opium poppy that yield what is considered to be poor quality-opium, and therefore carrying a lower price, because it could be harvested earlier, allowing

[10] This figures is calculated based on the assumptions that (i) a sharecropper receives one-third of the final opium crop and (ii) sells the entire crop in advance at half the harvest price.

[11] UNODC (2005, p. 80) estimates that the average amount of household land allocated to opium poppy in the 2005 growing season was 0.33 ha.

family members also to work as itinerant harvesters in neighbouring villages, districts, and provinces.

Access to credit. Previous fieldwork, including by Grace and Pain in 2004, has revealed that credit is an integral part of Afghan rural livelihood strategies (see UNDCP, 1999). In opium growing areas seasonal credit, known as salaam, has typically been obtained as an advance on a fixed amount of agricultural production (see Box 3.1). While salaam sometimes includes advance payments on other agricultural products, such as wheat or black cumin, opium is the crop favoured by lenders. Although the majority of households that cultivate opium poppy in Afghanistan utilise this system to some extent, the resource-poor often sell their entire crop prior to the harvest in return for an advance payment. Traditionally the price paid as an advance has been half the current market price of opium on the day that the agreement is reached. The borrower is expected to submit the agreed amount of opium that the advance has been provided against promptly at harvest time. For the resource-poor, this system allows some of the value of the standing crop to be realised before the opium harvest, facilitating the purchase of food, clothes, and agricultural inputs (including labour for opium harvesting). For the resource-rich, provision of advances allows opium to be purchased at around half the harvest price, and moreover this can subsequently be sold post-harvest when prices have risen.

Box 3.1: Borrowing in Jurm, Badakhshan

I have eight jeribs of rainfed land and a family of ten people. Last year my wife was very ill. We needed money for her treatment so I took an advance payment of 49,500 (US$ 990) against 15 kg of opium. I took my wife to Faizabad to see the doctor and get medicine. There was very little money left. Last year (2005) I cultivated two jeribs of rainfed land with poppy but I only got a yield of three kg of opium. I gave this to the trader who lent me the money. He converted the twelve kg of opium I still owed him into cash at 4,000 Afs per kg (for a total of Afs 48,000). I did not have cash so I sold two and a half jeribs of my land for Afs 62,500 (US$ 1,250). I repaid the trader and the rest of the money I have used for my family expenses. I am very happy with this local trader, he is a very good person as he helped me with my wife's illness. If I had not cultivated poppy I would not have gotten a loan and my wife would not be better.

Source: Mansfield (2006).

The salaam system came under considerable stress following the Taliban ban on opium poppy cultivation in 2000/01 and subsequent attempts to reduce cultivation. There has been a growing reluctance in some areas to provide advance payments against the opium crop. Nevertheless, households that cultivate opium poppy typically are still considered more "creditworthy" than those that do not. For example, in much of Nangarhar province in the 2005/06 growing season, households that cultivated opium poppy could obtain a range of different commodities, including food items, medicine, and clothes, on credit, while those that refrained from cultivation were refused on the basis that they had no collateral with which to repay. Moreover, opium poppy cultivation bans and eradication have seriously aggravated the problem of accumulated opium-related debt for many poorer farmers (see Box 3.2).

Access to land. Opium poppy cultivation has provided access to land for those who own no land, as well as increasing access to land for those with insufficient landholdings to meet their basic needs. This is primarily due to the significant labour demands of the crop and the financial advantage that those with relatively large landholdings can gain from making their land avalible to other farmers on either a sharecropping or leasing arrangement. Were the landwealthy to cultivate other crops (typically with much lower labour requirements) instead of opium poppy, the land would no longer be available to sharecroppers or for lease but would be farmed using family labour of the landowner or relatively few wage labour inputs.

Box 3.2: Jailed in Marja, Helmand

A sharecropper in Marja district in Helmand reported that he had taken an advance payment of US$1,600 on the understanding that he would repay the lender 10 kg of opium at harvest time in 2003. However, the sharecropper claimed that his crop was destroyed in the eradication campaign during the 2002/03 growing season. In response his landlord took back the land, blaming the sharecropper for failing to bribe the eradication team the US$200 necessary to spare the crop. The sharecropper reported that he did not have the money to pay the bribe, and once his crop was destroyed he could not repay his outstanding debts. In the 2003/04 growing season the sharecropper obtained five jeribs of land from a different landlord, but his creditor had him imprisoned in the district jail for defaulting on his loans. It was reported that the sharecropper's mother and current landlord appealed to the district administrator for his release, insisting that the women of the family would help him in the field so that he could repay his debts. The sharecropper was released but was ashamed. He stated that "no wife or mother works on the land in this district, but mine are working with me. My nine year old daughter and my two younger children are also working in the field. They cannot go to school as they help me on the land– this is the curse of debt." He was cultivating all five jeribs of land with opium poppy.

Source: Mansfield (2006).

For landowners who want their land to be cultivated with opium poppy on a sharecropping basis, preference is often given to those with experience in opium poppy cultivation (see Box 3.2). Under such arrangements, the landowner will typically obtain 50%-66% of the crop despite the fact that up to 80% of the total cost of production consists of labour and therefore is provided by the share-cropper. In many areas tenant farmers who are willing to cultivate opium poppy will also be given preference, as they will typically pay higher rates of rent.[12] A capacity to cultivate opium poppy hence offers the land-poor both the opportunity to gain access to land and to increase on-farm income. It also means they can improve their direct entitlement to food crops given that they will typically cultivate a variety of crops, and not just opium poppy, as part of their land tenure arrangement.[13] Where landowners have abandoned opium, the land-poor have been found to migrate to other areas to cultivate opium poppy. For example, increasing levels of cultivation in Balkh province in 2004/05 were reported to be a direct result of growing numbers of migrants from Nangarhar province who are leaving in search of both land and off-farm income in the wake of the very sharp reduction in opium poppy cultivation in their home districts.

Improving food security. The relationship between the price of agricultural commodities and the level of cultivation in Afghanistan is far from simple. For example, research has indicated that during the drought years, households determined how much land to dedicate to wheat based on estimates of water availability rather than the market price of wheat (Hale, 2002). Other fieldwork suggests that despite relatively high opium prices, households will favour wheat cultivation if they fear that they will not be able to purchase wheat on the open market.[14] Recent in-depth research in Nangarhar suggests that while opium poppy has been cultivated in a wide range of areas and by varied socio-economic groups, it tends to be

[14] Phillips has indicated that "the rural cultivator in Afghanistan will balance the amount of land sown with poppy with household food requirements. When basic foodstuffs such as wheat and flour can be easily purchased for reasonable prices the farmer may opt to dedicate a greater proportion of land to poppy cultivation. However, when wheat becomes too expensive or too difficult to purchase the farmer will reduce the amount of land planted with poppy and increase wheat cultivation, until the balance of the two corresponds with household food and cash requirements." See UNDCP (1995).

concentrated in areas with limited access to irrigated land, high population densities, and limited off and non-farm income opportunities (Mansfield, 2004b).

In many of these areas cultivation of other crops is a limited option. With such small landholdings and such a high number of persons per jerib of land, cultivating wheat exclusively would lead to food shortages. Under such conditions, households need to produce cash crops to meet their basic needs. Yet vegetables and fruits (and indeed wheat) are vulnerable to crop failure as a result of water shortages and inability to reap full value due to poor transportation endemic in these areas. Livestock typically have been sold due to drought and increases in costs of wheat straw. As a result households are left with very few obvious sources of income.

In these circumstances, intensive levels of opium poppy cultivation are not necessarily the cause behind lower levels of cultivation of licit crops, but instead reflect the lack of diversification in on-farm, off-farm, and non-farm income opportunities in the first place. The attraction of opium poppy in these areas lies in its role as a low-risk crop in a high-risk environment rather than as a possible strategy for maximising economic returns. While some crops (particularly as part of mixed cropping systems and combined with non-farm income opportunities) can compete in terms of financial returns with opium poppy when opium prices are lower, none can offer the same more qualitative attributes, including: relative drought resistance; a non perishable product; an almost guaranteed market; and traders who offer advance payments against the future crop. These characteristics serve to make opium cultivation more persistent and less price-responsive, particularly among the poor, than many might imagine. Indeed, the dramatic increases in opium poppy cultivation reported in 2003/04 occurred at a time of significant reductions in the farm-gate price of opium, with prices halving between the times of planting in the 2002/03 and 2003/04 seasons.

The returns on wheat do not have to compete with opium poppy to shift the balance between wheat and opium poppy cultivation. Under current conditions in Afghanistan, most households are more concerned about food security than about profit. Where markets do not function smoothly due to a shortfall in domestic production and restrictions imposed on traditional cross-border trade, households have few options but to cultivate wheat on their own land to guarantee food supplies and have been found to do so even at the expense of opium poppy cultivation.

Facilitating investments in land. In the mid-1990s opium poppy was described as a crop that needed considerable weeding. The reality was that the land needed weeding and that opium poppy provided the financial means (and motivation) with which to pay for agricultural inputs, including weeding and fertiliser. For example, in provinces such as Helmand and Nangarhar, opium poppy is ideally (where households have sufficient land) rotated on a given piece of land on a 2-3 year basis. In the first year opium poppy is cultivated during the winter months. The land is weeded intensively and fertilised. This is often paid for using the credit obtained against the future opium crop. In the summer, maize is cultivated on the same plot of land. In the following winter, wheat is cultivated and given a cursory weeding, with less fertiliser applied. The land is then left fallow during the summer. If the household has sufficient land, it is left fallow during the winter as well. If not, opium poppy is once again cultivated.

In some areas of Afghanistan, cultivation of opium poppy has become almost a prerequisite for agricultural production, providing the necessary resources for investing in the productive capacity of the land. For instance, in the canal areas of Helmand, the poor quality of soils has made fertiliser an essential precondition for agricultural production (Shairzai et al, 1975, p. 108). Yet for the poor, obtaining fertiliser requires credit, and obtaining credit requires opium poppy cultivation. Consequently, within this cropping system, opium poppy cultivation should be assessed based on its role in allowing access to resources for investing in the land over a longer-term time horizon and not simply on the basis of potential economic returns per unit of land from one year's cultivation.

In other parts of Afghanistan, opium has financed investments in land that have further increased returns on all crops. For instance, in the upper valleys of Khustak and Wadooj Bala in the province of Badakhshan, investments in land have also included bunding. Reports suggest that this has protected opium poppy (and other crops) against frost and has helped maximise the returns on water. Opium yields were reported to have increased by 20%, and intercropping with potato further increased returns per unit of land. However, the cost of bunding is significant, requiring 20 person-days at approximately US$ 2-3 per day, compared to only two person-days for preparing land in the usual way. The resource-poor were found to be aware of the benefits of bunding but considered the labour costs beyond their financial means, and would not increase their current level of debt to pay for it.

Maximising returns on water. Opium poppy also offers a relatively high return per unit of water–Afghanistan's most scarce resource. The crop is often described as drought-resistant, but while it is possible to obtain a yield in relatively dry conditions, productivity will be considerably lower than if the crop is irrigated with the right amount of water at the right time.

In Nangarhar province, opium poppy is typically found to be cultivated at its most concentrated in areas where access to irrigated land is acutely limited. For example, households in areas of the province that only obtain a single crop, and therefore have around half the effective cultivable land area of those that can obtain a double crop, have been found to cultivate opium poppy in the most concentrated manner, along with those that use tubewells for irrigation. For households in areas with only a single crop, opium poppy cultivation provides access to income-smoothing loans and maximises returns on relatively small units of land.

Particularly high densities of opium poppy cultivation on land irrigated by tubewells can be attributed to the high cost of installation (often requiring taking on debt to finance it) and recurrent costs. This is not limited to the province of Nangarhar but is also found in Farah, Kandahar, and Helmand. The cost of installation of a tubewell includes digging the well, pipes, a water pump, and a generator to run the pump. In Nangarhar these costs are estimated to total between US$ 900 and US$ 1,100. Sometimes such costs are paid jointly by a group of households and are often covered through loans.

Recurrent costs include repairs to the generator and water pump. In 2005 the diesel cost for irrigating one jerib of land in Nangarhar was estimated at the equivalent of $6 to $8. By 2006 the cost had increased to as much a US$ 10 per jerib due to the rise in diesel prices.

[12] For example, in the late 1990s in Laghman province in eastern Afghanistan, the influx of farmers from the district of Khogiani in neighbouring Nangarhar province served to increase the rental price of land. These farmers typically came to the districts of Qarghai and Mehtarlam on a seasonal basis and complained of insufficient landholdings in Khogiani district. In some cases they offered Laghmani landowners cash payments, repayable only when the rental agreement came to an end, to gain preferential access to the land. Similar trends in leasing land and rates of rent have also been seen in other provinces such as Ghor and Balkh.

[13] For instance, any household that sharecrops one Qulba of land (30 Jeribs) in Surkhrud district in Nangarhar is entitled to cultivate 1 Jerib of land with clover. This crop is not divided between the landowner and sharecropper but is for the sharecropper's animals alone.

Cultivation in sandy loam soils could require as many as seven irrigations. Where households had insufficient irrigation and did not own a tubewell, they could obtain water by leasing use of a tubewell in the village at a cost of up to US$ 17 per jerib.

Those who used tubewells to provide water for opium poppy cultivation were unanimous in their view that few other crops could provide the access to credit required for installation or rent of a tubewell, or indeed the economic returns to pay back the debts incurred. So much so that in 2005, when the ban on opium poppy cultivation was effectively implemented across most of Nangarhar province, villages that were most reliant on tubewells for irrigation typically cultivated wheat as the replacement crop (which is low yielding and does not require very much labor) and relied on migrating out in search of off-farm and non-farm income to meet considerably diminished levels of family expenditures.

Given the diversity in assets, dependency, and motivations and circumstances that influence opium poppy cultivation, developing a better understanding of the contributions made by different socio-economic groups involved in opium poppy cultivation, and the multiple benefits (for example social, economic, and political) they derive, is critical for identifying the entry points for developing an effective strategy for sustainable elimination of the crop in Afghanistan. It is also essential for understanding how different asset groups respond to various interventions, particularly shocks such as a rapid reduction in opium poppy cultivation.

VI. COPING WITH SHOCKS: DIVERSITY IN RESPONSES TO A REDUCTION IN OPIUM POPPY CULTIVATION

A Function of Assets

Significant reductions in opium poppy cultivation are not without precedent in Afghanistan. The most notable reduction took place in the 2000/01 growing season when the Taliban all but eliminated opium poppy cultivation across the territory that they controlled (which at that time broadly accounted for as much as 90% of the total land area of Afghanistan). Other sizable reductions have occurred on a more localised basis–in Helmand province where cultivation was reduced, according to UNODC, from 30,000 ha in the 2001/02 growing season to 15,000 ha in the following year, and in Nangarhar in 1995 and 2005, when cultivation was reduced by 5,000 ha and 26,000 ha respectively.

However, such significant reductions in opium poppy cultivation in Afghanistan have rarely been sustained. The impact of the Taliban ban on rural livelihoods was as dramatic as it was on the level of opium poppy cultivation. The elimination of the crop not only led to a significant fall in on-farm income for those who normally cultivated opium poppy but was also accompanied by a significant loss of employment opportunities for those usually involved in its harvest. Simply replacing one annual crop, opium poppy, with another, wheat, did not constitute a sustainable change in livelihood strategies.

A household's capacity to respond to a shock, such as eradication, is a function of its access to assets. For households with other livelihood options that they can draw upon and who are not dependent on opium poppy, eradication of their crops, or the threat of eradication, can prompt them to increase their investments in legal alternatives. This may involve reallocation of land, water, and labour to high-value vegetable and fruit crops, as well as

members of the household being freed up from the high labour demands of opium poppy to pursue non-farm income opportunities either in Afghanistan or in neighbouring countries. Where members of the family have salaried employment, skills in industries in high demand (for instance construction), or business opportunities in trade or the transport sector, the decision to cease cultivating opium poppy does not impose such a high economic cost on the household.

For households that are dependent on opium poppy and that have limited agricultural land, eradication or its threat, though serious in terms of its implications, does little to raise the opportunity cost of opium production and hence may not translate into a sustained shift into legal livelihoods. For such households, typically with limited landholdings and high population densities, cultivation of wheat will not satisfy basic household food requirements for more than a few months of each year.

Even in "good years" when climatic factors are favourable, distance to markets, poor physical infrastructure, limited local purchasing power, and the presence of rent seekers extorting bribes on most of the major transport routes, make the cultivation of higher-value agricultural crops much less profitable. Small landholdings, as well as low levels of cultivation of wheat and fodder crops, and the distance to markets, have also resulted in low levels of livestock ownership among households most dependent on opium poppy, further limiting their legal livelihood options. Consequently, it should not be any surprise that under these circumstances eradication has at best little effect, and it is quite common to meet farmers who have experienced eradication on a number of occasions yet still continue to cultivate opium poppy every year.

The "Nangarhar Experiment"?

In 2005 there was a concerted effort on the part of the provincial authorities in Nangarhar to eliminate opium poppy cultivation in the province. The result was a 96% fall in the level of cultivation between the 2003/04 and 2004/05 growing seasons. The process of implementing the ban learned much from the Taliban's experience in 2000/01. In particular, emphasis was placed on preventing the planting of the crop itself and on working through district and local power structures. As with the Taliban ban, promises of development assistance were made to communities in return for compliance with the ban.

In-depth research at the time (see Mansfield, 2005b) revealed that the ban imposed by the provincial authorities had a wide-reaching impact extending well beyond opium poppy farmers across a variety of different groups. Rural labourers, who had no land of their own but who had previously been employed, during the weeding and harvesting season for opium poppy, lost as much as US$ 1,000 in off-farm income due to the ban. Businessmen and shopkeepers in the provincial and district bazaars saw their turnover halve due to the significant shortfall in purchasing power that the ban imposed on the rural population. And unskilled daily wage labourers in Jalalabad city experienced a reduction in both the number of days they were hired and daily wage rates.

The most significant impact was borne by opium poppy cultivating households themselves. However, even here the impact of the ban was less punitive in areas with better access to resources. For instance, while households with access to larger and well-irrigated land-

holdings experienced more substantial falls in on-farm income due to the ban, their proximity to the agricultural commodity markets of Jalalabad allowed them to offset some of these losses by increasing cultivation of other high-value crops. Those with a stock of assets also drew on the different sources of legal income that they had access to in the provincial center and, where possible, increased the number of household members allocated to daily wage labour opportunities. While losses were significant, and even among this relatively resource-wealthy group expenditure on basic food items were curbed to make ends meet, neither longer-term productive assets, such as livestock and land, nor investments in licit income streams were sold off in response to the imposition of the opium ban.

In contrast, households most dependent on opium poppy and who typically cultivated it most intensively were found to adopt coping strategies in response to the ban that not only highlighted their growing vulnerability but threatened their long-term capacity to move out of illicit drug crop cultivation. The loss of on-farm income that this group experienced was not offset even in part by an increase in cultivation of high-value licit crops. This was due to constraints on irrigated land, the distance to markets, and the increasing control "local officials" are gaining over trade in licit goods. Instead, opium poppy was replaced by wheat, but due to land shortages and the density of population wheat production was typically insufficient even to meet families' basic food requirements. The loss of off-farm income (up to five months' employment) during the weeding and harvest season for opium poppy could not be replaced by intermittent wage labour opportunities at less than half the daily rate paid during the opium poppy harvest.

For this group, problems in accessing new loans were compounded by inability to pay accumulated debts. Expenditures on basic food items were reduced; children were withdrawn from higher education; and livestock, household items, and prior investments in licit income streams, where households had them, were sold. The resource-poor were also more likely to send members of their family to find employment in Pakistan, and typically were the most vociferous in their opposition to the government for its imposition of the ban and to the foreign countries they believed to be behind it.

Developments in 2006

Follow-up fieldwork in early 2006 has revealed that as anticipated, the pressure to revert to opium poppy cultivation in the 2005/06 growing season has been intense, and that some sections of the rural population in Nangarhar could not sustain such a significant shock to their livelihoods for a second consecutive year. Having sold the assets that they had available to sell in 2005, incurring increasing levels of debt, and having few viable alternatives, farmers believed that they had little choice but to resume opium poppy cultivation. In some parts of the province, opium poppy cultivation once again occupies up to 80% of the agricultural land.

In the areas where it has occurred, the shift back to opium poppy cultivation has led to (i) an increase in the availability of land for rent and share-cropping; (ii) the provision of income-smoothing loans, either as an advance on the future opium crop or in-kind due to the revived "collateral" of opium poppy cultivation; and (iii) an increase in daily wage labour opportunities during the weeding and harvesting season. The reduction in rainfall as compared with 2004/05 has also ensured that farmers in karez irrigated areas that are particu-

larly vulnerable to drought can meet the operating costs of running their tubewells (and possibly pay back some of the loans they obtained to install them).

There is also increasing confidence among the legal business community that many of the accumulated unrepaid loans to opium poppy farmers that they had accrued in 2004 and earlier, which remained unpaid in 2005 due to the imposition of the ban, might be repaid in 2006. It is notable that the new Governor of the province and the local authorities are adopting a pragmatic approach to eradication in some parts of Nangarhar in 2006. No doubt they are conscious that destroying the opium poppy crop of those with few alternative legal means of livelihood could provoke a backlash.

The situation is very different in areas that are in close proximity to the commodity and labour markets of Jalalabad, which have traditionally had larger landholdings and better access to irrigation. Households in these areas have not returned to opium poppy cultivation in 2005/06. Instead they have drawn on a variety of different income streams, with an increase in irrigation water in 2004/05, vegetable cultivation expanded and yields increased substantially. Onion, okra, and green bean production generated good returns in 2005, and in the subsequent year attracted traders to purchase crops in advance at the farmgate. The sale of fodder crops to those owning horses in the city and milk to urban consumers has further increased household incomes in areas adjacent to Jalalabad. Daily wage labour opportunities in the construction industry in Jalalabad and in the brick kilns of Surkhrud have also offered farmers an alternative. There have even been reports that some households have relocated to Surkhrud district from more entrenched areas of opium poppy cultivation in Nangarhar in order to take advantage of the agricultural potential of the area.

However, there are also many households that have on the whole refrained from opium poppy cultivation for a second year but who are facing increasing vulnerability as a result. These are typically areas with the potential for double cropping, reasonable-size landholdings and not really remote–areas such as the district of Bati Kot and lower Shinwar. They are in areas in which there is currently little purchasing power to stimulate the move into high-value horticultural crops, and in which access to regional markets is constrained by poor infrastructure and the impact rent-seekers have had on profit margins. Inventories of opium, among all but the rich, are now gone, and other assets including land are being sold. Households in these areas are currently experiencing a very serious downturn in their economy, and there is increasing evidence of families migrating to Pakistan, hostility to the local authorities, and the resumption of small plots of opium (from one to ten biswa) in 2006, where none had existed in 2005.

Experience across the province of Nangarhar over the last two years thus shows quite vividly the diversity in asset ownership, the corresponding diversity in dependency on opium poppy cultivation, and consequently the diversity in coping strategies adopted in response to the imposition of the ban on cultivation. It is important to note that while the amount of cultivation in Nangarhar as a whole is likely to rise in 2005/06 compared with 2004/05, the continuing very low levels of cultivation in the relatively asset-wealthy districts closest to the provincial center will prevent a return to the unprecedented high levels of cultivation in the province seen in 2003/04. This achievement should not be understated. Historically, the kind of dramatic reduction in opium poppy cultivation that was achieved in Nangarhar in the 2004/05 growing season has immediately been followed by an increase of equal order of mag-

nitude in the following year, but this has not happened in the case of Nangarhar in 2005/06.

It is also important to note that it is not just in the Kabul river basin of Nangarhar that there is evidence of increasing agricultural diversification and investments in high-value horticulture. Laghman, Badakhshan, Balkh, and even Farah are showing similar changes in patterns of behaviour. Furthermore, even within the districts in Nangarhar where over the years opium has been more entrenched and where households are more dependent on cultivating opium poppy as a means of livelihood, there is an increasing tendency to reduce, or even shift out of opium poppy cultivation, mainly in areas in close proximity to the district center. Thus an underlying trend is becoming evident in some provinces, whereby a real diversity is beginning to emerge between areas in the "center" where sustainable progress is beginning to be made against opium poppy cultivation, and those on the "periphery" where access to viable legal livelihoods is more problematic, and where a return to opium is seen as essential to meet both basic needs and repay debts.

This is not the full picture however. In the southern region of Afghanistan, especially in Helmand province, the prognosis is bleak. The incidence and level of opium poppy cultivation is likely to increase significantly. Feelings of resentment toward the local authorities, for what is perceived as their failure to deliver on past promises of assistance, are compounded by the view that those in authority are involved in the opium business themselves and moreover are unable to protect the life and property of even those in close proximity to the provincial center. This deterioration in the governance and security situation of the south should not only be seen in terms of the problems that the Government of Afghanistan has in extending its writ in what was traditionally the Taliban "heartland", but it also represents a failure to create a secure environment for economic growth in which rural households can strengthen and diversify their legal livelihoods. It is in just such an environment of uncertainty, poor governance, and lack of rule of law that opium poppy cultivation thrives, and by all accounts it will expand substantially in 2006 in Helmand, reaching a record level. And this is occurring at the same time that many households in Nangarhar continue their abstention from opium poppy cultivation for a second year running. These patterns could not be more different.

VII. POLICY OPTIONS: DIVERSITY IN CIRCUMSTANCES, DIVERSITY IN RESPONSES

Given the diversity of assets and livelihood strategies of Afghan rural households, as well as the diversity in their dependency on opium poppy cultivation as a means of meeting basic needs, a corresponding diversity in policy and operational responses is required. Just as it is recognised that to fulfil development objectives, policies, programs, and projects need to be designed and implemented so as to specifically target the poor (and not allow the resource-wealthy to accrue the lion's share of assistance), it should also be recognised that drug control efforts need to target and tailor their interventions accordingly if they are to achieve sustainable elimination of opium poppy cultivation in Afghanistan.

The Afghanistan National Drug Control Strategy actually acknowledges the diversity among opium poppy cultivating households in its text, and calls for targeting interventions accordingly. There are even calls for targeting the opium crops of the "greedy not the needy" with eradication. Experience prior to and since 2001 certainly highlights the efficacy of such

an approach. Where an opium poppy ban has been enforced across a wide geographic area and with no consideration of whether viable legal livelihood opportunities exist, it has proven unsustainable. From the Taliban prohibition in the 2000/01 growing season to the pattern of "boom and bust" in provincial-level production in Helmand since 2003, significant reductions in opium poppy cultivated have not been maintained into a second year.

The Taliban prohibition actually initiated a chain of events that not only had a dramatic impact on the livelihoods of the rural population and the overall economy but also established the conditions for increasing levels of opium poppy cultivation in subsequent years (see Box 3.3). For example, the Taliban 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. 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.

Box 3.3: The Ban as a Stimulus in Achin District, Nangarhar

In Achin in 2000, a respondent had taken a loan for the equivalent of US$ 448 as an advance payment on five kg of opium. As the respondent did not pay the opium he owed at the time of harvest due to the Taliban ban, this debt was converted into cash in late 2001 at the prevailing price of US$ 480 per kg, resulting in a total debt of US$ 2,400. In preparation for the 2001/2002 harvest season this cash debt was then reconverted into opium at the salaam price of US$160 per kg resulting in a debt of 15 kg of opium to be paid at harvest time. Once again the respondent failed to repay, this time due to drought. His debt was once again converted into cash at the prevailing price of opium of US$ 320 per kg in late 2002. Given that he now owed 15 kg of opium his total debt had increased to the equivalent of US$ 4,800 in cash. In January 2003, this unpaid debt was once again converted into opium at the salaam price of around US$96 resulting in a debt of 50 kg of opium. The respondent did not have sufficient land to produce this much opium even if it had been well irrigated. Finally the jirga intervened and decided that the respondent would give his 8-year-old daughter as payment. This was duly done.

Source: Mansfield (2005b).

For farmers saddled with high levels of accumulated debt, maximising the amount of land they allocated to opium poppy was their only means of raising enough funds for repayment. For those without debt, the high market price of opium following the ban encouraged them to cultivate the crop. At such high prices even those in more marginal areas where poor yields would otherwise have militated against cultivation (when prices had been lower) considered taking up cultivation. The increasing availability of wheat following the end of the drought, the freeing up of both internal and external markets, and the absence of effective governance–all contributed to making opium poppy cultivation an attractive option across many parts of Afghanistan.

Experience has also shown that the political costs incurred by local and provincial leaders in implementing an opium ban have been significant. Promises of development assistance in return for compliance with a ban have rarely been fulfilled, and the kind of development impact required to address the multi-functional role that opium poppy plays in the livelihoods of the households that are most dependent on it cannot be delivered in the short term. With fear of political unrest and the impact it would have on their own future (political, as well as financial where local political leaders are involved in the trade), there has often been little appetite among the political leadership to marginalise communities for a second year running. While we will never be entirely sure whether the Taliban would have been able to maintain a low level of cultivation for a second year in succession, it can certainly be said that the financial and social costs incurred by a large contingent of the rural population in strategic Pashtun provinces did little to bolster their support to the Taliban once the events

of September 11, 2001 unfolded.

In practice, implementation of the more targeted drug control effort outlined in the National Drug Control Strategy has proven illusive. Eradication has typically targeted the "needy", not the "greedy". For example, in some areas access to social and political networks and the finances to bribe officials has ensured that an individual's crop escapes unscathed (see Box 3.4 for an illustration). On occasion the threat of eradication has become a vehicle for extracting money from local communities. There is also a perception that eradication is targeting the poor, and while the true extent of this is unclear, this impression is damaging and remains hard to dispel given that in some areas there is a deeply-held view that local officials (sometimes even those charged with eradication themselves) are cultivating opium poppy on their own land.

While local power structures clearly prevail in areas where the national government has not extended its writ, there are also those in the international drug control community who have not supported a targeted approach to the drug control effort and oppose limiting eradication to areas where farmers have viable legal livelihoods. This opposition is on the principle that all cultivation is illegal and therefore should carry the risk of being destroyed.

Box 3.4: Corruption in Gulistan District, Farah Province

Due to the drought I dug one tubewell. Last year (2005) I cultivated eight jeribs of poppy. The local authorities came to destroy my crop. They said they would destroy it unless I gave them some money. I gave them Afs 20,000 (US$ 400) and they left my crop alone.

Although the thinking is that eradication, or the threat of it, can raise the opportunity costs of opium poppy cultivation, making it too risky an endeavour to pursue, the reality is that eradication can produce quite different results under different circumstances. Where there is access to viable legal livelihoods, the threat of eradication may deter farmers from planting in the first place. When faced with the risk of eradication, a household that has access to viable alternatives will likely choose not to plant opium poppy and forego the potential benefits they could obtain, by instead investing their assets (i.e. land, water, labour, capital) in legal livelihood opportunities.

Eradication does appear to have had some impact on the scale and nature of households' engagement in opium poppy cultivation where certain conditions prevail. For example, reports suggest that in the 2004/05 growing season, eradication in the province of Wardak proved effective in reducing opium poppy cultivation. Agricultural diversification, including the extensive cultivation of high-value fruit and vegetable crops and the limited history of opium poppy cultivation in the area, appears to have meant that the abandonment of what was after all a relatively minor crop in the local context was not such a difficult shift to make (see Mansfield, 2005b, p. 35). As discussed in the previous section, a similar phenomenon seems to have occurred in Nangarhar province in 2006 in areas with better access to legal livelihood opportunities.

However, in general the experience with eradication in Afghanistan since 2001 has been much more equivocal than its strongest advocates would like to admit. Households that have lost their opium crop to eradication on more than one occasion have been found to continue to cultivate opium poppy, even increasing the amount of land dedicated to it in subsequent seasons (see Mansfield, 2005b and 2006). Where a household is highly dependent on

opium poppy and has few or no other legal livelihood opportunities, this makes sense (see Box 3.5). Under these circumstances, eradication may not only not have any impact on the level of opium poppy planting in subsequent years, it may even result in an increased incidence of cultivation– as households seek to recoup the losses (and increased debts) they incurred as a result of their opium crop being destroyed. Households may even build the impact of intermittent bans on opium poppy cultivation into their decisions on how household assets will be allocated, electing to maximise cultivation in years where cultivation is not banned to make up for the "lean" years in which the local authorities feel compelled to enforce a ban.

Perhaps of even greater concern is the impact that poorly implemented eradication can have on the nascent relationship between citizen and state. There are anti-state elements that will no doubt seek to exploit any disaffection that eradication generates. The issuing of night letters by the Taliban, encouraging opium poppy cultivation and offering protection against eradication, in the southern region in the 2005/06 growing season, provides clear evidence of this. A more pronounced eradication campaign that ignores whether households have alternative legal sources of livelihood in place could prove even more destabilising.

Box 3.5: Eradication and Accumulated Debt in Marja Distrtct, Helmand

Mohammed Khan had 13 jeribs of land in the district of Marja but owed Afs 100,000 (US$ 2,000) that he had borrowed to meet household expenses in 2004. He cultivated seven jeribs of land with opium poppy in 2005 but it was all destroyed by the government. His creditor wanted him to repay the loan but he could not. The village Jirga decided that Mohammed Khan should give his eleven-year-old daughter to his creditor as payment in kind. In 2006 Mohammed Khan was cultivating ten jeribs of opium poppy and was convinced that he would resolve his economic problems.

There are those who would dispute claims that a comprehensive elimination effort would result in widespread unrest. They suggest that there is no need to focus eradication only on areas where households have access to legal livelihoods, as development assistance can be targeted to ensure that households which currently do not have viable alternatives to opium poppy cultivation can meet their basic needs. Indeed, Cash For Work is increasingly being seen as an appropriate response to opium poppy elimination (be it through eradication or non-planting) in such areas.

However, typically those that advocate the "eliminate-first-develop-later" model do not recognise that development assistance cannot be delivered in as timely a way as would be desirable; neither government nor bilateral or multilateral agencies have the capacity to respond so quickly, particularly in the insecure environment that prevails in most of the opium growing areas of Afghanistan. Nor do those pushing for quick and dramatic reductions in opium poppy cultivation realise that the farmers who are most dependent on opium production for their livelihood are least likely to be the beneficiaries of the development assistance provided.[15] Not only is the total cash income offered by interventions like Cash for Work insufficient to meet households' basic needs, but these initiatives do not address the other roles that opium poppy plays in the livelihoods of the rural poor, such as providing access to land and credit.

Ultimately, the kinds of interventions that are being designed as a specific response to reductions in opium production do not address the underlying structural and institutional reasons that have led to the growth of opium poppy cultivation in the first place. They do not address the issues of governance and the wider enabling environment that is required for

[15] "The impact of Cash-for-Work programs designed to meet some of the income shortfall experienced as a result of the opium poppy ban has been limited, often failing to reach those who have been made most vulnerable by the ban on opium poppy cultivation." (Mansfield, 2005a, p. iv).

households to move from illegal to legal livelihoods. Consequently, opium poppy cultivation continues to be perceived by many as a low-risk crop in a high-risk environment. Changing this perception requires not just increasing the risks associated with opium poppy cultivation through the threat of eradication and in conjunction papering over the livelihood issue by providing some short-term development assistance. More fundamental changes are required in areas as diverse as the provision of physical and social infrastructure, the promotion of high-value agricultural crops and agri-businesses, the enforcement of anti-corruption measures, and the development of non-farm income opportunities.

Considerable thought also needs to be given to provincial and regional economies. Areas of potential economic growth need to be prioritised rather than spreading efforts too thinly across wide geographical areas and where the development impact is likely to be limited. Much to the chagrin of some, it has to be recognised that there are many geographical areas in Afghanistan that are unlikely to offer viable legal alternatives to opium poppy cultivation given their location, the productive capacity of the land, and current population densities. From both a drug control and development perspective, the proportion of development funding that should be allocated to these areas needs to be carefully considered. This is not to say that these areas or their populations should be ignored, but rather that particular effort should be devoted to establishing the necessary "pull factors" in areas of higher economic potential so as to increase the legal livelihood opportunities for those moving to them from more marginal areas.

Most important, it has to be recognised that there is no substitute for state building and extending the presence of the state and service delivery in areas where there has been little or no direct relationship between the government and rural communities for the best part of two decades, if not longer. Indeed, as experience in the more accessible districts of Nangarhar the 2005/06 season illustrates, where improvements in governance are combined with the development of legal livelihood options, it is possible to sustain reductions in opium poppy cultivation for a second consecutive year. Both drug control and development efforts should learn from this experience and focus and target their efforts accordingly.

VIII. CONCLUSIONS

Given the diversity that exists in rural Afghanistan, it has always seemed rather counter-intuitive to attempt to generate the concept of an idealised "average" farmer on which to base development and drug control efforts. This chapter has sought to bring out the depth of understanding that we now have regarding the contribution different socio-economic groups make to the cultivation of opium poppy and the multiple benefits they derive from their involvement. This knowledge is critical to identifying the entry points for developing an effective strategy for the sustainable elimination of the crop.

It is certainly true that opium poppy growing households come in many different shapes and sizes. Some have considerable assets at their disposal. They own large tracts of (mostly) irrigated land; capital assets such as tractors, vehicles, and livestock; and are located near the main provincial markets. They employ others to work their land, while the landowner himself may engage in trade or politics, or both. The income earned on the numerous crops grown is supplemented with the sale of livestock and dairy products. The social

and political networks they have at their disposal ensures secure employment opportunities for family members, and access to patron-client relationships that may result in them preventing local power brokers, both formal and informal, from acting against their interests. There is little evidence to support any argument that poverty is the determining factor for opium poppy cultivation among this socio-economic group.

The same cannot be said of households at the opposite end of the socio-economic spectrum. For them, limited landholdings or a state of landlessness compounds the pressure that the sheer number of family numbers places on household assets. For this group, typically residing in a remote area far from commodity and labour markets, and with limited physical and social infrastructure, cultivation of opium poppy can facilitate access to on-farm and off-farm income, credit (in cash and in-kind), and–for the landless or those with insufficient land –increase the amount of land available for leasing or sharecropping.

Even with some of the most concentrated levels of opium poppy cultivation, the communities in these areas are typically far from prosperous: food is simple, education and health status poor, and ownership of capital goods limited. Moreover, even with opium poppy cultivation, the majority of households in these areas still need to send family members in search of off-farm and non-farm income opportunities in order to meet their basic needs. With the birth of a new generation of children and the further fragmentation of land that this will imply, the pressure to migrate can only intensify.

Between these two polar extremes there are a multitude of socio-economic groups with differing portfolios of assets and differing degrees of dependency on opium production as a livelihood strategy. The question remains as to what proportion of households can forego the assets that they derive from their engagement in opium poppy cultivation without enduring the kind of hardship that would be unacceptable from both a development and humanitarian perspective, as well as from a political perspective–recognising the potentially destabilising effect of denying a livelihood to a potentially significant proportion of the rural population.

Current estimates of the number of "people involved in opium poppy cultivation" seem rather unrefined. Issues of definition and methodology pervade. The multiplier effect of the opium economy, and the number of households that do not reside in poppy-growing communities but nevertheless engage in weeding and harvesting of the crop, are currently not considered.

Available rural household survey data suggest that three-quarters of households own some land and one-quarter are entirely landless. This is not to say that those that do own land have sufficient land to meet their basic needs–far from it. Indeed, this same survey suggests that in 2003 there were 3.5 million rural Afghans who were extremely poor, 10.5 million who were vulnerable to extreme poverty and the rest, a further 3.5 million, were less poor but nonetheless still vulnerable to poverty (World Bank, 2005, p. ii).

While it is true that many of the poor do not currently cultivate opium poppy on their own land, it is unclear how many of these derive either direct or indirect benefits from the opium economy as a consequence of the off-farm income they earn as itinerant labourers or though the effect on demand of the increase in disposable income generated by the opium

economy. There is certainly evidence in many areas where opium poppy is not cultivated, often due to environmental constraints increasing the opportunity costs of production, of households migrating seasonally to work in areas where opium poppy is grown more intensively. Were a more effective eradication campaign to be pursued this could constitute the shock that might turn those "vulnerable to poverty" into "the extremely poor". These are critical gaps in our knowledge base. They need to be filled in order for both development and drug control policies, programs, and their corresponding budgets to be designed, tailored, and targeted appropriately.

Fundamentally, there is a need to work with the diversity that exists in rural Afghanistan rather than ignore it for the sake of bureaucratic convenience or ideological positions. There is a great deal that we know about opium poppy cultivation and how the motivations and circumstances that influence its cultivation vary by socio-economic group and location. This knowledge needs to be used and built upon in response to both current information gaps and the new ones that will arise with the inevitable further evolution of the opium economy.

Indeed, both Afghanistan and opium poppy cultivation are too dynamic for any complacency. Effective policy and planning requires an evidence base by which to assess the impact of interventions. This is as much the case for development policy and planning as it is for drug control. Given how intrinsically linked the achievement of goals in each of these areas is, there can be no shortcuts. Greater effort needs to be made to define what we know, what we don't know, and what we need to know with regard to the interface between drug control and development efforts in Afghanistan, if the delicate balance between interventions aimed at reducing the scale of illicit drug crop cultivation and those aimed at broader state building and development are not to be undermined.

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Chapter 4

OPIUM TRADING SYSTEMS IN HELMAND AND GHOR PROVINCES

Adam Pain[1]

I. BACKGROUND AND INTRODUCTION

The role and impact of opium production on the livelihoods of landowners, sharecroppers, and migrant labour in Afghanistan is increasingly well understood. Research into the incentives, entry, and exit strategies of rural households in the opium economy is in progress and attention is beginning to be paid to building a better understanding of risk and uncertainty in relation to farmers' decisions and opium poppy cultivation. Through its annual surveys, UNODC has provided information on the spatial and temporal distribution of opium poppy cultivation.

Rather less attention has been given to the functioning of opium markets and trading systems for opium at village, district, and provincial levels. Earlier work by UNDCP (1998) concluded that rather different trade structures were in operation between Nangarhar in the east and Helmand in the south. The latter appeared to have a more open and competitive market. The former was perhaps more vertically integrated. Since 1998 when that study was undertaken, opium prices have been through a dramatic rise and decline,and since 2001 there has been a marked expansion in opium poppy cultivation throughout the country. This has possibly led toward a more national and integrated market. UNODC (2003, p. 59) and the World Bank (2004) have concluded that price behaviour suggests a relatively open and "free" market. The issue of market integration is further explored in Chapter 5 using statistical and econometric techniques. However, persistent regional price differentials indicate that there are some limits to an integrated market. Overall, there is much that is not understood with respect to price formation and how it relates to market structures and actors. Even less is known about the informal institutions that regulate opium trade.

A key gap in the understanding of the opium economy relates to the functioning of opium trading systems and the linkages between markets at village, district, and provincial level. We know little about traders at the local (village and district) level and their linkages to the provincial trade systems. There is little information on numbers or knowledge of how opium trading fits within an overall portfolio of trading, what the conditions and incentives are to move in and out of trading opium, what the competition is, and how linkages and networks are established and maintained. Knowledge about market risks and how they influence trading behaviour, including with respect to the maintenance and deployment of opium stocks, is limited. A particular point of interest is how opium trade networks have been established in areas that have recently moved into opium poppy production–who is trading opium in these places and how have linkages been built with the external market?

This chapter investigates the workings of the opium market in two provinces, Helmand and Ghor. It tries to establish who the traders are, how many there are of them, their characteristics, the history of their engagement in opium trading, and how it fits in their overall portfolio of activities. It investigates trading patterns and volumes, price differentials, and trader strategies in relation to inventory and turnover. Particular attention is

[1] The author is deeply grateful for the assistance of various agencies and individuals who supported him in this fieldwork. For obvious reasons most should remain anonymous, but the support of the various offices, both national and regional, of the United Nations Office on Drugs and Crime in Afghanistan was critical for the success of this study. The critical comments and thoughts of William Byrd, Paul Fishstein, David Mansfield, and colleagues from AREU on an earlier draft of this paper are greatly appreciated. An earlier, shorter version of this paper was published by AREU. The views, findings, interpretations, and conclusions expressed in this chapter are those of the author and should not be attributed to the United Nations Office on Drugs and Crime or to the World Bank, its affiliated institutions, its Executive Board of Directors, or the countries they represent.

devoted to traders' perceptions of market risks and how they respond to these. The chapter also strives to understand how the markets (in terms of location, prices, structures etc.) have changed since 2001 with the fall of the Taliban regime and the establishment of an internationally recognised Kabul-based government, and how this related to planned and actual government action against the opium economy.

The analysis and data contained in this chapter are based on two field trips to Helmand in May-June 2005 and to Ghor in June 2005. Interviews were held with farmers, ex-opium traders, current opium traders, and other key informants. In Helmand a research assistant who was well connected undertook many of the direct interviews working to a set of key questions, with notes written up after the interviews. An extensive process of debriefing was undertaken around these notes. In Ghor direct interviews were undertaken, facilitated largely through personal connections. In addition this chapter has drawn on the wider secondary literature

Terminology is a particularly vexed question in the case of the opium economy. While labels such as illegal or illicit are readily applied, these assume a functioning legal system that is widely regarded by citizens and the state as legitimate. There can be a legal state that is not necessarily recognised as legitimate, and also the converse. Under the Taliban, when the notion of a legal system was problematic, opium traded in an open market and this was seen to be legitimate. Now that there is a *de jure* state in Afghanistan, although its *de facto* capacity might be questioned, the existence of a functioning legal system is still a matter for debate. It must be accepted that legitimacy is still contested in Afghanistan, and that given the particularities of the opium trade– its trade in the past in an open market within Afghanistan, and the existence of legal trade and production of opiates (for medicinal purposes) elsewhere in the world, including in the west– there is a certain subjectivity to these descriptive labels. For the purposes of this chapter, opium production and trade during the Taliban times is described as "open" and post-2001 as "illegal".

The research was carried out at a time of considerable contention over the legitimacy of the opium market. Particularly in Helmand, there was conflict between key opponents of the Kabul Government and its allies, resulting for example in the murder in the province of five staff members of an international contracting firm working for USAID. Earlier actions by the provincial government, which as we shall see also includes key actors in the opium economy, led to a degree of crop eradication. More specifically, action by interdiction forces from Kabul during late May and June of 2005 led to the seizure of quantities of opium and its burning–4.7 tons being burned in Lashkar-Gah on June 4 in the presence of the Provincial Governor–and the arrest of various traders in the city and districts. Conditions in Ghor were easier, although considerable circumspection also was required.

Under such conditions, research had to proceed with extreme caution and indirectly, using local connections and their existing personal relations to gain access to informants. Even with these contacts, discussion and questions often had to be of a general and more indirect nature rather than specific, gradually building up a picture of detail where opportunities allowed. However in some cases, particularly in Ghor, detailed and frank discussion was possible. A total of thirty-nine individual or group interviews were undertaken, and summary details of these are included in the two sections of this chapter on the individual provinces.

The chapter has also attempted to build a quantitative picture alongside the more important process and qualitative story. However, the numbers presented here must be taken as approximate and indicative rather than authoritative. In a sense, these numbers are more about building an argument rather than establishing facts, and they are put forward to be challenged and questioned. In any study of an illegal economy, numbers and facts need to be treated with great caution since there is every incentive for informants to be "economical with the truth". In particular, under circumstances where the opium economy is in a state of considerable flux, district and provincial understandings are rapidly shifting, and the story for this year may be different from the story for last year or next year.

This chapter first describes the context of the study before going on to explore key issues of opium production and trading, the identity and role of traders, their trading networks and market risks, and some of the institutional dimensions of the opium economy. Two subsequent sections, one for each province, provide a more detailed analysis of the fieldwork and findings on which this study is based. There is inevitably some degree of duplication between these provincial sections and the earlier section on main findings. The chapter concludes with a discussion of some of the potential implications that might be drawn.

II. MAIN FINDINGS AND THEMES

Provincial Contexts

Helmand is essentially an economy of arid plains structured around a major valley irrigation system. The often controversial history of the Helmand-Arghandab irrigation system-since the 1950s, with substantial American investment and as a beacon of an agenda of modernisation of the Afghan state, has been well commented on by Cullather (2002). A combination of a difficult technical history (most notably in relation to issues of salination), a classic state agenda of re-settlement of primarily Pushtun people from the east (many from Nangarhar province), and a centralised irrigation authority with an engineering attitude toward water management and modernisation– and as Scott (2001) would have it of putting order into an unruly rural landscape–meant that the dreams of what the Helmand valley system might achieve have had a long history of disappointment. The irony is of course that this scheme, which was designed to be the generator of an agricultural export market based around cotton, has become so, but around the wrong crop (opium).

Irrespective of the cropping pattern, the river and its associated irrigation structures are the defining feature of the landscape, with a green ribbon of agricultural lands and dense settlements clustered along the river's length, which runs mainly northeast to southwest through Helmand before exiting into Nimroz Province. As one moves down the length of the river, the borders and extent of irrigation gradually narrow down to the immediate river border. During the drought of the late 1990s, water supplies were very limited in the southern reaches of the river. Outside the river valley, the area south of Lashkar Gah is essentially desert, classified under the FAO land use system as barren and stony ground. To the north and on higher altitude lands on the edges of the western reaches of the Hindu Kush, small villages located around *karez* irrigation systems (traditional gravity-driven underground canals), very limited amounts of rainfed land, and livestock production systems can be found.

Overlaying the dualistic agricultural economy of a central grain surplus river cultivation system and a northern periphery of grain deficit small-scale karez-based village economies are two important aspects of social identity. The first is the geography and spatial distribution of Pushtun tribal identity that constitute an important aspect of social networks and power structures. The second is more one of economic class, with major differences in land ownership including a landlord class with substantial land holdings and a multitude of households with limited or no land who exist in sharecropping arrangements with the major land holders. The playing out of these economic and social relations has been exemplified by the relative returns to opium poppy cultivation each class accrues.[2]

In addition, the importance of the location of Helmand, as a border economy within Afghanistan and with a long history of smuggling and trade to Pakistan and Iran, must be recognized. Its location inevitably places Helmand in a position of comparative advantage with respect to trade in illegal commodities given the proximity of the border and the fact that the borderlands on both sides have limited state presence.

Ghor displays classic features of a remote mountain economy. Notably it is surrounded to the west (Herat), north (Mazar), and south (Helmand) by irrigated plain economies and centers of demand and consumption. The province is remote and poorly served by infrastructure, with road access to the provincial capital (Chaghcharan) being at least a two-day journey from Herat and nearly three days from Kabul through Hazarajat. Only since 2001 has access to Chaghcharan along the Hari Rud river been possible with the construction of a bridge at Dar-i-taq. In winter the central high plains and provincial center are cut off by snow for between four and six months. However, within this generalised picture certain districts in the west and south of Ghor (e.g. Tulaq, Taywara, and western Sharak), with lower altitudes, have year-round access to Herat and Helmand provinces. Although it is a province through which many of the major northern rivers feeding the neighbouring plain economies flow (the Murgab, Hari Rud, and Farah Rud rivers), Ghor obtains rather limited benefits from these water sources on account of steep V-shaped valleys with limited flat irrigable lands on the river edges. Settlement tends to be highly dispersed and opportunistic around localised small-scale water sources, rather than densely settled along river basins.

Ghor is largely a rainfed-based seasonal economy from which surplus is extracted. This is well illustrated by the seasonal movement into Ghor during the summer months by Kuchis (nomads) from the surrounding plain provinces, who not only own the bulk of the provincial livestock population but also appear to control access to large areas of the natural pasture as well. Key natural products–such as livestock, walnuts, dried apricots, *qorut* (dried yoghurt), *kurk* (fine wool from the ear of the goat), and black cumin (gathered from common lands)– have traditionally been exported, along with rainfed grain in good years. Historically the major traders at the district centers were outsiders. Outside traders from Helmand, Kandahar, and Kabul largely controlled the export livestock trade and dealt directly with the Kuchis in their key seasonal markets around Chaghcharan.

Seasonality–in terms of both physical access and productive activity–is a defining feature of Ghor's economy. The summer months can best be defined as a period of intense household activity in preparation for winter hibernation. At the higher altitudes much of the crop is spring planted, and there are careful calculations about the division of irrigated land between wheat and fodder to provide for the winter survival of households and livestock.

[2] For more details see Mansfield (2002).

Household livestock numbers are critically constrained by availability of winter fodder. Collection of fuel and fodder during the summer is a major activity, requiring two to three months of labour. These are combined with transhumance and the seasonal movement of livestock out of villages to higher summer settlements.[3] The significantly higher price of wheat in Ghor (estimated to be at least 30% higher than in Herat) and the difficulties of winter access play a critical role in the calculus of decisions on opium planting in relation to the risks of failing to achieve food security for the winter period.

Ghor has also historically been a labour reserve. With a highly seasonal economy, and significant areas of grain deficit during years when the rainfed component of production failed, movement of male labour out of Ghor during the winter period has been a major component of livelihood strategies, dating back several decades but of variable importance according to location. Movement is thus a key feature of the landscape and economy: the spring movement into the province of Kuchis from various points of the compass around Ghor for high-altitude summer grazing and their departure in the autumn for low altitudes in the winter period; the seasonal movement of local labour out in the autumn and its return in the spring; and the seasonal export of natural resource products. All of these dimensions have contributed to making Ghor one of the poorer provinces of Afghanistan, a fact borne out by the NRVA data.

Opium Production and Potential Trading Volumes in Helmand and Ghor

Table 4.1 situates the relative position of the two provinces in the estimates of national opium poppy cultivation area. The data demonstrate the historical and absolute importance of opium poppy cultivation in Helmand in contrast to the insignificant and recent contribution of Ghor. The trends are discussed in more detail below.

Table 4.1: Contribution of Helmand and Ghor to Afghanistan's Opium Poppy Area (% of total)

Source: UNODC (2004).

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005*
Helmand	55	44	50	47	48	52	0	40	19	22	25.5
Ghor	0	0	0	0	0	0	0	2.9	4.7	3.8	2.6
Total National Area (000 ha)	54	57	58	64	91	82	8	74	80	131	104

* Based on UNODC "Opium Situation in Afghanistan as of 29 August 2005".

[3] The Kuchi and transhumant Ghor people can easily be distinguished on the basis of their tents; the classic Kuchi tents contrast strongly with the rectangular black tents of the Ghor people which often have a wall base of perpendicular willow twigs matted together.

Opium poppy cultivation in Helmand dates back to well before the 1950s and the creation of the Helmand-Arghandab Valley Authority (HAVA). Traders used to come on camels from Pakistan and Iran to buy opium after the harvest. With the development of HAVA and the expansion of irrigation, the government prohibited cultivation of opium poppy, and it largely died out in the main irrigated areas,[4] although it persisted in the northern districts of the province (Baghran and Kajaki). However, by 1992 with the fall of the Najibullah Government, the prices of inputs rose rapidly (these had been heavily subsidised),[5] market networks began to deteriorate, maintenance of the irrigation system declined, and water shortages began to worsen. These provided considerable push factors to move back into substantial opium production as one of the only ways to access agricultural inputs (see Mansfield, 2002). In addition, with the collapse of the Najibullah government in 1992 there was a sharp decline in the demand for guns on which a thriving smuggling operation from Pakistan had been based. For gun smugglers the opium market was the market of choice to move into. Combined with the need for revenue by local commanders, conditions were ripe for the expansion of opium poppy cultivation.

Since 1995, the year after official surveys by UNDCP started,[6] the opium poppy area in the province has fluctuated around 30,000 ha, with a drop in 2003 due to action by provincial authorities. The modest decline in the estimated area of opium poppy cultivation in Helmand in the 2004/05 season, coupled with a very sharp drop in Nangarhar's poppy area and a substantial decline in Badakhshan, mean that Helmand is firmly holding onto its position as the biggest opium cultivating and producing province in Afghanistan. The gap between it and the other major opium producing provinces is possibly widening due to the decline in their cultivated area.

A key part of this study is an attempt to establish indicative numbers relating opium production to volumes of trade, numbers of traders, and in turn to market structures, changes in opium stocks, and so forth. A starting point is the production side, and in this regard it should be noted that greater certainty can be attached to the area statistics at provincial level than to the production statistics. Statistics for area have been determined on a provincial basis, although the method by which this has been done has varied over the years. On the other hand, estimates of yields and therefore of opium production levels have been made on a regional basis, and the means by which this has been done also has varied over the years. Helmand has been included in the Southern region that also contains Uruzgan, Kandahar, Zabul, Ghazni, and Paktika.

On the basis of UNODC estimated yields of dry opium[7] of around 30 kg per ha, annual production of opium has hovered around 1,000 tons, with a low of 650 tons in 2003 and a high of 1,300 tons in 2002.

In contrast, opium cultivation in Ghor is much more recent, establishing itself within the last three years, largely fuelled by a two-way exchange of skills: from the experience of labour from Ghor working in the Helmand's opium poppy fields (see UNDCP, 1999) and in Chaghcharan and Sharak from Kandahari and Nangarhari people renting or sharecropping land for opium cultivation (see Mansfield, 2004). This provided Ghor with skills and seed and some knowledge of the market. However, the limited significance of the crop in Ghor should be noted. Starting according to UNODC survey records in 2002 (although there are informal reports that it was cultivated earlier than this), with an estimated area of 2,200 ha (7% of the

4 This is a point that is returned to in the conclusions
5 The canal irrigated areas of Helmand are nutrient-poor and require high inputs of fertiliser–see Shairzai et al (1975, p. 108).
6 The results from the first year of the UNDCP surveys (1994) are generally not considered to be reliable.
7 Wet opium can be up to 40% heavier than dry opium.

wheat area), opium poppy cultivation increased to 4,983 ha in 2004, largely through expansion into rain-fed areas, before falling significantly in 2005, according to all reports because of widespread crop failure in 2004 (and possibly also in 2003). Cultivation in 2005 has come to be more concentrated in the lower-lying valleys where there is secure irrigation, but it remains fairly dispersed. Although Ghor farmers have done much of the cultivation, Helmandi cultivators are also coming to Ghor and working on a sharecropping or tenancy basis. Using an estimated yield figure of 25-30 kg per ha, an indicative range of opium production might be from 55 to 65 tons in 2002 to 125 to 150 tons in 2004. If area has declined by as much as 50% in the 2004/05 season as many observers have reported, then production may well be back at the 2002 levels.

However, for both provinces the traded volume of opium is substantially larger than provincial production. By virtue of Helmand's historical and geographical position (as a major producer and having a border with Pakistan and through there a route to Iran), it is also the major conduit for opium trade from other provinces. Interviews with the opium traders confirmed that, as they put it, "they traded with other provinces." Assessing the level of these flows of opium traded into Helmand takes us to the realm of "guesstimates", and we should be aware of substantial temporal fluctuations in trading conditions that regulate opium flows. From discussions with key UNODC officials and others, estimates have been made of possible levels of opium poppy flows from other provinces into Helmand (see Section III for specifics). These indicate a potential total flow of opium from the production of other provinces through Helmand trading systems on the order of around 1,000 tons per year (based on 2004 figures of area and yield). Hence the potential total volume of opium traded in Helmand during 2004 would be in the range of 2,000 tons, which amounts to just under half of Afghanistan's estimated total opium production in that year.

In the case of Ghor, it is evident that there has been a transit trade operation that predates opium poppy production within the province. It appears to have started around 1998, for dealing with opium produced in the northern provinces of Balkh and Badakhshan. On the basis of the number of Ghor opium traders and the number of trading trips that they reported making, an indicative figure for the transit trade might range from 60 to 150 tons of opium per year. If we take into account the estimates provided by one trader of the relative importance of the transit trade to Ghor production, and take a low figure of 55 tons of opium production in Ghor in 2002, this would indicate a transit trade of about 220 tons, some 25% higher than that based on the trader activity estimates.

If we then look at the supply side and take the area statistics for 2003 for the northern provinces but exclude Badghis (the production of which by all accounts was directly traded to Herat), and Bamiyan, then the northern region cultivated a total area of about 5,000 ha of opium poppy in 2003 (UNODC, 2004, p. 115, Annex 2). On the basis of an average opium yield of 35 kg/ha, this gives a northern production figure of around 175 tons.

According to these calculations and assumptions, we derive a rough estimate for the size of the transit trade in Ghor that is of the same order of magnitude ranging between 100 and 200 tons annually. There is little point in seeking greater precision than this given annual fluctuations in production and the changing conditions under which the market operates. Much would depend on the contribution of Badakhshan production and the trading routes that it finds, as well as alternative routes for trade for northern production. There are indi-

cations for example that possibilities for trading of opium into Tajikistan have now become greater after the replacement of Russian border guards with Tajiks on the Tajikistan border, and that some 30-50% of Badakhshan's production may now flow through this route. However, there are many who would argue that even when Russian troops guarded the border, it was fairly permeable to opium flows.

A final point of comparison needs to be made between the two provinces. There appear to be no processing facilities for opium in Ghor. On the other hand, laboratories for producing morphine base have been identified and destroyed in Helmand, indicating that processing plays a critical role in the Helmand trading systems. Depending on the existence of processing facilities in other provinces, this may remain a strong incentive to pull trade through Helmand.

How Many Opium Traders are There and Who are They?

First there is an issue of what defines an opium trader. It was clear from Helmand that when the opium poppy market was open and legitimate, many were involved in opportunistic trading, even if on a very small scale. This included farmers and government servants. Many might be engaged on a limited seasonal basis during the main period of production. While there is little point in pursuing an exact definition, interpretations of what constitutes an opium trader clearly vary and certainly contribute to the wide variation in estimates of how many traders there are. All informants agreed that the number of people engaged in the trade has certainly increased since the Taliban times, largely as a result of the increase in prices during the 2001-2004 period. However, it is likely that these have mainly been entrants at the bottom end of the market, trading opportunistically and quickly with small amounts.

There is also a question of knowledge and numbers. In contrast to Ghor where there are far fewer opium traders and it is likely that most of the opium traders know of each other, in Helmand there are so many opium traders that the estimates of numbers are likely to be more speculative and based on hearsay, particularly in the case of estimates by smaller traders. It was often not clear, for example, how much smaller traders in Musa Qala knew of trading in Kajaki in Helmand, although UNDCP (1998) found that there were cross-district networks, and that small traders would work for relatives on a commission basis. Larger traders on the other hand possibly had a clearer picture at the district and provincial level and of their immediate competitors or trading partners, but it is a moot point as to how accurate the estimates that they provided would be.

For Helmand, estimates of trader numbers therefore varied considerably according to source (see Table 4.5), with provincial totals ranging from 600 to 6,000 (a huge difference), and with variable distribution in terms of the breakdown between district and provincial centers and the balance between small, medium,[8] and large traders, the definitions of which are discussed below. For the purposes of this chapter, we will work with an indicative range of between 1,000 to 1,500 small traders and 300 to 500 bigger traders.

[8] Mainly informants distinguished between small and large traders; it was informants in Lashkar Gar who identified a medium size group.

In the case of Ghor, three categories of traders need to be delineated. First there are the Helmandi[9] traders numbering from 10 to 20, who were responsible for establishing the transit trade back in 1998 and who until this year have appeared on a seasonal basis. Second there are their Ghor agents, about 20 to 30 of them, who have played a key role in building the linkages between the traders from northern Afghanistan and the Helmandi traders. Third there are the small Ghor opium traders, called here the "motorbike traders" on account of their means of transport between dispersed areas of production, who have been dealing primarily with trade in provincial production. There are more of this third category, possibly 100 to 150 of them in Chaghcharan district which has the largest reported area of opium poppy cultivation in the province (30% of the total in 2003).[10]

What defines a small, medium, or large trader? Essentially, definitions revolve around the volume of opium traded, the seasonality of the trade, the geographical extent of the trade, and associated with this the risks that different traders can carry in line with their capital base and access to credit. Here there was considerable consistency across informants in Helmand. Small traders were essentially defined as part-time traders on a seasonal basis, dealing perhaps with 10 to 15 kg per month (2-3 mauns) during the main trading months (June to September), and possibly half that amount for another six months of the year. They were either small shopkeepers selling cloth or essential commodities or government servants. Medium-sized traders also tended to be largely seasonal traders, dealing with larger amounts of opium poppy (50 to 100 kg per month) and involved more in selling imported goods such as motorbikes. Most of the informants, however, did not identify a medium-sized category, possibly indicating that their location was mainly restricted to the provincial center. Many of the large traders dealt primarily in opium (and were reported to have accountants to manage their finances), and their ownership of assets was considerable (they were characteristically large land owners both by origin and as a result of having invested opium profits in land). Most were talked of in terms of having several houses, luxurious cars, and cash. Some were also dealers in motorbikes and imported cars. It also appears to be the case that many of them have gone on Hajj.

The defining feature of the Ghor transit traders was their earlier role as livestock traders, and it was the collapse of this trade with the drought that may well have driven them into the opium trade. In the case of the motorbike traders, these were sometimes small livestock dealers, shopkeepers, or small landowners. It must be remembered though that all opium trade in Ghor is highly seasonal, and therefore it is likely that all Ghor traders have a diversified portfolio of activities. None appeared to have accumulated assets at anywhere near the scale of the large Helmandi traders.

What is worth drawing attention to in Ghor is the different sets of actors who have contributed to the development of opium production and trade in the province. Both Ghor and Helmandi farmers, possibly driven by incentives provided by Helmandi traders, have clearly been instrumental in establishing opium production in Ghor. The extent to which credit provision contributed to this is unknown. The trade systems have also involved both Ghor and Helmandi traders, although in this case it would appear that the Helmandi traders have played the key role. There is also a link between the transit trade through Ghor and the development of provincial production, although the latter clearly followed after the former. Given the context of Ghor, it would clearly be unwise to ascribe any one single factor as the main cause of the spread of opium poppy cultivation.

[9] Although the term "Qandahari" is also used and may be more of a generic term referring to Pushtuns from the southern provinces of Zabul, Qandahar, Helmand, and Nimroz (David Mansfield, personal communication).
[10] Estimates of the number of smaller traders in the western and southern districts of Ghor are not available; for Tulak district which had about 2% of the provincial opium poppy area in 2003, there were reportedly three main traders.

Opium Traders and Trading Volumes

The volume of opium handled by any trader largely reflects his capital base, capacity to handle risk, and the reach of his trade networks. Table 4.2 summarises these aspects by type of trader and province.

The seasonal dimension to opium trade should be emphasised. The key period of selling from the farm gate is during the months of production–from May probably through to July in Helmand and from July to September in Ghor. However, it is clear from interviews with farmers and small traders that there are farmers who keep back small stocks of 2-10 kg as reserves that are slowly traded throughout the year in small amounts according to need, but these are likely to be a minority of farmers. Most cultivators of opium poppy are likely to sell either prior to or at harvest time (Mansfield, 2006). Farmers in Helmand who hold stock reported that reserves had been built up over several years, but Ghor farmers stated that they sold everything at harvest. Small traders are less likely to keep much stock, particularly under current conditions in Helmand when all reported that they were being particularly targeted by the police. In part the use by big traders of commission agents and brokers is necessitated by supply drying up after the main trading period and having to search for opium to purchase (UNDCP, 1998). The lowest period of trade in Helmand on the previous year's harvest is from December to April; no trade in opium would be expected during the winter months in Ghor.

Table 4.2: Estimates of Annual Opium Traded (tons) by Trader Category (2004)

	Peak monthly trade per trader (tons)	Annual Trade per trader (tons)	Number of traders	Total Annual Estimated Trade (tons)	Traded volumea (tons) estimated from production
A. Helmand					
Small Traders	0.01 - 0.015	0.1 - 0.2	1000 -1500	100 - 300b	1000 - 2000
B. Ghor					
Transit traders	1.5 - 2	5.0	20 - 30	60 - 150	175 - 200
Motorbike traders	0.030 - 0.065	0.1 - 0.2	100 - 150	20 - 30c	125 - 150d

[a] This combines estimates of provincial production and transit trade
[b] This will be traded to bigger traders within the province
[c] note this relates to trade in Chaghcharan district only, possibly 30% of the trade of district production
[d] This figure is for opium poppy production in the whole of Ghor

Using the larger estimates of the number of small traders for Helmand (1,000-1,500) and assuming that for the whole year they each might trade 100-200 kg, the total amount of opium that these small traders might deal in ranges from 100 to 300 tons in total, all of which would be traded on to the bigger opium traders.[11] This constitutes 10-30% of an indicative Helmand annual production of opium of 1,000 tons. On the basis of these figures alone it can be suggested that the bigger traders are directly dealing with farmers for the bulk of the Helmand's opium production. This conclusion is borne out from a number of sources (see Section III for a detailed discussion).

[11] Leading to an element of double counting on the provincial level figures.

Direct estimates of opium traded by the larger traders in Helmand varied considerably, but during the main season might range from 450 kg per month upwards, with total annual trading volumes of 1,750-2,000 kg at least. A significant number of the larger traders are dealing in more than this, and note is made in a UNDCP (1998) report of one trader purchasing 20 metric tons in a year. If we assume around 300-500 big traders purchasing between 2-5 tons each, this implies an annual purchase of between 600 and 2,500 tons, consistent with the estimates of the range of opium traded in Helmand from both provincial production and opium brought from other provinces.

In Ghor, the opium trade as noted earlier is almost entirely seasonal. The transit traders are likely to be handling somewhere between 60 and 150 tons in total. It is possible that a number of Helmand traders who set up their networks with northern Ghor have been trading independently of them, but no estimates are available. We also have estimates for the motorbike traders who handle the provincial production, relating just to the Chaghcharan output which may be about one-third of the overall provincial production. Within the margins of error of these figures, the estimates of trade are not inconsistent with estimates derived from production.

Trading Stock. Ghor is characterised by an apparent absence of significant stocks, although there may be temporary holding of stocks when security conditions (or threat of government action) make transporting opium particularly risky. While a few traders do have stocks, these largely relate to opium bought at high prices in 2001/02 which they are unwilling to sell until there is some recovery in prices. They do not appear to be maintaining stocks to respond to market demand.

However, larger traders in Helmand do keep stocks to respond to orders and demand given the seasonality of production. From all accounts, the sale of opium out of Helmand takes place throughout the year and as discussed below, happens episodically and quickly. Various sources suggested that perhaps 40% of the annual purchase would be kept as stock for trading during the year before the next harvest, and also to be able to respond opportunistically to short-term price rises. However, it was also reported that the age of stocks goes back further than this. There has been an accumulation of stock from the years of high prices, which are being held in the hope that prices will recover from current lower levels. One source estimated that possibly about 10% of a trader's purchase for each year from 2000 to 2002 was being held, with perhaps 20% of 2003 and 2004 purchases also held as reserve. This indicates possible stock for a trader purchasing two metric tons per year of at least a ton of opium built up over a four to five year period. This is consistent with various newspaper reports.[12]

The reasons for holding stock and the quantity of inventory held are variable and related to context. For some, as in the case of farmers and possibly smaller traders, it is possibly the best way to hold financial reserves, which in small quantities are unlikely to attract adverse attention. For bigger traders the holding of stock is necessary to be able to respond to periodic demand (and uncertainty over supply) and capitalise on price fluctuations. For some traders there are also opium holdings which reflect being caught out by downward price shifts but being able to avoid distress sales. However, specifics on inventory management and how this has responded to greater risks of seizure remain largely unknown.

[12] See for example Tom Coghlan, "Meeting an Afghan Drugs Smuggler". http://news.bbc.co.uk/1/hi/world/south_asia/4522957.stm May 18-05.

Trade Routes. Almost all opium traded from central Ghor is moved down to Helmand. Some of the production from southwestern Ghor, however, is likely to be traded to Herat province, either through Shindand or directly, although the quantities are unknown. Prior to 2003, most of the opium seems to have been taken by the main road to Herat and then south to Helmand in large convoys of land cruisers. Now it would appear that it is taken in smaller amounts and through the back routes of the hills into northern Helmand due to the risk of seizure on the main routes to Herat.

Little is known about the demand side and how Helmand-based traders link with external actors. UNDCP (1998) reported outsiders coming to Helmand from Pakistan, Iran, and even Central Asia and visiting the various opium bazaars to purchase opium. Many informants reported continued visits by what are now termed "smugglers", although these are mainly people from Pakistan who come in disguise to known Lashkar Gah traders. Many informants also made reference to the trafficking routes to trade points close to the Pakistan or Iran border reached through either Helmand or Farah. Opium trade flowed when travel routes were seen to be relatively open, and at such times market prices for opium rose. However, when transit routes were seen to be under threat or being monitored, prices in Helmand fell. Some traders reported combining together to transport opium down to the border posts.

Trading Networks

The evolution of the Ghor transit trade offers a particularly interesting insight into the formation and development of opium trading networks. It seems as if the Helmandi traders who came in 1998 were largely principals in their own right rather than acting as agents for principals based in Helmand. They appear to have sought out connections with key Ghor traders who had well-established provincial linkages developed through the livestock trade. Almost all of the Ghor opium traders who were interviewed previously had been livestock traders.

What the Helmandi traders were interested in was gaining access to the opium produced in the northern provinces of Balkh and reportedly Badakhshan, at least in the early years. The chief obstacle that they faced was that they did not have the networks within Ghor to establish trading routes,[13] and this was primarily related to networks that would guarantee security and protection rather than the need to establish a point of supply and purchase. Ghor-based traders were thus recruited to provide that linkage to the northern parts of Chaghcharan District, particularly the regions of Murqab and Charsadah.

While the Helmandi traders worked hard to build connections with Ghor traders in order to establish the transit trade, it would appear that they remained very much in control of the trade. The one reported case of a Ghor trader who had prospered in the opium trade had been accomplished entirely out of provincial production and not through the transit trade. But this was very much an exception.

Although the Helmandi traders needed the Ghor traders up to a point, the ability of Ghor traders to operate in the opium markets in Helmand and elsewhere was dependent on connections with the Helmandi traders. The Helmandi traders were not beyond dropping their Ghor connections once they had made the necessary trading linkages with bigger part-

[13] It should be noted that the Helmandi traders were Pushtun while the population of Ghor is largely Tajik; the nomadic Pusthun population (Kuchis) do not appear to have been seen to provide a basis for building networks to the north.

ners. Where partnerships were established, the Ghor traders were very much the junior partners, not least because of their limited capital. One informant had been able to build up sufficient capital to trade in partnership, but many of the intermediaries in the transit trade operated on short-term contracts, with the Helmandi traders advancing capital for purchase for delivery within a six to ten day period. Their margin depended on being able to purchase stock relatively quickly and at lower than the contract price and then being able to deliver it. One informant recalled that on one occasion he had lost nearly Afs 300,000 on a contract for 400 kg of opium because he had not been able to deliver quickly enough to the market and the price had dropped (similar reports can be found in UNDCP, 1998, p. 19).

The smaller motorbike traders preferred to work on a commission basis– while it provided a lower return, working on their own account for profit was less certain. The bigger Ghor traders made reference to the fact that even if they did trade on their own account and sold on to Helmandi traders in Chaghcharan, while profits could be made (one informant recounted two trading events which he had done without contract which netted him in one case a profit of Afs 300,000 and in another Afs 200,000), there were also major risks of losing money (see the subsequent discussion on risks associated with price fluctuations).

The Helmandi networks are clearly extensive and pervasive. Family networks link Nangarhar and Helmand, reflecting the Nangarhar origins of many in Helmand.[14] Earlier, opium trade across provinces had operated apparently in a way not dissimilar from the *hawala*, and within the province on credit and reputation. It was reported that the trade has now shifted entirely to cash transactions only, across provinces and within provinces as well, indicative of the increased risks of trading. Personal networks seem to have closed in to trusted network members, with communication being largely undertaken through satellite phone connections. This shift may point to the existence of more local and regional markets than a national or "free" market.

The Opium Value Chain

Obtaining data on trading margins at different points of the value chain is difficult enough at the best of times; in relation to an illegal crop it is even more difficult the further one moves up the value chain. It was not possible to follow through in detail, for example, the margins over the farm-gate price that producers received in northern Afghanistan, through the various intermediaries across Ghor, and from there to Helmand and the final sale point to foreign buyers. Details on costs of transportation including the necessary payoffs to ensure security of transport are unknown. The information was so fragmentary and incomplete that a narrative account is probably the best way to report it.

For Ghor farmers, June 2005 purchase prices in Tulaq were quoted at between $60 to 80 per kg for wet opium[15] (this contrasts with May farm-gate prices of $138 per kg for dry opium in Helmand). A Tulaq trader would sell on in Shindand for about $90 to $100 per kg, making a margin of 12-50% depending on prices and market conditions. According to Tulaq informants, Shindand traders would then be able to sell for about $200 per kg at the border, a mark-up of 100%, although account has to be taken of the possible drying out of opium at this stage. Tulaq traders regarded this mark-up as acceptable; they saw it as easy to get the opium to Shindand but argued that there were much higher risks in getting the opium to and over the border, and that good connections were needed.

[14] This may represent a shift from 1998, when farmgate traders appeared not to work across regions, and in particular Nangarhari traders did not want to buy poor quality (moist) opium from the south since it made poor quality heroin (David Mansfield, personal communication).
[15] Wet opium in Ghor is likely to have a water content of less than 40% given the dry conditions.

The margins on the transit trade through Ghor are very unclear, but it appears that opium passes through multiple intermediaries. The farmer in the north would have sold to a small trader who sold on to a trader in Mazar. The latter might have transported it to northern Ghor and traded it there with a Ghor transit trader, who in turn might have sold it to a Helmandi trader in Chaghcharan. There would have been transport and protection costs at each stage. One informant suggested that there was a price difference between Chaghcharan and Mazar[16] of about $60 per kg, but that it depended on the Helmand and Iran prices. The costs of transportation would have to take into account the costs of securing protection through Ghor. Earlier there seems to have been a 10% "tax" on all opium in transit through Ghor charged by the provincial authorities – in one year a former governor was estimated to have accumulated two tons of opium through taxation. Now it is possible that protection is even more expensive. There may well be additional payments at the district level. The margins for the Ghor traders clearly fluctuated a great deal.

In Helmand, information on differences between the farm-gate price and the small trader price is regularly collected by UNODC; the May 2005 prices of US$150 per kg dry opium at the farm-gate and a margin of about $5-6 per kg for the small trader are consistent with field-level information, although prices may have dropped subsequently. Margins and costs beyond this point, e.g. for the larger traders, were almost impossible to collect; however, one large district trader suggested a margin of about 100% between purchase and trading at the border with outside buyers.

Trading Risks

Given the conditions of insecurity in Helmand at the time of fieldwork, it was much easier to discuss in detail how traders perceived risk in the opium market in Ghor. Taking into account the comments from all informants, four areas of risk were identified-risks in relation to price, risk of theft, risk of seizure by government authorities, and risks associated with adulteration of the product.[17]

Risks associated with price fluctuations. In all cases price was seen as the greatest source of risk by Ghor traders. One informant estimated that in five out of ten transactions he would either break even or lose money. A second informant agreed with this and noted that in 2004 a number of Ghor traders lost all their capital. A third informant (also a large trader) emphasized that market risks were the greatest ones that they had faced until recently, estimating that in 40% of his transactions he had either broken even or lost money.

This persistent story of price fluctuations as the greatest source of risk to opium traders is borne out by available information on opium prices. In addition to the UNODC price statistics which show significant volatility of prices on a month-to-month basis (see Chapter 5), informants reported that there are short-term (within 24 hours) fluctuations in prices that may be on the order of 20-30%. This does not appear to be just a case of the Helmandi traders who control the transit trade using a monopoly position in Chaghcharan to manipulate the market, although there may be an element of such practice.

[16] However, prices from Balkh are known to be low due to the high water content of the opium.
[17] The evidence reported here is consistent with that reported by UNDCP (1998).

What appears to be driving these substantial short-term price fluctuations is that when it is known that outside buyers (from Iran or Pakistan), who tend to come in quickly and buy large quantities, are in the market, the market price quickly rises. No doubt some collusion on the part of key traders holding stocks is taking place (an aspect of the informal regulation of the market), but once the buyers have satisfied their demand, the price quickly drops again, sometimes apparently in a matter of hours. This price behaviour does not appear to be confined just to the opium market. It has also been reported in the case of the raisin market (Lister and Brown, 2004), and by the Dar-I-tak traders in Herat for the *kurk* (fine wool) markets as well, who noted that it is primarily associated with commodities for export.

This degree of price fluctuation is regarded as acceptable, however. One informant regarded the opium market as much more open than the currency market with which he compared it, arguing that there was much greater competition in the opium market.[18] Compounding the potential risk of losses in the market is the apparent behaviour on the part of many traders to venture substantial proportions of their liquid capital in a single transaction in the hope of large profits, but at the risk of exposing themselves to considerable losses. This speculative behaviour seems to be widespread and is consistent with an attitude of "high risk but high profit".

Risks associated with theft and seizure. Price is not the only risk faced by opium traders, whether it be Ghor or Helmandi traders. Indeed, the whole process of building networks to provide protection against theft and looting of opium cargoes was a critical part of the Helmandi traders' strategy of networking with Ghor intermediaries. However, protection came at a price. During the time when opium was relatively openly traded, it was accepted that pay-offs had to be made not only to local commanders but also to key provincial authorities to guarantee security of transit. Such relations were not without risks. One informant in Ghor reported how two key government and security officials lost their posts and demanded higher payments from the next opium trade convoy. This was refused, a gun battle ensued, and two Helmandi traders lost their lives and one of their convoy vehicles was seized.

Travelling in convoy was one of the ways of reducing the risk of banditry and theft, with lead vehicles reportedly travelling empty and acting as decoys in case of ambushes, allowing other vehicles with opium to escape. If a trader was powerful enough or paid enough money to key provincial authorities, however, he could be escorted by forces linked to authorities along the main roads, as happened in Ghor. While in the past much of the opium poppy traffic passed through the main routes out of Ghor, now the traffic is much more small-scale, using minor routes and back roads down through the southern districts of Ghor, leading directly into the northern districts (Baghran) of Helmand.

With the gradual shift from what was seen to be an open and legitimate market to one that is illegal but in the eyes of many still legitimate, gaining protection has become even more risky. Several reports were provided on how official government action had captured various trading convoys, taken half the opium, and sold it on directly to other traders while releasing the remaining part back to the original traders for a further payment. In one case a seizure of over a ton of opium went through the public spectacle of burning, although in reality a substitute was burned, with the seized opium again being sold on to traders. While in the past, key traders could secure reasonable protection from random robbery through the

[18] Since the new Afghan currency was established, exchange rate fluctuations for the currency have been far less than those for opium reported here.

networks that they had established, more recently it has been less easy. Transport of opium has been scaled down to individual pickup trucks and even motorbikes, a strategy of dispersing the risks. However, one trader reported how relatives of his were ambushing the motorbike traders now because these traders were not in a position to make complaints about theft to the authorities.

Risks of adulteration. A number of traders referred to adulteration risks– one quoted an example of dates being used to bulk up one consignment that he had handled in his early days of trading. In Ghor few reported any examples of adulteration, although it appears to have been more common in Helmand. The risk appears to have been greatest for inexperienced traders, whereas for most traders it appeared to be a minimal risk compared to the other risks that they faced.

Institutional Dimensions

A persistent thread that runs through this chapter is the engagement of key provincial authorities in the opium economy. When the opium trade was essentially open and legitimate, such authorities derived substantial personal incomes from it. With the shift from an open market to one that is illegal and vulnerable to confiscation, many of these authorities remain in position and reportedly have continued to engage in the opium economy, using their authority to gain greater control over the opium trade.

In Helmand, existing tribal divisions and their geographical basis already provide the strands of competition for power. The Alizai tribe from which the previous governor comes are largely located in the north in Musa Qala, Baghran, and Kajaki. The Noorzai tribe living in Nad Ali and Marja is the power base of the head of police and largely make up the provincial police service. The former chief of intelligence, a member of the Alikozai, came from Sangin where his brother is district governor. The army commander comes from Girishk where the Barakzai tribe dominates.

Superimposed on and woven through these strands of tribal identity and location is the opium economy that provides a commonality of interest as well as an arena for competition among different interests. While some of these actors are widely reported to be heavily engaged in the transportation and taxation of opium, the extent to which trader networks cross geographical and tribal affiliations and provide a basis for cooperation or conflict is not clear. What is clear is that eradication, and interdiction as well, have played into the hands of powerful actors, allowing them to exercise greater control over the opium economy.

Many small traders reported higher risks due to being targeted by the police, who confiscated opium reportedly to sell it on to the bigger traders. During the time of fieldwork, the district market in Musa Qala was targeted in this manner. For the bigger traders as well, there are a number of increased risks. One informant reported how the brother of a district governor who had been a key provincial figure had threatened closure of existing opium trading centers unless they moved into new market buildings that he controlled. There are also risks related to seizure of opium either by rival networks (the militia of one former governor of a southern district in Helmand lost a major consignment in this way) or by the central counter-narcotics force as happened in Helmand in late May 2005. However, these losses may induce a response in terms of price rises, thus allowing compensation for the losses

[19] UNDCP (1998, pp. 17-19) has an extended discussion on this issue and other quality issues.

through higher profits on other sales.

While these confiscatory practices do not yet clearly amount to direct control over production, and farmers still appear to have choice as to where they can sell, the control over distribution and trade seems to have become tighter in Helmand, including with respect to where trade can take place. This may explain the tightening of networks, the shift to cash transactions, increasing harassment of marginal actors, and so forth. Greater concentration and control of the trade appears to be occurring in the current environment.

The scope for such action is less in Ghor, although it was consistently reported that key district authorities who had been in position since the fall of the Taliban were still in power (although sometimes moved around between districts). As with Helmand, an understanding of the way in which the opium trade system works, the protection systems provided, and the "taxes" levied requires a district-level analysis of key power holders and their wider networks. The recent appointment of a new provincial governor, who comes from Badakhshan and has no history of engagement in the opium trade or provincial-level political ties, has led to a re-ordering of affairs at the provincial level. But it is less clear that this has happened at the district level.

What should also be noted is that the resource base and control of these key authorities, particularly in Helmand, extends beyond the opium economy. There are consistent reports of government land being acquired and distributed by these individuals and in urban areas used for the construction of new market areas to which traders are "encouraged" to move. Government-owned farmland has been distributed or sold off. Control over cotton ginning has been exercised, with private gins closed down or chased out and farmers left with little opportunity but to accept below-market prices and then remain unpaid if they are poorly connected.

III. OPIUM TRADING SYSTEMS IN HELMAND

Helmand has been one of the core opium producing provinces in Afghanistan, with a history of production that has its origins at least from before the 1950s but which flourished and scaled up from the 1990s onward. During the 1990s Helmand accounted for 40-55% of the total national opium poppy area. Only since 2001 with the Taliban ban and then the spread of cultivation of opium poppy much more widely in Afghanistan since 2003 has its percentage contribution to the total national area dropped below 25%. Helmand's annual area of cultivation has remained remarkably stable at around 29-30,000 ha, (other than a temporary drop in 2003 due to eradication, which did not have a lasting impact), with a peak cultivation of over 40,000 ha in 1999/2000. On such a production base, Helmand has also come to occupy a pre-eminent position in opium trading systems, bolstered by its strategic location on the borders with Pakistan and Iran. Any study of opium trade systems in Afghanistan has to start with Helmand.

The data and analysis contained in this section are based on two field trips made to Helmand during May and June 2005. The first mainly looked at the effect of the decline in opium poppy cultivation on rural livelihoods and the rural economy and included field trips to Nawar, Sangin, and Kajaki. Interviews were held with farmers, some ex-opium traders,

and other key informants. On the basis of these discussions a national research assistant, using his own networks and connections, followed up with interviews of key active opium traders both at the provincial center and in key trading districts, building interviews around a key set of questions. Interview notes were written up after the interviews, and these provided the basis for an extensive de-briefing during the June visit.

The research was carried out at a time of contention over the legitimacy of the opium market, including eradication and interdiction campaigns and serious security incidents. Nevertheless, it was possible to interview a total of 12 active opium traders as well as other key local informants. Summary profiles of the informants are given in Table 4.3 along with a coded identity

Table 4.3: Profile of Key Helmand Informants

H1	Small Trader 1
H2	Large Trader 1
H3	Small Trader 2
H4	Large Trader 2
H5	Large Trader 3 District
H6	Large Trader 4 District
H7	Large Trader 5 District
H8	Small Trader 3
H9	Small Trader 4
H10	Large Trader 5
H11	Small Trader 5
H12	Motorbike Trader, Lash
H13	General Trader, Lash
H14	General Trader, Lash, Mechanic
H15	Motorbike Trader, Sangin
H16	Trader, Kajiki
H17	Farmers, Kajiki
H18	Farmer, Lash
H19	Landlord, Nawar
H20	Farmers, Nawar
H21	Agency worker
H22	Agency worker
H23	UNODC Official

Context and History of Opium Poppy Cultivation in Helmand

Helmand is essentially an economy of arid plains structured around a major valley irrigation system. The Helmand River and its associated irrigation structures are the defining feature of the landscape, with a green ribbon of agricultural lands and dense settlements clustered along the river's length, which runs mainly north-east to south-west through Helmand before exiting into Nimroz. Outside the river valley, the area south of Lashkar Gah is essentially desert, while to the north and on higher altitude lands on the edges of the western reaches of the Hindu Kush, small villages located around karez irrigation systems, very limited amounts of rain-fed land, and livestock production systems can be found. Overlaying this dualistic agricultural economy (areas of grain surplus in the river valley, areas of grain deficit in the northern foothills) are two important aspects of social identity. The first is that of the geography and spatial distribution of Pushtun tribal identity, which as we will see constitutes an important aspect of social networks and power structures. The second is more one of economic class, with major differences in land ownership between a landlord class with substantial land holdings and a multitude of people with limited or no land who subsist in sharecropping arrangements with the major land-holders. Around these natural and social structures, the location of Helmand as a border economy within Afghanistan and with a long history of smuggling and trade to Pakistan and Iran has to be recognized. This inevitably places Helmand in a position of comparative advantage with respect to trade in non-legal commodities.

The history of opium poppy cultivation in Helmand dates back to before the start of the Helmand Arghandab Valley Authority (HAVA). Informant H22 recounted how in his childhood in Nawar during the early 1950s, most households in the district were growing a small area of opium poppy, and he remembers himself harvesting the opium resin. Traders used to come on camels from Pakistan and Iran to buy opium after the harvest. In his view, the major reason for the cultivation of opium poppy at that time was the unreliable water supplies and a cropping pattern limited to wheat and maize.

With the development of HAVA and the expansion of irrigation, the government prohibited cultivation of opium poppy, and it largely died out in the main irrigated areas, although it persisted in the upper districts of Helmand where not only was the climate more favourable to opium poppy but water and land resources were also limited. Under such conditions opium provided a unique opportunity for households to maintain their traditional land-based economy.

HAVA continued to function into the period of the Soviet occupation, but from the mid-1980s, as the management and maintenance structures began to break down, opium poppy cultivation re-emerged,although subsidised inputs (fertiliser and seed) continued to be provided through HAVA. By 1992, however, with the fall of the Najibullah Government, the prices of inputs rose rapidly, market networks began to deteriorate, maintenance of the irrigation system declined, and water shortages began to worsen. These provided considerable push factors to move back into opium production. Moreover, after the fall of the Najibullah government in 1992 there was a sharp decline in the demand for guns on which a thriving smuggling operation from Pakistan had been based, and for the gun smugglers the opium market was the market of choice to move into. Combined with the need for revenue by local commanders, conditions were ripe for expansion of opium poppy cultivation.

Official statistics on the cultivation of opium poppy in Helmand have been collected by UNODC starting from 1994 and are summarised by district for selected years up to 2003 in Table 4.4. District-level data was not collected by UNODC in 2004, and in 2001 (the year of the Taliban ban) no opium poppy was recorded as being cultivated, so this year also is omitted.

Table 4.4: Opium Poppy Area (ha) by District and Year in Helmand.

District		Percent Provincial Irrigated Land (ha)			Percent Province Poppy Area*					
		A	B	C	1994	1996	1998	2000	2002	2003
A	Nad Ali	63	12.9	2.5	42.4	16.2	16.8	19.4	19.6	5.7
A	Nawayi I Barakzayi	37	19.1	1.4	20.5	2.0	3.7	7.6	9.1	8.1
Group % of total					62.9	18.2	20.5	27	28.7	13.8
B	Garmser		14.3	7.4	2.6	3.4	3.9	6.4	6.7	3.0
B	Lashkar Gah		5.9	6.5	7.6	4.2	6.1	7.3	3.8	3.9
B	Nahri Sarraj		16.5	11.5	1.9	17.3	7.9	10.2	6.1	10.2
B	Sangin		5.5	2.0	9.6	7.7	5.6	4.0	9.3	5.1
Group % of total					21.7	32.6	23.5	27.9	25.9	22.2
C	Dishu		0	5.5	0	0	0	0	0	0
C	Reg		5.0	11.1	0	0	0	0.5	6.5	0
Group % of total					0	0	0	0.5	6.5	0
D	Baghran		4.4	5.5	0	5.1	9.5	6.2	6.0	15.0
D	Kajaki		4.6	14.7	3.3	11.3	12.9	10.8	9.8	9.1
D	Musa Qala		7.3	6.9	3.9	15.7	18.2	13.3	12.3	16.0
D	Naw Zad		3.2	21.3	7.9	14.4	11.7	11.9	8.8	20.1
D	Washer		1.1	3.4	0	2.2	3.5	2.4	2.7	3.8
Group % of total					15.1	48.7	55.8	44.6	39.6	64.0
Total (HA)		13452	105588	117515	29579	24910	30672	42853	29950	15371

1: FAO, 1999. Provincial Land Cover Atlas: A: Irrigated–Double Cropped Intensive Irrigation; B: Irrigated–Single Crop Intensive; C: Irrigated–Intermittent
* There are no district statistics for 2004.

The 1994 data record a very high concentration of opium poppy cultivation in the well-irrigated areas (Districts A), but the results of the 1994 survey are seen as questionable by many observers. From 1995 until recently, cultivation has been concentrated more in the single-crop irrigated (Districts B) and intermittently irrigated (Districts C) areas of the province, and there has not been any major shift between the different agro-ecological zones.[20] The 2004 survey which did not provide district level data (UNODC, 2004, p. 31) indicated from field

[20] This raises questions about the method or sample frame used in the 1994 survey, which may have just concentrated on well-irrigated areas. Apparent shifts between 1994 and 1996 may well be spurious.

reports that higher levels of cultivation were found in the northern parts of the province, and this seems to be a pattern that has persisted in the 2004/05 cultivation season with the estimated 10% decline in area (UNODC, 2005). In part, at least in 2005, this has been reinforced by the province-led eradication strategy that has sought to restrict opium poppy cultivation in the more visible and accessible areas. It will be interesting to follow the spatial distribution of opium poppy area in the coming years as it responds to eradication pressures.

Yield and Production

First, it should be noted that greater certainty can be attached to the area statistics at provincial level than to the production statistics. Provincial statistics for area have been determined on a provincial basis, although the method by which this has been done has varied over the years. On the other hand, estimates of yields and therefore estimates of opium production levels have been done on a regional basis,[21] and the means by which this has been done has also varied over the years.[22] Helmand has been included in the Southern region that also contains Uruzgan, Kandahar, Zabul, Ghazni, and Paktika.

On the basis of an indicated yield for 2004 for the region of 27.8 kg per ha of dry opium, Helmand's opium production can be estimated at roughly 1,300 tons in 2002, 650 tons in 2003, and 816 tons in 2004.

However, by virtue of Helmand's historical and geographical position (as major producer and bordering with Pakistan, providing a channel for onward trade to Iran), the province is also the major conduit for opium trade from other provinces. Assessing what these flows of opium traded into Helmand are takes us into the realm of "guesstimates," but from discussions with key UNODC officials, the following estimates have been made of possible levels of opium flows from other provinces.

- Possibly up to 100% of the production of Ghor, Bamiyan and Uruzgan (note should be made of the strategic position of Sangin, a key trading center in Helmand at the border with Uruzgan).
- Maybe 50% of the production from Mazar (Balkh).
- 30% of the production from Badakhshan.
- 30-40% of the production from Nangarhar.

All sorts of qualifications must be attached to these figures. There are reports that some of the opium production from Ghor is traded directly to Herat and then exported. It may well be that none of Badahkshan's production is now traded through Helmand, since with established processing facilities in the province a more direct export route is available to the north. A similar issue could be raised about Nangarhar. But as emphasised earlier, these figures are intended to be indicative and have been constructed to generate an argument.

These considerations indicate a potential flow of opium through Helmand trading systems from the production of other provinces on the order of around 1,000 tons per year (based on 2004 figures for area and yield). This makes the potential total volume of opium traded in Helmand during 2004 on the order of 2,000 tons, which amounts to just under half of Afghanistan's estimated total opium production in that year.

[21] "Opium production was estimated by multiplying the average dry opium yield per region by the cultivation level per region and adding up the results to arrive at a national total." UNDCP (2004, p. 57).

[22] Yield estimates have largely been based on what farmers reported, disaggregated by irrigated / rain-fed,perhaps with a limited sample framework at least in the past. It might be that an altitudinally based sample frame on a provincial basis could provide a more accurate assessment, but it is recognised that for a crop where agricultural practice and in particular harvesting technique is as much a determinant of yield as climatic conditions, this would not be easy.

It should be stressed that these are ballpark figures and estimates of orders of magnitude. They should not be taken as authoritative and have been constructed to assess consistency with estimates based on the number of traders, trading volumes, and links to production (discussed below).

Opium Trading Systems

How many opium traders are there and what are their characteristics? All informants agreed that the number of people engaged in the trade has increased since Taliban times, largely as a result of the sharp rise in prices in 2001 and continuing high prices during the 2002-2004 period. Many of the longer-term traders looked back to the Taliban period as the golden period of trade compared to the more competitive and risky environment now. There is also a question of knowledge and numbers. In Helmand there are so many opium traders that estimates of numbers are likely to be more speculative and based on hearsay, particularly for the smaller traders. It was often not clear, for example, how much smaller traders in Musa Qala knew of trading in Kajaki. In the past when trade was open, estimates of numbers based on a count of shops in the bazaar may well have been useful (see UNDCP, 1998), but this is less likely to be the case now. Larger traders on the other hand possibly had a clearer picture at the district and provincial level and of their immediate competitors or trading partners, but it is a moot point as to how accurate their estimates would have been.

Estimates of the numbers of traders therefore varied considerably according to source (Table 4.5), with provincial totals varying from 600 to 6,000, and with a variable distribution in terms of the breakdown between district and provincial centers and the balance between small and large traders.

Table 4.5: Estimates of Numbers of Opium Traders in Helmand by 10 Informants

Source	Lashkar Gah City				Districts				All			
	S	M	L	All	S	M	L	All	S	M	L	All
H1	100	100	50	250	60	60	50	170				400
H2									300	250	150	700
H3		600	150			0	150		100	600	300	1000
H4			1000								200	5000
H5					800		100					6000
H6					100		3-400	500				
H7					100		40	140				
H8	300		100	400								
H9	50		50									
H10	100		50	150	500		50	550	600		100	700

What defines a small, medium, or large trader? Here there was considerable consistency across informants (see Table 4.6). Small traders are essentially part-time traders on a seasonal basis, dealing perhaps with 10 to 15 kg per month (2-3 mauns) during the main trading months (June to September), and possibly half that amount for another six months of the year. They are often small shopkeepers selling cloth or essential commodities, or government servants. Medium-sized traders also tend to be largely seasonal, but dealing with

larger amounts of opium (50 to 100 kg per month) and involved more in selling imported goods such as motorbikes. Most of the informants, however, did not identify a medium-sized category, possibly indicating that their location was mainly restricted to the provincial center.

Table 4.6: Characteristics (Assets and Trading) of Opium Traders in Helmand
(Maun = 4.5 kg)

	Small		IV. Medium		Large	
Source	Trade /month	Assets	Trade /month	Assets	Trade /month	Assets
H1	2-3 Mauns	Work in government Offices	20 Mauns	Shops	100 Mauns	Cash, >100 jeribs 5% importers care, motorbikes
H2	1-2 M and sell all; no agents	Buy and sell clothes	7 no agents	Trade motorbikes	60-65; Use agents 60-65;Use agents	Markets. Houses, plots; Cash 30 - 80 jeribs; motorbikes, car trade
H3	2-3 M	Clothes shops	Medicine LKG		70 - 100 M	Cars, 50-70 j land, markets; import Mb & Cars
H4						2 landcruisers. 3 houses Kabul in MK, 150 j land; buy and sell cars
H5	1-2 0.3 - 5g	Petty trade, tea, sugar			50 - 100; Agents	Cars , >100 j; Houses in cities; store & supply op
H6	2-3	Small shops,			50 - 100 Use agents	Markets, houses in cities, lands, cars
H7	2-3	Gov officials Shops 3-4 j			40 - 100, agents / brokers	30 - 35 j, houses, cars, cash
H8	1-2	Shop motorcycle parts Shops			40 - 80; agents, accountants, store poppy	Markets, houses cars > 30 j land Kabul houses, $100K Kabul
H9	1-3	Gov officials Shops Clothes			20-80	4 big traders stock of 350 maun each, cars houses, cash
H10	1-3	Shops, Gov Officials			20-50	20 j lands, Shop Agric Equip

With respect to the larger traders, there was considerable unanimity about both their trading volumes and their assets. Such people are likely to trade throughout the year, dealing in peak months with up to 500 kg of opium per month. They usually have their own accountants and hired agents to work for them. They have considerable assets in the form of land, vehicles, and cash. Some are also running legal businesses including importing motorbikes and cars. The very biggest traders also have substantial property assets, including markets in Lashkar Gah and key district centers and houses both in Lashkar Gah and Kabul. One large trader was reported to have recently bought a house in Kabul for over US$100,000. A number of large opium traders reportedly have gone on Hajj, one apparently having gone seven times (Anthony Fitzherbert, personal communication).

Trading volumes, turnover, and stocks. Working with the larger estimates of the number of small traders (1,000-1,500) and assuming that for the whole year they might trade 100-200 kg (25-45 mauns, see Table 4.7) the total amount of opium that these small traders might deal in ranges from 100 to 300 tons in total. This constitutes 10 to 30% of estimated Helmand opium production of 1,000 tons. What is clear from all informants is that these small traders simply sell on to larger traders either within their district or within the province, and are not involved farther up the market chain in transporting opium out of the province.

Table 4.7: Monthly Opium Trading Volumes by Informant and Trader Category (in Mauns)

		Small			Medium			Large		
		Buy	Sell	Store	Buy	Sell	Store	Buy	Sell	Store
H1	05	3-4	3-4		10	6	4	100		
	Tb	400	400							
H2	05	1-2	1-2	0	7	4	3 , 2-3M	60-65		100+ 1-2 yr
H3	05	2-3	2-3							
H4								50 - 100 upto 200 in M/ J	30-50	20 - 30
H5	05	30	33-34	No				20-25		Yes
H6	05							10-15 / m		Yes 100-200
H10	05	2-3						20-50		

These figures suggest that the bigger traders are directly dealing with farmers for the bulk of Helmand's opium production. This conclusion is borne out from a number of sources. First, farmers themselves reported that unknown people arriving on motorbikes came to the farm directly to seek opium for purchase, and that more of them were coming in 2005 than in the past. Second, traders themselves, both small and large, reported on the extensive use of agents or brokers by large traders. This is supported by the UNDCP (1998) study on farm-gate opium trade, which refers to the particular use of commission agents by large traders in Helmand. Third, the increasing control of opium production by key local authorities (discussed below) and the double taxation (both not to eradicate and on the crop once it is harvested) mean that key big traders are very well informed on the location of production.

If we take the direct estimates of opium traded by larger traders, these varied considerably but during the main season might range from 450 kg (100 mauns) per month upwards, with total annual trading volumes of 1,750-2,000 kg at least. A significant number of the larger traders are dealing in more than this, and UNDCP (1998) reported one trader purchasing 20 metric tons in a year. If we assume around 300-500 big traders purchasing 2-5 tons each, this gives an annual purchase of between 600 and 2,500 tons, which although a wide range is consistent with the estimates of the range of opium traded in Helmand from both provincial production and opium brought from other provinces.

The seasonal dimension of the opium trade is important. The key period for selling from the farm is during the months of harvest–from May probably through to July, a three-month period. However, it is clear from farmer and small trader interviews that there are farmers who keep back small stocks–of up to around 1-5 mauns–as reserves that are slowly traded through the year in small amounts according to need. Such farmers also reported reserves built up over several years. Small traders are less likely to keep much stock, particularly under current conditions when all reported that they were being particularly targeted by the police. In part the use by big traders of commission agents and brokers is necessitated by supply drying up after the main trading period and having to search for opium to purchase (UNDCP, 1998). The lowest period of trade is from December to April.

This points to the need for larger traders to keep stocks in order to be able to respond to orders and demand as they come in, when prices will rise, making holding for sale at such times profitable. Various sources suggested that perhaps 40% of the annual purchase would be kept as stock to tide over trading during the year before the next harvest, and also to be able to respond opportunistically to short-term price rises. However, it is clear that some of these holdings were not intentional, as it was also reported that the age of some stocks goes back further than this, and that they were acquired when prices were at their peak. The holding of stock from the years of high prices in the hope that prices will recover is likely to be limited to those who can afford to have capital tied up in this way. One source estimated that possibly about 10% of a trader's purchases for each year from 2000-2002 was being held, with perhaps 20% of 2003 and 2004 purchases also as reserve. While recognising that 2001 was not a production year, nevertheless this indicates possible stock for a trader purchasing two metric tons per year of at least a ton of opium built up over a four to five year period. This is consistent with various newspaper reports. Note should also be made of between-trader dealing–one informant reported on the exchange of a land cruiser for opium in order to maintain his reserve stock.[23]

Patterns of demand and how Helmand-based traders link with external actors are largely unknown. UNDCP (1998) reported outsiders coming to Helmand from Pakistan, Iran, and even Central Asia and visiting the various opium bazaars in Helmand to purchase opium. Many informants reported continued visits by what are now termed "smugglers", although it is mainly people from Pakistan who come in disguise to known Lashkar Gah traders. It was not possible to collect information on the frequency or timing, numbers, or seasonality of these visits. Many informants also made reference to the trafficking routes to trade points close to the Pakistan or Iranian border, reached either through Helmand or Farah. Opium trade flowed when travel routes were seen to be relatively open, and at such times market prices for opium rose. However, when transit routes were seen to be under threat or monitored, prices in Helmand fell (see also UNDCP, 1998, p. 10). Some traders reported combining together to transport opium to the border points under such circumstances.

The value chain. Preliminary analysis of the value chain data that has been put together indicates a margin of 7-10% for the farm-gate / small trader margin, but from the limited data a rather larger margin (50%) for the other traders, consistent with the UNODC (2004) report of a shift of the balance of advantage to the traders.

[23] UNDCP (1998) also reported a similar example of a deal between Musa Qala and Sangin traders when Balochi traders did not pay in time.

Trading risks. There is no doubt that the risks associated with the opium trade in Helmand have increased for all actors, but for different reasons. For opium poppy cultivators there is now both a risk of their crop being eradicated, or if not eradicated an increased risk of informal taxation first in order to prevent the crop from being eradicated and second at time of harvest. One farmer reported how he had grown his crop within his compound and carried out all the work within the family, thus evading these "taxes"; he nevertheless voluntarily paid ushr (a religious levy) to the local mullah. Another problem is that credit for opium poppy cultivation has also become more difficult to obtain.

Turning to the small traders, many reported higher risks due to being targeted by the police, who confiscated opium reportedly to sell it on to the bigger traders. During the fieldwork the district market in Musa Qala was targeted in this manner.

For the bigger traders there are also a number of risks. One is losses due to loans advanced to farmers not being repaid. Available evidence indicates substantial indebtedness among opium poppy farmers with significant amounts of overdue unrepaid debts outstanding. However, the provision of credit for production seems to have declined, so losses on this account may have been reduced more recently. UNDCP (1998) suggests that at least in Helmand, the provision of credit often did not cover more than 5-10% of a trader's turnover, although with the price increases of 2000/01 there may well have been an increase in the amount of credit provided since then. The risk of adulteration of opium by farmers and small traders remains, and one informant commented that this was still common practice in the market. Traders are also susceptible to the influence of key power holders with respect to where and how they trade. One informant reported on how the brother of a district governor (the latter had been a key provincial figure) had threatened closure of existing opium trade centers unless they moved into new market buildings that he controlled.

New risks also relate to seizure of the crop either by rival networks (the militia of one former governor of a southern district lost a major consignment in this way) or by the central counter-narcotics force as happened in late May 2005. However, these losses may induce a response through price rises. Conversely, threats of seizure may act to keep price down through the temporary closing of trade routes.

Overall, what appears to have happened is a shift in trust. Earlier, opium trade across provinces had operated apparently in a way not dissimilar from the *hawala*, and within the province based on personal credit and reputation. It was reported that the opium trade has now shifted entirely to cash transactions only, across provinces and within the province as well as across the border. Personal networks seem to have closed in, with communication being largely undertaken through satellite phone.

One might expect some of these risks to be reflected in rising prices or greater volatility in prices. In fact, beyond the normal seasonal pattern (lower at harvest time, higher in winter) prices in 2005 have remained comparable to the previous year's prices, although there are substantial short-term fluctuations due to appearance of buyers in the market. One noteworthy point is that during the 2003 season Helmand prices were higher than Nangarhar's, which has not been the historical pattern.[24] In 2005 it was the reverse, reverting back to the pattern seen in the 1990s, but now reflecting the largely successful ban on opium poppy cultivation in Nangarhar (see also Chapter 5). These shifts and provincial dif-

[24] According to David Mansfield (personal communication) there was an enforced reduction of area in Helmand in 2003 which led to the price increase, with Nangarhar assuming the pole position for opium production; in 2005 the situation was reversed.

ferences in prices tend to suggest regional and fragmented markets rather than a national unified one.

Involvement of key government authorities in the opium economy. A major factor in many of the shifts identified above is the central role of government authorities in the opium economy. Existing tribal divisions and their geographical structure already provide the basis for competition for power. The extent to which trader networks cross geographical and tribal affiliations and provide a basis for cooperation or conflict is not clear. What is clear is that eradication and possibly interdiction as well have played into the hands of powerful provincial actors, enabling them to exercise greater control over the opium economy. While this does not yet amount to direct control over production, and farmers appear still to have choices as to where they can sell, the control over distribution and trade seems tighter, including as noted above control over where trade can take place (see also Chapter 7). Concentration of the trade appears to be occurring, and there is potential for a cartel in the making.

IV. OPIUM TRADING SYSTEMS IN GHOR

Ghor was selected as the second province for this study of opium trading, and as a contrast with Helmand, for two main reasons. First, opium poppy cultivation is relatively recent in Ghor, with the official UNODC surveys recording its cultivation for the first time in 2002 on an area of 2,200 ha, although small areas are likely to have been cultivated before then. However, even in 2004 the area of opium poppy cultivation in Ghor comprised a relatively small part of the arable area–about 13% of the wheat area and about 2% of the arable area (UNODC, 2004). During 2005 there has according to all reports been a sharp drop in the opium area. This raises questions about how opium trading systems established themselves in new areas of opium poppy cultivation. Did existing Ghor traders simply move into opium trading, establishing contacts with outside markets, or was it more a case of outside traders expanding their trading networks into Ghor? Second, and in partial answer to the above questions, based on the work in Helmand it appears that opium from Ghor is traded into Helmand. Thus the selection of Ghor as the second province for study offered the possibility of exploring how trading systems in Ghor might be linked to those of Helmand, and what has driven the development of these trade networks.

The data and analysis contained in this annex are the result of fieldwork in three areas. The first was in western Sharak in the Dar-I-tak area on the Herat provincial border, where discussions were held with general market traders, opium poppy cultivators, and group discussions in various villages in the surrounding area. The second area was in Chaghcharan town and surrounding villages and included interviews with opium traders and various other key informants. The third area was in Tulaq district, where interviews with a key district opium trader and a group meeting in a village with a history of opium poppy cultivation were undertaken. These specific site discussions were complemented with more general discussions with key people who were knowledgeable about the province. Summary profiles of the informants are included in Table 4.8 along with coded identity.

Table 4.8: Profile of Ghor Key Informants

G1	Large Opium Trader, Chaghcharan, Haji
G2	Large Opium Trader, Village outside Chaghcharan
G3	Small Younger Opium Trader, Chaghcharan
G4	Medium Size Opium Trader
G5	Livestock Trader, Chaghcharan - former/ current opium trader ?
G6	Farmers Village 1, Chaghcharan
G7	Farmers Village 2, Chaghcharan
g7	Sharecropper from Helmand, Sharak District
G8	Shop Trader, Dar-I-tak
G9	Shop Trader, Dar-I-tak
G10	Farmers Village 1, Tulaq
G11	Opium Trader, Tulaq
G12	Agency Employee, Former Opium Smuggler in Helmand
G13	Agency Employee,
G14	Agency Employee, Influential Person
G15	UNODC Employee
G16	Farmers, Sharak Villages

Context and History of Opium Production

Ghor displays classic features of a remote mountain economy. The province is poorly served by infrastructure. In winter the central high plains and provincial center are cut off by snow for between four and six months. Settlement tends to be highly dispersed and opportunistic around localised small-scale water sources, rather than densely settled along river basins.

Ghor is largely a rain-based economy from which surplus is extracted. This is well illustrated by the seasonal movement of Kuchis (nomads) into Ghor during the summer months from the surrounding plain provinces. The Kuchis not only own the bulk of the provincial livestock population but also appear to control access to large areas of natural pasture as well. Key natural products–such as livestock, walnuts, dried apricots, qorut (dried yoghurt), kurk (fine wool from the ear of the goat), and black cumin (gathered from common lands)–have traditionally been exported, along with rainfed grain in good years. Historically, the major traders at the district centers were from outside of Ghor. Traders from Kabul dominated trade in Chaghcharan, and Herati traders tended to manage trade in the district centers. Outside traders from Helmand, Kandahar, and Kabul largely controlled the livestock export trade and dealt directly with the Kuchis in their key seasonal markets around Chaghcharan. One former livestock trader (Informant G7) remarked on how cheap livestock had been in Ghor before the drought (in contrast to the present),[25] and the considerable profits to be derived from the trade. Where there were people from Ghor engaged in the livestock trade, they largely acted as agents for the external traders in the main trading season and traded livestock locally between villages during the rest of the year.

[25] He reported that prior to the drought for Afs 150,000 (new currency) he could have bought 400 sheep, but now this amount would only purchase him 100 lambs.

Seasonality in terms of both physical access and productive activity is a defining feature of Ghor's economy. The collection of fuel and fodder during the summer months is a major activity, requiring two to three months of labour. These are combined with transhumance and the seasonal movement of livestock out of villages to higher summer settlements. The significantly higher price of wheat in Ghor (estimated to be at least 30% higher than in Herat) and the difficulties of winter access must play a critical role in the calculus of decisions on opium planting in relation to the risks of failing to achieve food security for the winter period. This as will be seen may explain the sharp fall in opium cultivation in 2005 following poor production in 2004. Ghor has also historically been a labour reserve. With a highly seasonal economy, and significant areas of grain deficit during years when the rainfed component of production failed, movement of male labour out of Ghor during the winter period has been a major component of livelihood strategies, dating from several decades back but of variable importance according to location.

Two significant transformations of the economy of Ghor have taken place in the recent past. The first is the improvement of access through the building of a bridge across the Hari Rud and the development of roads that provide a direct route through to Chaghcharan via the northern route from Herat along the Hari Rud. This work, which started during the drought which hit hard the rainfed-based economy of Ghor, has also contributed to a second transformation–the significance of cash-based labour work through NGO investments in road and snow clearance. Catholic Relief Services and partners estimate that in 2002 cash for work may have provided overall about 27% of household income in the areas in which they are working.[26] The share is unlikely to have decreased since then.

Opium cultivation in Ghor started no later than 2002, fuelled from all accounts by the experience of labour from Ghor working in Helmand's opium poppy fields during the years of drought. This experience provided skills and seed and some knowledge of the market. However, the limited significance of the crop in Ghor should be emphasized. Starting according to UNODC survey records in 2002 with an estimated area of 2,200 ha (7% of the wheat area), opium poppy cultivation increased to an estimated 4,983 ha in 2004, largely through expansion into rain-fed areas, before falling significantly in 2005, according to all reports because of widespread crop failure in 2004. Preliminary figures for 2005 (UNODC, 2005) report that the provincial opium poppy area has dropped to 2,689 ha, a decline of 46%. Villagers in one valley in Tulaq (Informant G10) estimated that about 20-30% of the 1,000 jeribs of irrigated land in the valley had been planted with opium poppy in 2003; it expanded to 90% of the area in 2004 and then declined in 2005 to about 10% of the area. The main reason given for the fall in production was the reported crop failure in 2004, which discouraged farmers from planting in the subsequent year.

Elsewhere in Ghor, the expansion of opium poppy cultivation in 2004 was largely rainfed based–cultivation was even attempted in the main Shahrak valley at 2,400 meters altitude– and failed. Cultivation in 2005 by all accounts has come to be concentrated in the lower-lying valleys with secure irrigation and is fairly dispersed. Although Ghor farmers have done much of the cultivation, Helmandi cultivators are also coming in to cultivate on a sharecropping or tenancy basis.

[26] Paul Hicks, Catholic Relief Services, personal communication.

Table 4.9 summarises on a district basis the area of opium poppy cultivation recorded in the UNODC surveys since 2002. District-wise data was not collected in 2004, and with the short run of historical data, meaningful trends are not discernible. Moreover, it is unclear what the relative allocation of poppy between irrigated and rainfed land has been. It would also be important to distinguish between the autumn planted and spring planted crop, the latter (largely rain-fed) taking place at higher altitudes and therefore more dependent on spring rains. Most informants stated that the expansion of opium poppy cultivation particularly in 2004 was into rain-fed areas where production largely failed in that year as the spring rains were poor. Informant G14, whose brother has lands in Sharak at high altitude (over 2,000 meters above sea level), reported how his brother had been approached in successive years by some Kuchis and a man from Shindand (in Herat) to rent land for opium poppy cultivation. In both cases they had completely lost their investments as the crop failed, the former in terms of money and the latter who paid with a new motorbike (about $450-500). Observations during fieldwork in Chaghcharan, Shahrak, and Tulak indicated that opium poppy cultivation is now entirely restricted to well-irrigated areas.

Table 4.9: Cultivated Area of Opium Poppy in Ghor (Ha)

District[27]	Percent Provincial Irrigated Land (ha)		Percent Provincial Rainfed Land (ha)	Percent Province Poppy Area		
	B*	C		2002	2003	2004
Chaghcharan	13.9	24.1	54.9	700	1189	
Lal Wa Sarja	0.4	15.0	10.5			
Pasaband	8.0	23.1	15.3	700	805	
Saghar	6.7	1.6	0.8	300	256	
Shahrak	25.7	20.8	4.5		640	
Taywara	24.7	12.8	3.3	500	808	
Tulak	20.5	2.5	10.7		84	
Total (ha)	29761	41202	134963	2200	3782	4983

Source: UNODC (2004).
* FAO, 1999. Provincial Land Cover Atlas: A: Irrigated - Double Cropped Intensive Irrigation; B: Irrigated - Single Crop Intensive; C: Irrigated - Intermittent

On the basis of the 2002 and 2003 area statistics, production has been largely confined to four districts, three of them (Pasaband, Shahrak, and Taywara) border districts, and probably cultivated within the limited area of single-crop intensive irrigation in each. UNODC (2004) estimated that the opium poppy area is equal to about 13% of the wheat area in the province.

Yield and Production

UNODC (2004) uses a yield of 34.9 kg/ha to calculate production for the western region of Ghor, Hirat, Farah, and Nimroz. While this seems on the high side for Ghor given what many informants reported (but noting a tendency for production to be to be under-reported and also highly variable conditions), it results in estimated provincial output for 2004 of about 175 metric tons of opium. If a yield range of 25-30 kg/ha of opium poppy is used, and

[27] Note that UNODC reports on seven districts only; there appears to be official recognition of three others districts - Charsadah carved out of north west Chaghcharan, Doulatyar out of north eastern Chaghcharan and Dolainah out of eastern Sharak.

given the provincial area statistics from 2002, an indicative range of opium production might be from 55-65 tons in 2002 to 125-150 tons in 2004. If area has declined by as much as 50% in the 2004/05 season as many observers have reported, production may well have returned to 2002 levels.

Opium Trading Systems

The development of the transit trade. Although significant opium production in Ghor appears to have developed only since 2002, a transit trade in opium has been operating for rather longer, dating back at least to 1998 (Informant G1). At that time a group of Helmandi traders, variously reported to number from 10 to 20 (Informants G1, G2, G13, and G14), appeared in the Chaghcharan marketplace during the summer months (July-August) and began to establish connections with local Ghor traders. Where these Helmandi traders came from is not entirely clear, but references by informants to visits to Musa Qala and Sangin and the naming of key opium traders from the latter suggest their likely origins. It seems that the Helmandi traders were largely principals acting in their own right rather than agents for principals based in Helmand, and that there was a fairly solid core of them who established their base in Chaghcharan during the opium trading season (June to September).

These Helmandi traders appear to have sought out connections with key Ghor traders who had well-established provincial linkages developed out of the livestock trade. Indeed, a characteristic of almost all of the Ghor opium traders who were interviewed was that they had previously been livestock traders. Informant G1, for example, reported that he had well-established trading networks for sheep and goats in the north of Ghor, and that his assistance in helping his livestock trading friends sell opium in Chaghcharan had helped establish his relations with the Helmandi opium traders.

The Helmandi traders were interested in gaining access to the opium produced in the northern provinces of Balkh and Badakhshan (Faryab, Samangan, and Saripul were not to move into production until a few years later), which appears to have been largely traded through Mazar at that time.[28] The chief obstacle they faced was that they did not have networks within Ghor to establish trading routes.[29] This was primarily related to networks guaranteeing security and protection rather than establishing points of supply and transit. Ghor-based traders were recruited to provide such a linkage up to the northern parts of Chaghcharan district, particularly the regions of Murqab and Charsadah. These areas were under the sway of various Murqab commanders who had become influential and key power holders in Chaghcharan district. The number of Ghor traders who worked for the Helmandi traders was probably in the range of 20-30 (Informants G1, G2, G4, G13, and G14), none of whom seemed to be exclusively tied to any one Helmandi trader.

Transit trade volume. The opium trade in Ghor is highly seasonal, operating over a 3-4 month period. Informant G1 indicated that he normally purchased about 500 kg at a time (one pickup load) and did this about 10 times during the trading season. He claimed that his annual trading of about five tons put him in the middle rank of opium traders, and that there were others who were trading bigger amounts. Informant G2 talked about 5-6 trade trips of about 500 kg a time. He also noted that prior to 2004 the transit trade had probably constituted about 80% of the total opium trade in the province, and that this had increased to about 90% with the decline in Ghor's own production.

[28] Informant G1 noted that although much of the opium trading he had been involved in had been as an intermediary within Ghor, on the two occasions that he had gone outside the province, it had been to Mazaar.
[29] It should be noted that the Helmandi traders were Pushtun while the population of Ghor is largely Tajik; the nomadic Pusthun population (Kuchis) do not appear to have been seen to provide a basis for building networks to the north.

On the basis of the figures for the number of Ghor opium traders and the number of trading trips they said were made, an indicative estimate for the transit trade might range from 60 to 150 tons of opium per year. If we take into account the estimates of the relative importance of the transit trade to Ghor production, and take a low figure of 55 tons of opium production in Ghor in 2002, this would indicate a transit trade of about 220 tons, some 25% higher than that based on traders' estimates.

If we then look at the supply side and take the area statistics for 2003 for the northern provinces but exclude Badghis (the production of which by all accounts was directly traded to Herat) and Bamiyan, then this region had an area of about 5,000 ha of opium poppy in 2003 (UNODC, 2004, p. 115, Annex 2). Based on average yields of 35 kg/ha, this gives a northern production figure of around 175 tons.

According to different methods and points of departure for calculations and various assumptions, we therefore have a set of figures for the size of transit trade that are of the same order of magnitude and range between 100-200 tons per year. There is little point in seeking greater precision than this given annual fluctuations in production and the changing conditions under which the opium market operates. Much would depend on the contribution of Badakhshan production, its trading routes, and alternative routes for trade for northern production. There are indications, for example (Informant G15), that trading of opium into Tajikistan became widespread after the replacement of Russian border guards with Tajiks on the border and that some 30-50% of Badakhshan's production may now flow through this route, although others would claim that the border has always been permeable to opium flows.

Trade in provincial production–emergence of motorbike traders. The establishment of provincial opium production subsequent to the development of the transit trade in opium seems to have led to the emergence of a different group of Ghor agents for the Helmandi traders. This group appears to be distinct from the original "transit trade" Ghor opium traders and can be characterised more as shopkeepers and small-scale petty traders, rather than having a history as larger livestock traders. This may well also reflect the location pattern of Ghor's production, which has been highly localised, small-scale, and dispersed, with fairly high costs of time for collection, lending itself to smaller dealers on motorbikes who would collect amounts of 10-25 kg from a village. Informants G10 described in detail how different agents on motorbikes would come to their village to collect the opium harvest.

In Chaghcharan these motorbike traders would work directly with the Helmandi traders, perhaps trading 100-200 kg in a season. On the basis of Chaghcharan District's poppy area of 1,000 ha in 2003 and (estimating a yield of 30 kg/ha of opium poppy cultivated) production of 30 tons, this would suggest that the number of small traders is in the region of 100 to 150, consistent with the numbers given by informant G3.

However, opium production in some of the border districts of Ghor has not been handled through the Helmandi traders of Chaghcharan, although informant G11 described how he had gone with Helmandi traders to purchase 60 kg of opium in Chaghcharan in an earlier year, for which he was paid a commission of Afs 20,000. This same informant (G11) described how he had become involved in the trade starting from his own production and using this to build up capital to purchase other stocks. These he sold on through a cousin

directly to the opium market in Herat province, to which there is a direct route from Tulaq. In his view there were about three traders like himself in Tulaq district center, who resold opium through trading networks developed around other commodities. They all had their own transport, and it was easy for them to send small amounts of opium to the market in Herat. He estimated his annual turnover at about 50 kg. Many of the other shopkeepers in the Tulaq bazaar have also been engaged in the trade but in much smaller amounts–one or two kg at a time–using it primarily to gain credit from Herati traders bringing other stock to their shops. Opium appears to have provided the currency of exchange and was used to repay loans.

Partnerships of convenience or equality? While the Helmandi traders worked hard to build connections with Ghor traders in order to establish the transit trade, it would appear that the former remained very much in control. Indeed, as informant G14 noted, the one case of a Ghor trader who had prospered in the opium trade had been accomplished entirely based on provincial production and not through the transit trade. But this was very much an exception. As informant G8 put it with respect to the Helmandi traders: "The opium is theirs, the money is theirs, the trading is theirs, the skills are theirs."

While the Helmandi traders needed the Ghor traders up to a point, the ability of Ghor traders to operate in the opium markets in Helmand and elsewhere was dependent on connections with the Helmandi traders. Moreover, the Helmandi traders were not unwilling to drop their Ghor connections once they had made the necessary trading linkages themselves. Informants in two Chaghcharan villages (G6 and G7) noted how originally Ghor traders had come, but once the Helmandis had become familiar with the area, they came directly.

Where partnerships were established (as in the case of G2), the Ghor traders were very much the junior partner, not least because of the limited capital that they had.[30] Informant G2 had been able to build up sufficient capital to trade in partnership and accompanied Helmandi partners to Helmand in order to sell in the Sangin markets (as he put it, he had to go with Helmandi traders for protection). But many of the intermediaries in the transit trade operated on short-term contracts with the Helmandi traders who advanced capital for purchase for delivery within a 6-10 day period. Their margin depended on being able to purchase stock relatively quickly and at a price lower than the contract price, and being able to deliver it in a very timely manner. Informant G1 recalled that on one occasion he had lost nearly Afs 300,000 on a contract for 400 kg because he had not been able to deliver it quickly enough to the market, and the price had dropped in the meantime.

The smaller motorbike traders preferred to work on a commission basis (Informant G3); while it provided a lower return, working on a profit basis was less certain. Even the bigger Ghor traders made reference to the fact that if they did trade on their own account and sold on to Helmandi traders in Chaghcharan, while profits could be made (informant G1 reported on two trading events which he had done without contract which netted him in one case a profit margin of Afs 300,000 and in another Afs 200,000), there were also major risks of losing money.

Trading risks. In discussions on risks associated with trading, it was striking that all of the Ghor opium traders ranked the risk associated with price fluctuations as the greatest risk that they faced. Informant G11 estimated that in five out of ten transactions he would

[30] Several informants suggested that trading capital of Afs 500,000 was needed to be able to trade about 100 kg of opium

either break even or lose money, with a lower chance (less than 1 out of 10) of losses due to either theft or (more recently) actions by local authorities. Informant G2 agreed and noted the fact that last year a number of the Ghor traders lost all of their capital in trading. Informant G1 also said that market risks were the greatest ones that they had faced until recently, estimating that in 40% of his transactions he had either broken even or lost money. It is clear that there are short-term (within 24 hours) fluctuations in prices that may be on the order of 20-30% according to various informants. Informant G11 from Tulaq reported that his cousin based in Shindand would ring him instructing him to buy at a given rate; even if he bought at that rate and delivered it to the market within 24 hours, the price might have declined in the meantime.

What appears to be driving these short-term but sizable fluctuations is that when it is known that outside buyers who tend to come in quickly and buy large quantities are in the market, the price quickly rises. No doubt some collusion on the part of key traders holding stocks is taking place, but once the buyers have satisfied their demand the price quickly drops again, sometimes in a matter of hours. This price behaviour does not appear to be confined just to the opium market. It has also been reported in the case of the raisin market (Lister and Brown, 2004), and the Dar-I-tak traders (Informants G8 and G9) also reported it for the kurk markets as well, noting that it is primarily associated with commodities for export.

This degree of price fluctuation is regarded as acceptable, however. Informant G11 regarded the opium market as much more open than the currency market with which he compared it, arguing that there was much greater competition in the opium market. Compounding the potential risk of losses in the market is the apparent behaviour by many of the traders to venture substantial proportions of their liquid capital in a single transaction in the hope of earning substantial profits, but at the risk of exposing themselves to considerable losses.

Nevertheless, the fact that Helmandi traders have strong control over the market is not in doubt (Informant G15 and others), and their ability to manipulate prices must be a strong contributory factor in keeping non-Helmandi opium traders in a position of relative weakness.

Price is not the only risk faced by opium traders, whether those from Ghor or the Helmandi opium traders operating in Ghor. Indeed, the whole process of building networks to provide protection against theft and looting of opium cargoes was a critical part of the Helmandi traders' strategy in networking with Ghor intermediaries. However, protection came at a price. During the time when opium was relatively openly traded, it was accepted that pay-offs had to be made not only to local commanders but also to key provincial authorities to guarantee security of transit. Such relations were not without risks. One informant reported how two key government and security officials lost their posts and demanded higher payments from the next opium trade convoy. This was refused, a gun battle ensued, and two Helmandi traders lost their lives and one of their convoy vehicles was seized.

Travelling in convoy has been one of the ways of reducing the risk of banditry and theft, with reportedly lead vehicles travelling empty and acting as decoys in case of ambushes, allowing other vehicles with opium poppy to escape. If an opium trader were powerful

enough or paid enough money to key provincial authorities though, he could be officially escorted along the main roads. While in the past much of the opium traffic passed through the main routes out of Ghor, now the trade is much more small-scale, using minor routes and back roads down through the southern districts of Ghor, leading directly into the northern districts (Baghran) of Helmand.

With the progressive shift from what was seen to be an open and legal market to one that is less legal, ensuring protection has become even more risky. Several informants reported that official government action had captured various trading convoys, taken half the opium, and sold this on directly to other traders while releasing the other part back to the owners for a further payment. In one case a seizure of over a ton of opium went through the public spectacle of burning, although in actuality a substitute was burned, with the seized opium being sold on to other traders. While in the past key traders could secure reasonable protection from random robbery through the networks that they had established, more recently it has been less easy. Transport of opium has been scaled down to individual pick-up trucks[31] and even motorbikes, a strategy of dispersing the risks. However, one trader (Informant G4) reported that relatives of his were ambushing the motorbike traders, because these traders were not in a position to make complaints about theft to the authorities.

Involvement of authorities in opium trade. According to all informants and consistent with the means by which risks of theft were reduced, many key government officials have been closely linked with the opium trade in the recent past and have made personal fortunes out of the "taxes" they levied on it. As in the case of Helmand, an understanding of the way in which the opium trading systems work, the protection systems provided, and the taxes levied requires a district-level analysis of key power holders and their wider networks. While the recent appointment of a provincial governor who comes from Badakhshan, has no legacy of engagement in the opium trade, and no provincial political ties has led to a re-ordering of affairs at the provincial level, it is less clear what has happened at the district level. It was consistently reported that key district authorities who had been in position since the fall of the Taliban were still on the scene, although they might have been moved between districts. One had recently confiscated 15 kg of opium from a group of farmers, but one trader commented, "we were told it would be burnt but who knows."

Prices, margins, and value chains. Finally, there is the issue of margins at each stage of the transfer of opium. While these are confounded by the rapid changes in market prices which can lead to windfall profits or severe losses for those in the trade, several generalisations can be made:

- Price differences as between farmers and small local traders at the village level are about $10 (Afs 500) per kg, with farmers selling at about $80 to $100 (Afs 4,000-5,000) per kg.
- Village traders could sometimes sell on with a margin of $20 to $40.
- Informant G11 would pay $60 to farmers and sell on for $80 to $100; traders would sell for $200 at the border because of the risks of getting it over the border, a premium based on having good information on prices and good connections; it is easier to get opium from a village or town in Ghor to Shindand than from Shindand across the border.
- Between Mazar and Chaghcharan a price difference of Afs 3,000-4,000 ($60-80) per kg is common, and a slightly greater margin of $80 to $100 is likely between Chaghcharan and Helmand.

[31] During the research one pickup truck carrying opium crashed its way through a checkpost and escaped in Dolainah between Chaghcharan and Sharak.

V. CONCLUSIONS

The first point to consider given the evidence presented in this chapter is the extent to which trading systems at this "middle-market" level have changed since the UNDCP (1998) study. In many respects, there are remarkable similarities in terms of actors, differentiation between types of traders, and the nature of the risks that they face. Indeed, it is possible that the trading systems in Ghor closely resemble those described in Nangarhar in 1998, with the domination of a central bazaar and evidence of a somewhat vertically integrated trading structure. However, details on differential price structures were not collected in this study, so it is not clear how far the comparison can be pursued.

One should not ignore, however, the extent to which the context has changed, including the increase in the number of traders since 1998 driven by dramatic price increases and shifting production levels. While the number of traders has probably increased much more at the bottom level and may well be in decline by now, the role of credit in a total trading portfolio may have changed and possibly increased from the modest levels (10-20%) reported in UNDCP (1998).

A key conclusion from the UNDCP (1998) study was of rather distinct regional markets reflecting a fragmented rather than unitary market in Afghanistan. The evidence presented here appears rather consistent with this story, and with evidence of market networks increasingly working through bounded relations of trust, there is clearly some caution required in terms of assuming a national market, and some degree of market segmentation seems equally possible.[32]

Indeed, and this leads to a second area of consideration, what lessons might be drawn from this evidence? There are indications that processes of interdiction and eradication are leading to increasing concentration and control of the opium trade at least in Helmand. While it might be too strong to apply labels of cartel formation and "mafiazation" at this stage, nevertheless at the very least it is clear that current pressures and enforcement practices against opium have played into the hands of key actors in the opium economy, allowing them to consolidate and even strengthen their positions.

While there is some evidence that interdiction measures and policing of transit routes may lead to a lowering of prices in the market for opium at specific times, it is also likely that seizures could lead to greater price rises when trading is possible, reinforcing the market position of opium traders with stocks. Market mechanisms may therefore provide higher potential profits to traders in compensation for the risk of losses due to seizure.

Note should be made of the HAVA experience in Helmand and measures taken to achieve a large reduction in Helmand's opium poppy area during the 1960s to 1980s. It is clear that this was not just about law enforcement but also about the delivery of a whole range of farm services, ranging from extension to other inputs and combined with an assured market around cotton processing. Current conditions for cotton production and processing described in this chapter (and there have also been recent protests by Helmandi farmers about prices)[33] indicate that addressing the informal regulation of markets, not just around opium but for other crops as well, is a critical issue.

[32] The technical analysis in Chapter 5 supports the argument that opium markets in Afghanistan have become less integrated in the last half-decade, although it suggests that in the 1990s the two markets for which long time series price data are available (Nangarhar and Kandahar) were integrated.

[33] See Pajhwak Afghan News October 14-2005, "Afghan Cotton Farmers Blast Govt for Failing to Keep Promises".

The articulation of Ghor's opium economy with that of Helmand is clear from this study. If pressures to reduce opium poppy cultivation in Helmand increase, it is evident that production could be shifted more into Ghor, facilitated by credit and trade arrangements and potentially stimulated if prices rise. Anticipatory action and development in this remoter province might do much to prevent this from happening, as well as addressing the significant levels of poverty found in Ghor. The move of traders from opium back to livestock trade could surely be assisted.

Looking beyond Afghanistan, it is striking how similar many of the issues discussed here are to studies on middle markets (positioned broadly between wholesale supply and individual purchase) for drug distribution in the west. Work in the UK by Pearson and Hobbs (2001) noted just how small and flexible trading networks were; emphasized that transactions involved market-defined roles of responsibility, risk, and reward; and found little evidence of organised crime groups with extensive tentacles. Instead they emphasized the distinct regional nature of drug markets in the UK. Rather than consider a national drugs market, they argued that it should be thought of more as a series of local and regional markets in which kinship and ethnic identity remain important. The need is to think more of contingent and context-specific opium trading systems in Afghanistan, which in some ways may be more amenable to effective interventions, rather than to work through a model of a national market. This would, however, require a greater depth of understanding than currently exists.

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Chapter 5

PRICES AND MARKET INTERACTIONS IN THE OPIUM ECONOMY

William A. Byrd and Olivier Jonglez[1]

I. INTRODUCTION

Given the enormous economic importance and development implications of drugs in Afghanistan,[2] prices and price movements in the opium economy are of great interest:

- Prices are a critical determinant of the overall level of opium/opiate revenues in the Afghan economy, and of the distribution of revenues within the drug industry, i.e. how much goes to farmers, traders at different levels, processors/refiners, long-distance traffickers and wholesalers, and retailers.
- As in the case of other market activities, prices provide market-based signals to producers, traders, other actors, and consumers which influence their decisions; however, the characteristics of the product, the producers, and final demand, and the status of the opium economy as a set of illicit activities may affect the impact of prices on decisions by the different actors.
- Since opium is a durable good and is widely held as an asset, opium prices directly affect asset values, capital gains, and decisions on building, holding, and selling inventories.
- The large amount of opium-denominated debt in Afghanistan's rural economy (well into the hundreds of millions of dollars by all accounts) means that opium prices can have an effect on the level of opium-related debt, debt distress, and associated adverse consequences including for rural poverty.
- And finally, price behavior–structure, movements, fluctuations–may shed light on the characteristics of opium markets and of the drug industry, which could provide indications on how to respond to the opium economy effectively.

This chapter analyzes available data on prices of opium and opiates in and around Afghanistan, with a view to better understanding (i) **price structure**–including the vertical structure of prices from farm-gate to and beyond the border (and through processing), and the pattern of prices across different parts of Afghanistan; (ii) **price trends**– overall, and in different markets; (iii) **price behavior**–including price formation, price volatility, and responses of prices to economic shocks (e.g. drought) and changes in counter-narcotics policy and practice; and (iv) **extent of market integration** between different opium markets in Afghanistan. The chapter will draw out to the extent possible what this analysis of opium prices implies about the functioning of the opium economy, including in particular price formation, and also implications for counter-narcotics policies. Unlike studies of pricing and industry structure for licit activities (where the focus may be on structural or other impediments to efficient market functioning, with a view to removing them), in the case of the opium economy the ultimate objective is to find weaknesses and vulnerabilities in the market and industry structure that can be exploited as part of the counter-narcotics strategy.

[1] Adviser and Consultant, respectively, South Asia Region, The World Bank. Comments from Thomas Pietschmann and Peter Reuter are gratefully acknowledged. The views, findings, interpretations, and conclusions expressed in this chapter are the authors' and do not necessarily reflect those of the United Nations Office on Drugs and Crime or the World Bank, the latter's affiliated institutions, its Executive Board of Directors, or the countries they represent.

[2] See Ward and Byrd (2004), and for a shorter discussion, Byrd and Ward (2004).

A number of caveats and constraints need to be kept in mind in conducting this analysis and especially in drawing out implications. First, the quality of opium price data is weak and variable (see Annex A for further discussion). Understandably, there is nothing like posted or transactions-based price data available; the best information on prices comes from UNODC's local offices which periodically inquire about and compile raw opium prices in key market areas. Information on downstream wholesale prices, including those of processed opiates and prices in neighboring transit countries, tends to be less regularly available and is likely to be even weaker in terms of quality and reliability. Second, although there are opium price series for an increasing number of localities in Afghanistan, price data are available over a significant length of time only for two points (Nangarhar and Kandahar). Third, most price series are monthly, whereas fieldwork suggests that there are substantial price fluctuations on local markets on as short as a daily basis, reflecting sizable buying activity (see Chapter 4). Fourth, the narcotic content of raw opium (as well as the moisture content and therefore weight of "wet" opium freshly harvested), and the purity of processed opiates (morphine and heroin), may vary somewhat. And fifth, changes in the "product mix" at different stages, for example the increase in the proportion of opium processed into morphine and heroin within Afghanistan, complicate product mix and value calculations.

Nevertheless, price data provide useful information about the opium economy and shed light on how it functions. They are essential for building rough estimates of the distribution of gross opium economy revenues among the different actors, as is done by UNODC in its annual opium surveys on Afghanistan . More specifically, price data can also tell us something about market structure, price formation, and the degree of integration among different opium markets in Afghanistan. Recent price developments on Afghanistan's opium market indeed do provide valuable insights. The Taliban ban in late 2000, and to a lesser extent the sharp reduction in opium production in Nangarhar Province in 2004-2005, are "natural experiments," in which the opium market responded to major shocks. Analysis of these episodes can facilitate better understanding of the functioning of opium markets and of the drug industry more generally.

This chapter is organized as follows. Section II provides an overview of the evolution of opium and opiate prices over the past decade or so, including price trends and the changing volatility of prices. Section III analyzes the spatial pattern of farm-gate prices in Afghanistan and how this has changed over time, with some attention also to prices of opiates in neighboring countries. Section IV examines the "vertical" structure of opiate prices, from raw opium at the farm level through traders and processors within Afghanistan to the markets in neighboring countries. Although the chapter will not look in any detail at prices further downstream–long-distance trafficking, wholesale prices in major consuming countries, and retail prices for final consumers–there will be a brief overview of this end of the "value chain" to provide perspective and inform the analysis of the upstream portion. Section V analyzes market integration in the opium economy, based on available data for farm-gate prices of raw opium and making use of several econometric techniques. The concluding section highlights the key findings and their possible implications for counter-narcotics strategy and policies.

The preliminary nature of the analysis in this chapter should be emphasized. Data weaknesses and gaps mean that the picture painted by price patterns and the results of technical analysis need to be treated with caution, and reinforced with qualitative information

where possible. Nevertheless, it is hoped that the chapter will shed light on broader issues related to the structure and functioning of Afghanistan's opium economy, with significant implications for counter-narcotics strategy and policies.

II. THE EVOLUTION OF OPIUM AND OPIATES PRICES OVER TIME

The last decade has seen major changes in opium prices in Afghanistan, reflecting most notably the Taliban ban, its aftermath, and more recent counter-narcotics efforts, as well as changes in the global structure of opium production, which have left Afghanistan in a dominant position accounting for close to 90% of world illicit opium production. These global changes reflect successful counter-narcotics efforts in some other countries (most recently in Myannmar) and the major advantages that Afghanistan offers as a center of opium production–good climatic and soil conditions (resulting in the highest illicit opium yields in the world); poverty and associated plentiful labor supply (including skilled labor for opium poppy harvesting); weak governance and lack of rule of law; and more generally (except briefly during the Taliban ban of 2000/2001) a conducive overall environment for opium production at least in large parts of the country.

Due to among other factors the illegality of production and trade in opium, price data and information about price formation on opium markets are difficult to collect (see Annex 5A). However, some price data are available, most notably from UNODC (see various publications listed in the References section, and summary information and analysis in Pietschmann, 2004). These price data are based on periodic inquiries in major opium producing areas (interviews with some 170 farmers and 160 traders) on a monthly basis. Although it is not possible to select the traders and farmers on a random sampling basis each month, comparisons with the results from much larger samples of randomly sampled farmers as part of UNODC's annual opium survey have yielded similar results. There is a complete series of monthly data stretching back to 1997 for farm-gate dry opium prices in Nangarhar and Kandahar. Since 2003 price data are available on a systematic basis for four more provinces (Helmand, Badakhshan, Herat, Mazari-i-Sharif). More recently, estimates of prices in a total of some 25 provinces were compiled by UNODC (2006, pp. 18-38). These data can be used to analyze price trends and volatility (discussed in this section), as well as spatial price patterns (see Section III).

Price Trends

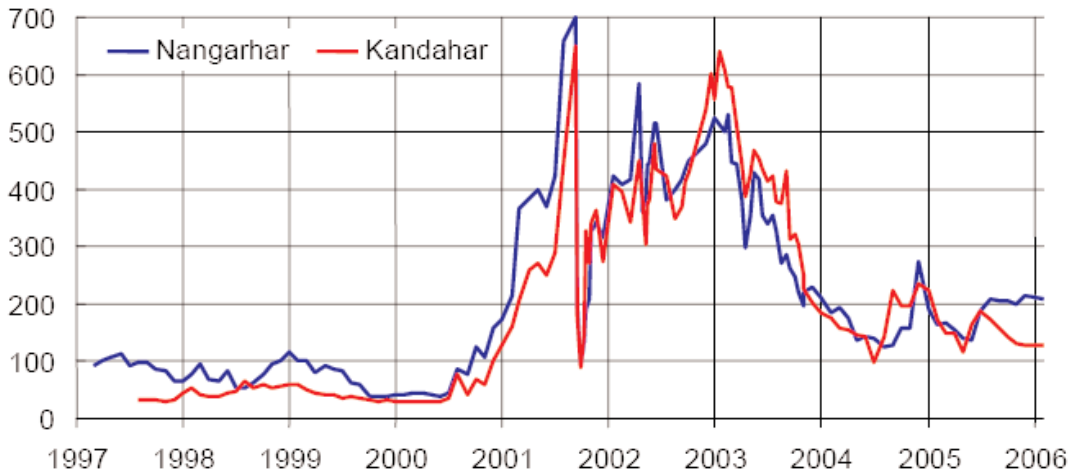
As shown in Figure 5.1, changes in farm-gate opium prices have been dramatic since the Taliban ban in the second half of 2000. After years of relatively low prices, farm-gate opium prices rose very sharply in late 2000 and especially in the first half of 2001. There was a sharp but very short-lived decline coinciding with the post-September 11 war against the Taliban, followed by maintenance of high prices lasting well into 2003. The second half of 2003 and first half of 2004 saw progressive large price declines followed by a degree of stability since then, albeit at a level around three times as high as that prevailing immediately before the Taliban ban. More specifically:

- Before the Taliban ban in October 2000, opium prices ranged from US$ 30-100 per kg of dry opium.
- The Taliban ban induced a very sharp increase in opium prices, reflecting the nearly

complete stoppage of production, peaking at US$ 700/kg in September 2001, approximately a 10-fold increase from September 2000.

- Prices subsequently fell sharply during the post-September 11 war that ousted the Taliban,which may reflect temporary disruption of markets, traders getting rid of stocks for fear of having them destroyed, or other expectations of future price declines. However, prices recovered very rapidly in late 2001 and remained very high and unstable during 2002 and until early 2003, probably supported by the re-building of inventories. During this period prices peaked at US$ 600/kg, with large monthly fluctuations.
- Starting near the beginning of 2003 and especially in the second half of the year, opium prices declined progressively and somewhat stabilized during 2004-2005, but at levels above US$ 150/kg in the main markets–around three times what was seen at the end of the 1990s. Most recently, in 2006 prices have further softened, most likely reflecting expectations of a bumper opium harvest.

Figure 5.1: Dry Opium Prices in Kandahar and Nangarhar, 1997-2006 (US$/kg)

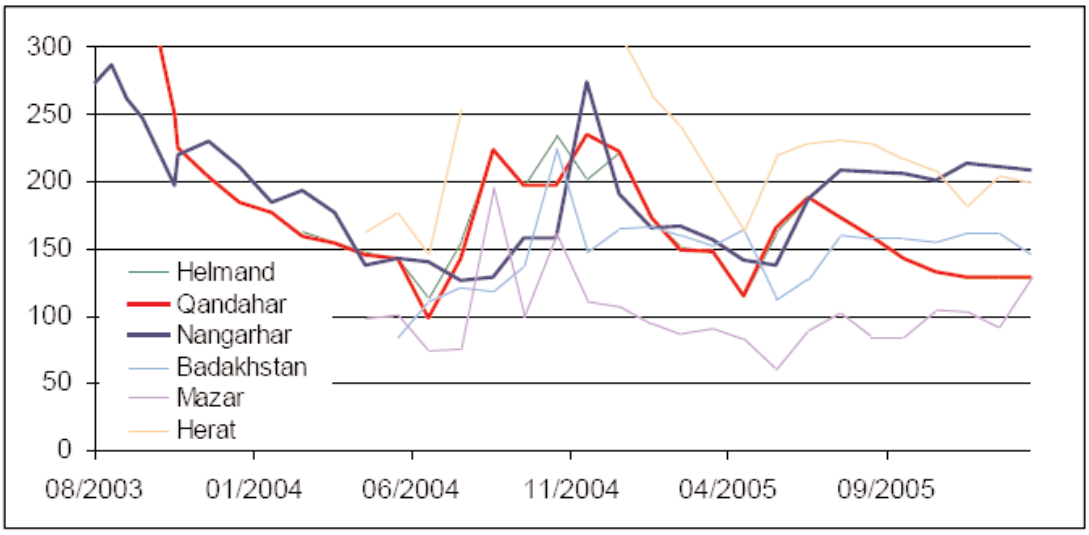


Source: MCN/UNODC Afghanistan Opium Price Monitoring.

Price observations for a larger number of locations, available only since 2003, are shown in Figure 5.2. These exhibit broadly similar trends to those for Kandahar but at different levels and with fluctuations. Moreover, it is interesting that the price in Nangarhar started deviating from that in Kandahar from the middle of 2005 (after Nangarhar became a minor producer following a largely successful ban and associated law enforcement efforts starting in late 2004) and has stayed at a higher level of around US$ 200/kg as compared with most other localities. Spatial price patterns will be discussed in more detail in Section III.

The interpretation of opium price trends requires different factors to be taken into consideration. Some are classical price determinants for agricultural goods–demand, supply, weather conditions. Others are more specifically related to the characteristics of opium as an illicit product and a durable good which maintains value as it is held (losing some weight through drying, but thereby gaining a higher price as "dry" opium).

Figure 5.2: Dry Opium Prices in Six Localities, 2003-2006 (US$/kg)



Source: MCN/UNODC Afghanistan Opium Price Monitoring.

First, as is normal in the case of agricultural products especially in developing countries, prices are subject to seasonal variations, with modestly lower prices at time of harvest (in the spring or early summer, varying depending on climate, altitude, and planting time) and prices rising outside the harvest season. This is particularly true for fresh ("wet") opium prices, as fresh opium is mostly available during and immediately after the harvest period, and sometimes no fresh opium can be found in some regions outside the harvest season. Seasonal price variations are not surprising given the characteristics of opium as an annual agricultural crop and the high cost of capital in Afghanistan's rural areas and in the drug industry, as demonstrated by the extremely high implicit rates of interest on loans against the opium harvest. These seasonal effects are most probably dampened by other factors; for example, large quantities of opium produced by farmers to repay their debts and not sold directly on the market (instead held by the creditors as inventories to respond to subsequent price opportunities) might well tend to reduce the supply effect of the harvest on prices.[3]

Second, weather conditions have an impact on yields and hence on overall supply, and thereby can cause substantial changes in prices. In 2004, for example, insufficient rainfall combined with other factors induced lower yields, and opium prices stopped declining, although the area under cultivation increased by a large margin. The opposite impact was seen in 2005, when prices decreased despite a decline in the area under cultivation–with higher yields due in part to better weather conditions, opium production was almost stable. Weather conditions also can influence the moisture content and narcotic quality of opium; for example, heavy rains in 2003 led to a larger gap between fresh and dry opium prices, as the fresh opium contained more water and therefore would lose more weight while drying.

Third, the influence of final consumption demand on prices cannot be easily measured, but consumption is assumed to be fairly stable in mature OECD markets although it may be growing in some new markets (outside Europe and North America), including in particular in most countries neighboring Afghanistan and in several countries along trafficking routes beyond. Overall, the global demand curve for opium and opiates appears to have shifted out. Global supply appears to be quite responsive to global demand but not necessarily influenced by current global prices in a systematic way in the short run. Given the long and multiple-

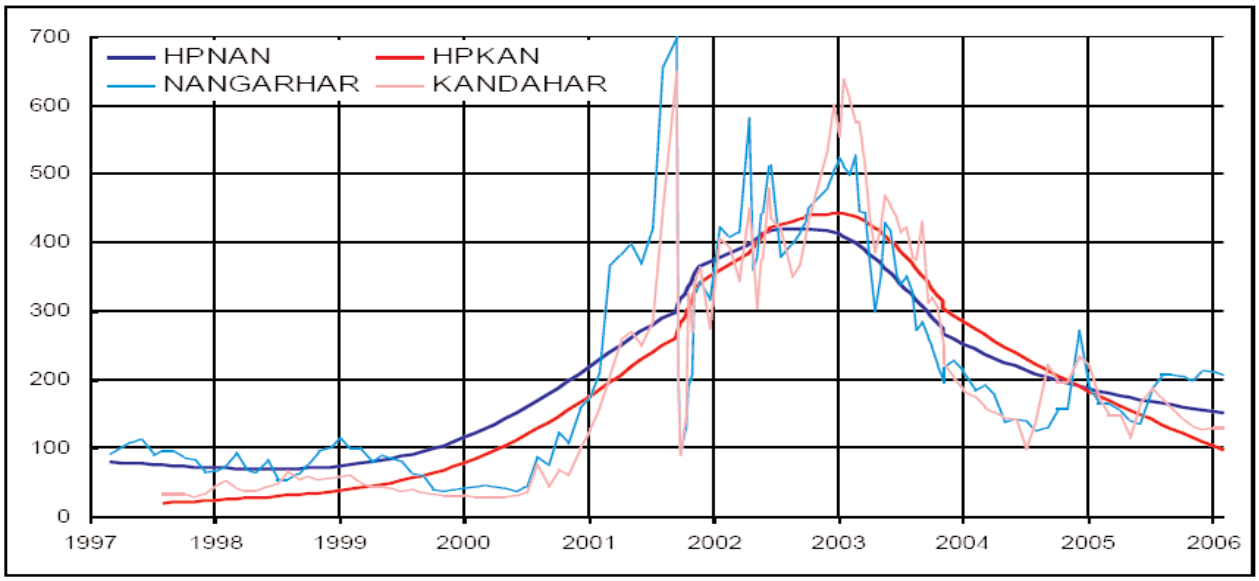
[3] The complexity of the opium markets prevents us from using normal techniques of de-seasonalization, as other factors would necessarily affect the analysis.

stage value chain and the enormous margins between downstream stages (discussed in Section IV), this is not surprising. Supply shocks (including weather developments, production bans, eradication, and other law enforcement efforts) are major determinants of prices, mediated by inventory adjustments which could be expected to respond to prices and price expectations. For example, uncertainties during the late 2001 war against the Taliban regime, and associated expectations that it might become more risky to hold inventories of opium, appear to have led to substantial release of opium inventories onto the market and hence to a sharp (albeit very temporary) decline in prices. The Taliban ban of 2000-2001, by raising prices sharply, must have elicited a massive depletion of inventories which enabled supply of opium and opiates to downstream stages to be largely maintained.

Fourth, the illicit nature of opium production and trade makes it very dependent on the political situation and on law enforcement: (i) the measures undertaken by the authorities can have a direct effect on opium supply (through seizures, eradication, etc.), and (ii) strong law enforcement and political pressure can affect prices by increasing the "risk premium" that opium traders charge. Moreover, the risks taken by farmers can be to some extent rewarded by a price increase (even if the farmers have little influence on prices) when the threat of eradication is high.[4] This second channel provides a possible explanation for the maintenance of relatively high (in relation to the late 1990s) opium prices as observed recently. Just as the de-facto legal status of the opium trade under the Taliban regime may have helped keep prices low, increasing criminalization and law enforcement efforts subsequently have tended to induce higher prices through higher risk premia, even if success in reducing opium production has been limited.[5]

In order to focus the analysis on underlying price trends as opposed to seasonal or other short-term fluctuations, smoothed price series were obtained after application of the Hodrick-Prescott filter, as explained in Annex 5A (see Figure 5.3). The smoothed price trends give rise to similar findings as the unsmoothed price series.

Figure 5.3: Opium Price Trends in Nangarhar and Kandahar



Note: Obtained after application of Hodrick-Prescott filter, lambda = 14.400 (see Annex A).
Source: MCN/UNODC Afghanistan Opium Price Monitoring.

[4] However, since many farmers have sizable opium-related debts, they may reap little if any of the benefit from higher opium prices. See Zia et al (2005) for a discussion of opium debt in the context of rural finance in Afghanistan.
[5] Supporting this hypothesis is the findings of rural research which indicate that farmers have become well aware of the changing legal status of opium and eradication risks etc. See various works by Mansfield.

Price Volatility

As can be seen from Figures 5.1 and 5.2, opium prices exhibit considerable volatility. An important question is whether the extent of price volatility has changed over time, and if so why. The indicators chosen to assess price volatility are:

- ***Monthly rate of change,*** in absolute value terms. Repeated large monthly changes are a sign of short-term instability and high point variations.
- ***Relative standard deviation,*** calculated as the ratio of the standard deviation of prices in the last six months to the average price during that period. Hence it is com parable across the different price series which have different average levels. This is an indicator of price instability over multi-month periods.

Table 5.1 shows annual averages for monthly rates of change in prices in different markets over the years for which data are available. There is substantial price volatility, with prices changing by more than 10% each month on average in most localities, even apart from the period of the Taliban ban in late 2001, a time of very high price volatility due to the large step-change in prices. But it is hard to draw any conclusions about changes in price volatility over time. In fact the hypothesis that price volatility did not change significantly in recent years as compared with the late 1990s cannot be rejected. This suggests that market factors–in addition to, for example, changing intensity of enforcement efforts against opium–are major contributors to price volatility.

There do not appear to be major differences in volatility among the six localities for which recent data are available. However, there were high monthly variations in all areas in 2004, indicating greater instability of prices. Monthly variations decreased in 2005, except in Helmand where there have been unsuccessful counter-narcotics efforts and serious problems of insecurity. In early 2006 only Mazar-i-Sharif experienced high monthly price variations, possibly because of recent eradication measures.

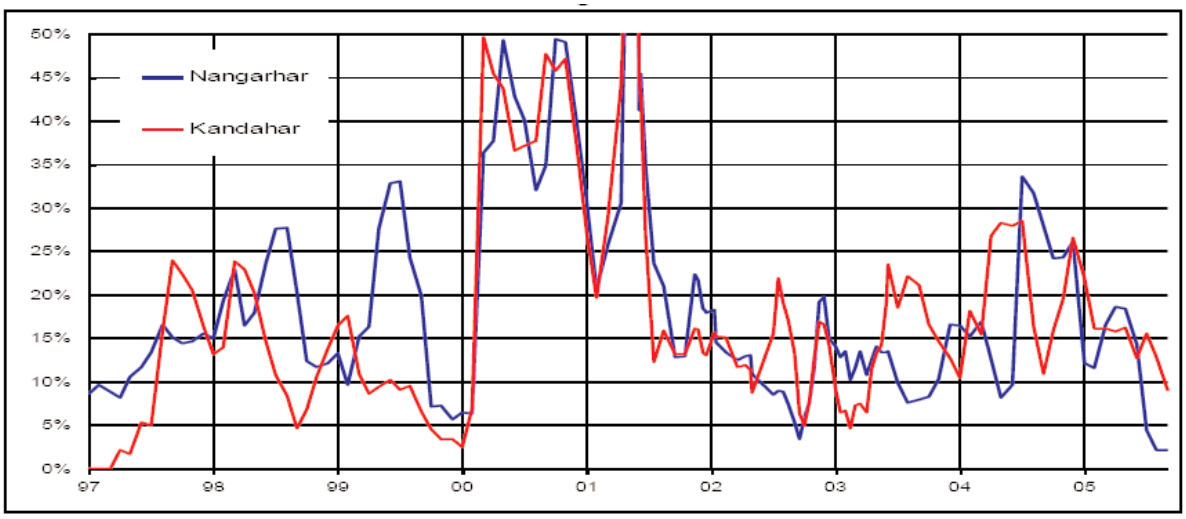
Table 5.1: Yearly Averages of Monthly Rates of Change in Opium Prices

	1997	1998	1999	2000	2001	2002	2003	2004	2005
BADAKHSHAN								13.13%	9.05%
HELMAND							4.34%	13.40%	13.56%
Herat								8.25%	10.24%
MAZAR								27.47%	13.94%
NANGARHAR	8.32%	17.04%	11.72%	23.92%	26.76%	11.67%	9.53%	14.11%	10.06%
KANDAHAR	2.54%	15.43%	6.94%	28.19%	34.19%	15.89%	8.97%	16.46%	13.19%

Note: The averages are of the absolute value of monthly rate of change.
Source: MCN/UNODC Afghanistan Opium Price Monitoring.

Longer-term trends in the second measure of price volatility are shown in Figure 5.4. Volatility increased significantly during the Taliban ban and immediately afterward, before returning to somewhat less volatile patterns in recent years.

Figure 5.4: Volatility Ratio (Standard Deviation/Mean) in Kandahar and Nangarhar

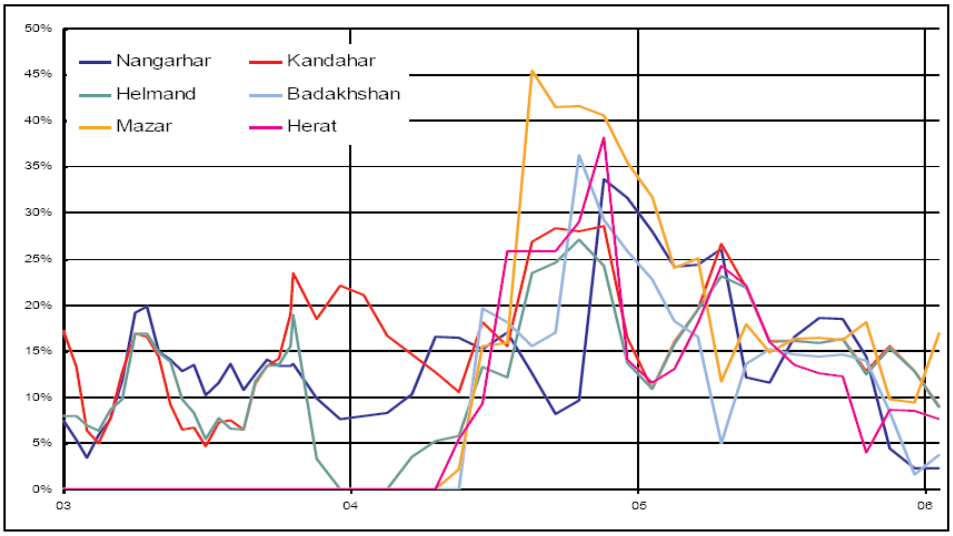


Source: MCN/UNODC Afghanistan Opium Price Monitoring.

Turning to the more recent period, volatility as per the second indicator was high in 2004 in all six areas for which price data are available, especially in Mazar-i-Sharif (Figure 5.5). Since mid-2005, however, there has been much less volatility in all localities.

This discussion has brought out the impact of the strong pressure on opium markets between late 2000 and mid-2003. The behavior of opium prices appears to be settling down somewhat. However, this could be only a temporary phenomenon, depending on whether additional law enforcement measures and political pressures are brought to bear against the drug industry.

Figure 5.5: Volatility Ratio (Standard Deviation/Mean) in Different Regions



Source: MCN/UNODC Afghanistan Opium Price Monitoring.

Implications for Counter-Narcotics Strategy and Policies

While it is difficult to draw hard and fast conclusions from the price data, it is clear that strong and effective counter-narcotics actions–which reduce the production and supply of opium–can have a major effect on opium prices. This was evident most notably in the Taliban ban of 2000/2001 but also, at a more local level, in the sharp reduction in opium production in Nangarhar Province between 2004 and 2005. The price effect of the latter was not at all comparable to that of the Taliban ban, however, as overall national production (helped by higher yields) did not decline significantly. Nevertheless, a gap opened up between the price in Nangarhar and elsewhere, which is most logically explained as being a result of the extremely sharp (95%) reduction in opium production in Nangarhar and associated disruption in the local opium market.

Thus a first implication that can be tentatively drawn from this review of price trends is that supply changes (taking into account inventory adjustments) are manifested in changes in farm-gate prices, and that prices therefore comprise a reliable signal of the overall supply situation and expectations of supply changes. However, higher prices also send signals to market actors, to increase opium production (perhaps by moving to other provinces where law enforcement pressure is less, or by getting into production in marginal areas where yields are lower and poppy cultivation is justified only if prices are high), and to release inventories onto the market, often with handsome capital gains. Moreover, higher opium prices tend to exacerbate the problems of heavily indebted poppy farmers, most notably as a result of the sharp price rise after the Taliban ban.

In this context, the maintenance of farm-gate opium prices during the last couple of years at levels several times those prevailing in the late 1990s suggests that, despite the failure to significantly reduce opium production, the "risk premium" for farmers to cultivate poppy has increased significantly. This is not surprising, given the de-facto legality of opium under the Taliban until their ban was imposed, and the erratic but nevertheless significant eradication campaigns and other law enforcement efforts since 2002, especially in late 2004. The higher underlying price structure at present may also reflect increasing extortion from farmers by authorities and payments of "protection money" on a regularized basis, whereas during the Taliban period there appears to have been a relatively low and fairly regularized levy on opium.

III. HORIZONTAL STRUCTURE OF PRICES (CHANGING SPATIAL PATTERNS)

Opium prices vary considerably across different parts of Afghanistan. A "snapshot" of the spatial pattern of prices as of December 2005 is available from UNODC (2006, pp. 18-38) and is shown in Table 5.2. Very significant regional differences are apparent from the table. The highest prices are encountered in the eastern zone, where law enforcement has been vigorously pursued. Especially in Nangarhar, where opium production fell sharply, prices reported at the end of 2005 were more than twice as high as in the Northern zone, where they are the lowest.

Table 5.2: Spatial Pattern of Dry Opium Prices

	Rapid Assessment	Price Evolution	Cultivation Change in 2006
North-Eastern zone			
Badakhshan	132	+	++
Takhar	106	+	=
Eastern zone			
Nangarhar	207	+	++
Kunar	175	+	=
Laghman	191	+	++
Nuristan	190	..	-
Northern zone			
Baghlan	106	..	=
Balkh	100	+	-
Bamyan	100	..	=
Faryab	101	+	+
Jawzjan	156	..	+
Samangan	96	..	-
Sari Pul	99	..	-
Central zone			
Khost	169	..	+
Parwan	200	..	=
Kapisa	191	..	+
Southern zone			
Kandahar	140	-	=
Helmand	141	-	++
Uruzgan	135	..	++
Zabul	146	..	..
Western zone			
Herat	156	-	+
Farah	177	-	=
Nimroz	205	..	=
Ghor	155	-	++
Badghis	99	..	+

Source: UNODC (2006), Opium Price Monitoring.

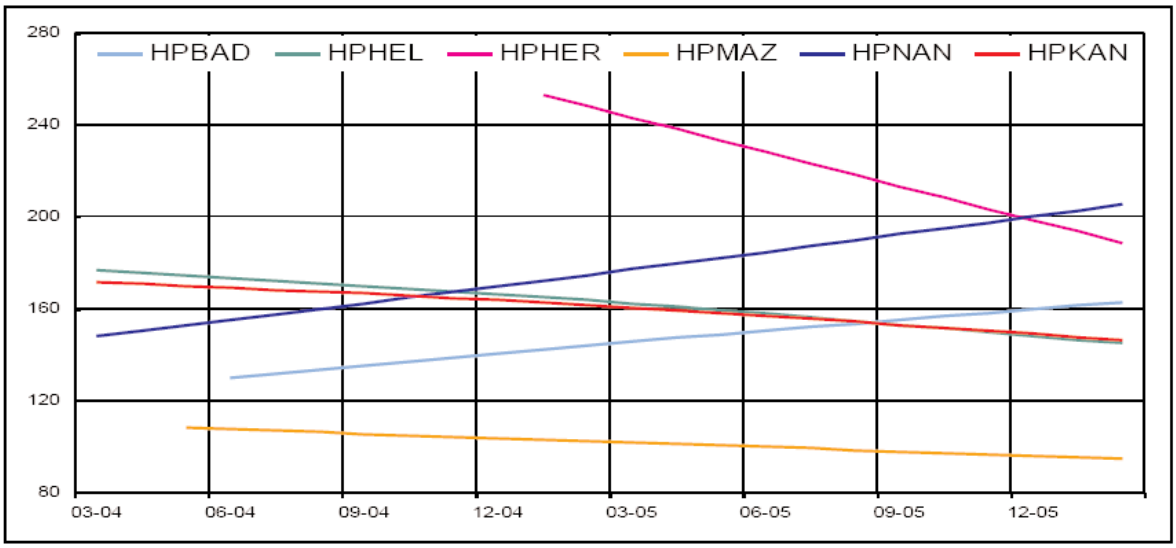
Recent price developments suggest that the regions where progress has been made in law enforcement, particularly in the Eastern zone where eradication threats were the most credible and effective (Nangarhar), are the ones where prices are significantly higher or increasing. More generally, looking at price evolution together with cultivation trends reported in the Rapid Assessment Survey, there is to some extent an expected inverse correlation between price movements and changes in cultivation. The most notable exception to this pattern (Nangarhar and Laghman in the eastern zone) can be explained by the fact that production in these provinces is rising from extremely low levels resulting from strong law enforcement efforts which are continuing.

As can be seen from Figure 5.6, recent smoothed trends in opium prices in the six localities for which data are available show some signs of convergence, albeit partial. The main exception is Nangarhar with a rising trend since 2004, most probably reflecting the largely effective ban on opium production in that province (previously one of the major opium producers in Afghanistan). In Helmand and Kandahar, prices have been on a downward trend, with production and poppy cultivation rising and apparently not much real pressure from authorities to prevent opium poppy cultivation. The significant downward trend for prices in Herat may be related. As can be seen from these figures the trends are becoming relatively stable and flatter, despite some recent contradictory moves.

Thus the spatial pattern of opium prices in different parts of Afghanistan shows con siderable variation, which might be in part explained by factors like the following:

- Proximity to borders where cross-border transit is occurring; proximity to the Iranian border explains why prices in Herat, Farah, and Nimroz are so high.
- Distance from central markets in Afghanistan like Helmand/Kandahar, or previously Nangarhar. The farther away a local market is from these central markets, the lower the price tends to be, since higher transport and other costs (including risk of interdiction or theft) are incurred in reaching the central market.
- Climatic and agricultural conditions affecting the ability to achieve high opium poppy yields and morphine content. Major producing provinces tend to have lower prices, as was the case in Nangarhar before the ban and is still true in Helmand / Kandahar and Balkh, as well as Badakhshan.
- Eradication and law enforcement efforts. These appear to have a major impact on prices. Prices are higher in provinces where eradication and law enforcement efforts are vigorously pursued, as in the case of Nangarhar and other Eastern provinces.

Figure 5.6: Trends of Opium Prices in Different Regions of Afghanistan



Note: Obtained after application of Hodrick-Prescott filter, lambda = 14.400
Source: MCN/UNODC Afghanistan Opium Price Monitoring.

The spatial pattern of prices has varied over time, as illustrated in Table 5.3. Between June 2004 and February 2006, prices in Badakhshan increased by 70%, whereas prices in Helmand and Kandahar fell by 10%. Prices in Badakhshan were the lowest in June 2004 but are now significantly higher than in Southern or Western provinces. Between June 2005 and February 2006, prices in Balkh and in Nangarhar rose sharply (by 120% and 50%, respectively), considerably affecting the spatial pattern of prices.

In addition to the short-term changes noted above, significant changes in spatial patterns of prices have occurred over longer periods. This suggests that local factors have had an important influence on prices, and that such factors can change over time. In 1997 the price for dry opium in Nangarhar was up to three times as high as in Kandahar. Then the prices in the two markets approached each other by 2000, and in October 2001 prices were considerably lower in Nangarhar than in Kandahar (58% less). But they then were higher in Nangarhar in 2002 before returning to lower levels than in Kandahar until recently, when prices in Nangarhar rose due to the sharp reduction in opium production. Implications of such price trends for market integration are discussed in Section V.

Table 5.3: Recent Evolution of Prices in Six Localities (US $/kg

	June 2004	June 2005	February 2006
Nangarhar	143	137	208
Kandahar	143	165	129
Helmand	143	162	129
Badakhshan	84	112	145
Mazar	101	60	130
Herat	176	219	199

Source: UNODC (2006), Opium Price Monitoring.

Turning to the spatial pattern of prices for processed opiates, Table 5.4 presents data for prices of raw opium and opiates in different regions in Afghanistan and in neighboring countries. There are very large spatial differences in opiates prices, both regionally and between countries. Opium prices are especially high in Iran, where law enforcement is strict and where a large share of the opiate consumption market is still for opium rather than heroin. Not surprisingly, it appears that very significant profits can be made by crossing the Iranian border or by entering Central Asian countries like Tajikistan. Differences between heroin prices are much larger, and are very significant even within Afghanistan. Heroin prices in Herat and Kandahar appear to be pushed upward by the large cross-border profits related to the Iranian and Pakistani markets. Badakhshan's prices for heroin are surprisingly low, as proximity to the Tajikistan border might have been expected to raise the price. Large differences can also be observed between border regions of neighboring countries and their big cities, as illustrated by the large gap between Sistan-Baluchestan and Teheran prices for both opium and heroin, indicating that substantial profits can be made by transporting the products within the country, but at higher risk due to strong law enforcement.[6]

Table 5.4: Geographical Pattern of Opium and Opiates Prices (US $/kg)

Country	Region	Opium	Date	Heroin	Date
Afghanistan					
	Badakhshan	145	02/06	2500	12/05
	Balkh	130	02/06	2620	01/06
	Herat	199	02/06	3952	01/06
	Nangarhar	208	02/06	2351	01/06
	Kandahar	129	02/06	4350	01/06
Iran					
	Teheran	3400	02/05	4400	02/05
	Sistan-Baluchestan	930	02/05	2300	02/05
Pakistan					
	Peshawar	266	02/06	3349	01/06
Tajikistan					
		~ 400	03/05	~ 5000	03/05

Source: Various UNODC reports.

Implications for Counter-Narcotics Strategy and Policy

Spatial patterns of opium prices in Afghanistan suggest some policy implications:

- First, the factors affecting local opium prices, and, their respective influence, are not very clear, suggesting the need for more detailed data and further research.
- Second, variations in spatial price patterns, both short-term and over time, suggest that opium markets are flexible and mobile. While specific regional actions against the drug economy can be effective locally and in the short run, they will tend to encourage a shift of production and trade to other, less targeted regions.
- Third, the regional differences in prices around Afghanistan and associated profits illustrate the importance of trade for opium markets. This might suggest, for example, strengthening controls at borders, but sealing remote, mountainous, and porous borders may be very difficult to accomplish in practice.
- Finally, the flexibility of opium markets and the profitability of transactions make the industry a very difficult target, especially in a country where government authority is weak; this reinforces the need for a realistic, well-sequenced strategy.

IV. THE VERTICAL STRUCTURE OF OPIATE PRICES

Opium and its products dramatically increase in price along the "value chain" from raw opium produced on rural farms in Afghanistan to local markets, wholesale trade, processing into heroin or morphine, trade in neighboring countries, transit to distant consuming countries, and ultimately wholesale and retail prices in these countries. The "vertical" structure of prices can provide clues about how the drug industry is organized and its evolution over time. Although there are signs of stability (and a gradual downward trend) in prices at the downstream end of the value chain–at and near where final consumption occurs, in recent years there have been major shocks to and changes in prices at the upstream end, in and around Afghanistan. The impact of these price shocks on the vertical structure of prices sheds light on the structure of the drug industry and on price formation and how pricing deci-

[6] It is hard to explain how opium can sell at $3,400 per kg and, at the same level of market, heroin sell for only $4,400 (Tehran); the Sistan figures are only slightly better. The explanation may possibly be that the opium price is retail (sold at the gram level) and the heroin price is wholesale (multi-kg shipments). However, this requires further investigation.

sions are made.

Vertical Price Structure

Although price data are relatively weak for the parts of the opium "value chain" after the farm-gate level and before reaching prices in distant consuming countries, it is possible to piece together a rough picture of the vertical price structure and in particular the price margins at different stages. While the focus will be on those parts of the vertical price structure that pertain to Afghanistan and to a lesser extent the surrounding countries, brief summary background on downstream stages will be provided as context.

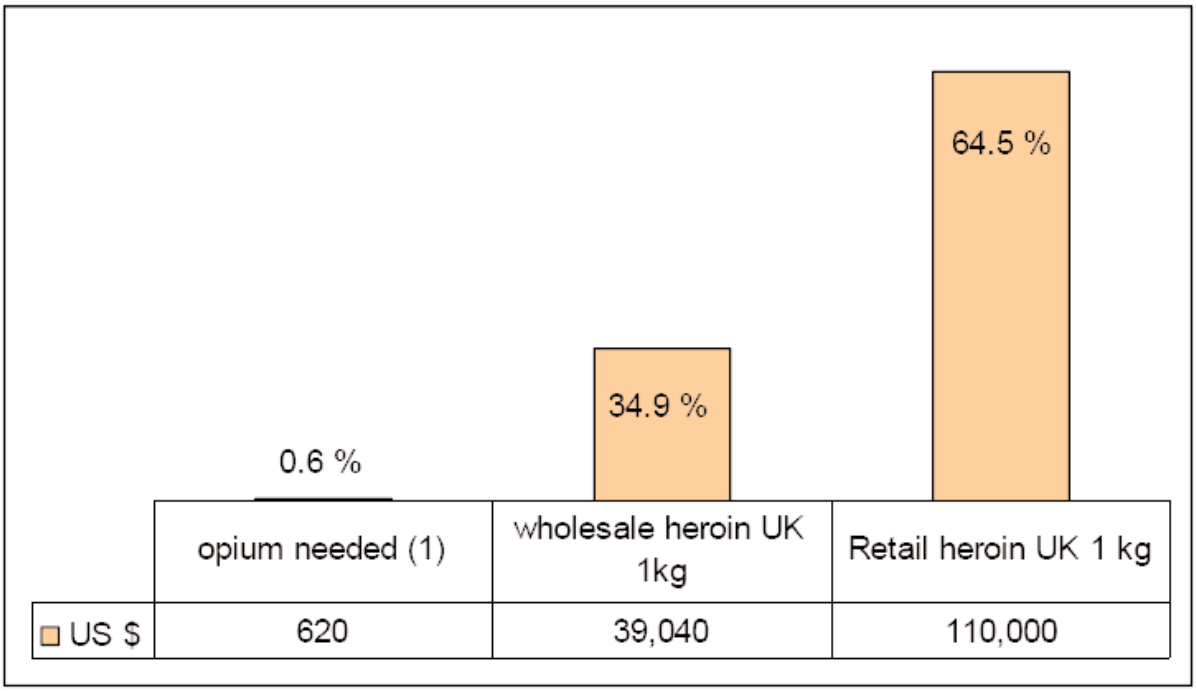
First, it is useful to review the main actors involved in Afghanistan:

- **Farmers** cultivate opium poppy for various reasons, based on complex livelihood strategies and coping mechanisms (see Chapter 3). Different types of farmers can be found, depending on the size of their landholdings and other resources. The poorer ones are often forced to cultivate opium poppy to repay high-interest debts.
- **Rural laborers** are numerous as opium poppy cultivation is a labor-intensive activity, although there is much reliance on household labor as well. Laborers are typically poor, even if wage rates are considerably higher for opium poppy laborers than for other rural laborers, since the labor is quite seasonal.
- **Small traders** buy and sell small volumes of opium at farm gate and in small general-purpose bazaars. Some of them get into longer-distance trade as well, some times involving processed opiates (see Mansfield, 2006, for some case studies of small opiate traders who run risks and frequently run into trouble).
- **Wholesalers** trade larger quantities of opium and often organize the processing of opium. They are also often involved in transferring the products across borders, and so merge with the cross-border smugglers discussed below.
- **Refiners** process the opium into heroin or sometimes morphine. Many of them are also involved in trading activities, and they often have powerful sponsors. However, there is evidence that they also process smaller volumes of opium owned by traders, on some kind of commission payment basis.
- **Government officials, warlords and commanders, and other local notables** are heavily involved in the opium economy; commonly they receive bribes and other payments at various stages of the opium chain, for "protection." At higher levels, some of them may be involved in facilitating large-scale transport and transactions, and more generally in oversight of the drug industry (see Chapter 7).
- **Cross-border smugglers** vary from small-scale individual traders to organized groups working for large traffickers. Many of them have connections (personal, family, tribal, ethnic) across the border, but it seems that the trade is taken over by other trafficking groups after entering neighboring countries.

Information is available on retail prices of heroin for final consumption in major consuming countries, and also for wholesale prices in those countries, as well as to a lesser extent for wholesale prices in the main transit countries surrounding Afghanistan. Taking the UK as an example, Figure 5.7 lays out an illustrative vertical structure of opiate prices from farm to final retail level. As is well known, the vast bulk of "value added" in the drug industry is generated outside Afghanistan, with a substantial chunk accruing in neighboring countries but even bigger price margins in transit to industrialized consumer countries, and

within those countries between wholesale and final retail prices. This has important implications for price formation at the upstream end, and for the effects of price changes in and around Afghanistan further downstream.

Figure 5.7: UK "Value Chain" for Heroin in 2004



Source: UNODC World Drug Report.
(1) opium needed for a kg of UK heroin was calculated as the price of one kg of afghan opium multiplied by the conversion ratio (8) and divided by 3 as the average purity of UK heroin is reported to be 33%.

Henceforth we focus on Afghanistan and to a lesser extent countries immediately around it. The analysis looks at "price margins," since information on costs incurred at different stages is largely unavailable. These include farmers' payment of wages to laborers, bribes paid to officials and warlords, other payments to people (e.g. salaries for those providing security at different stages), and other payments comprising part of the "value added" of the opium economy. There are also costs incurred for materials and other non-factor inputs necessary for cultivation (seeds, fertilizer), processing (chemicals etc.), and transport of opium and opiates, but these are small in relation to gross revenues (see Chapter 2). The level of uncertainty in the price information at each stage of the chain is high, so the numbers and percentages given below are very rough estimates.

Opium and opiates are durable goods (raw opium paradoxically has a longer storage life than heroin powder), enabling various actors to hold inventories, in aggregate quite large. As a result sizable inventories can be built up, held, and sold, with such decisions responding to prices, expected prices and supply conditions, political pressures, threat of law enforcement, etc. Indeed, the behavior of inventory-holders, and resulting supply and price effects, can be volatile, as the example of the sharp decline in opium prices in late 2001 suggests. However, it appears that inventory adjustments more often dampen price fluctuations, as for example most probably occurred through massive depletion of inventories after the Taliban ban and subsequent inventory accumulation when large-scale opium production resumed in

the post-Taliban period.

Another important aspect of opium markets, especially concerning opiates, is the importance of the quality and purity of products. Changes in purity can be an adjustment mechanism helping smooth nominal prices. In periods of low supplies, studies indicate that the average quality of opiates seized diminishes significantly, allowing the nominal price and quantities to remain closer to normal levels and introducing biases in price analysis. For example, McColm (2004) explains that very large changes in purity were reported by UK authorities in heroin imports. These changes were related to an increased level of cutting, as the products were cut outside the consumer country (up to two or three times before reaching UK) and also at the downstream end, inside the destination country. These alterations in purity allowed greater stability in nominal street prices.

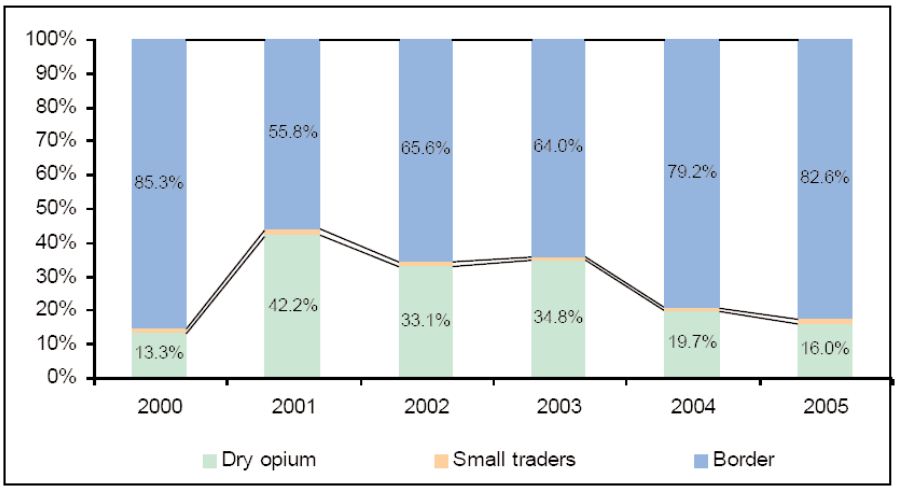
Estimates of the opium price chain and heroin price chain are presented and discussed below. However, the data weaknesses and very limited information about intermediate stages need to be kept in mind when interpreting the estimates.

The Opium Price Chain

As discussed earlier, data on farm-gate prices of fresh ("wet") and "dry" opium are available monthly for some localities in Afghanistan, as well as for opium prices in small bazaars. Estimates of wholesale opium prices in neighboring countries can also be found in some reports. These will be used as estimates for the border price and will be referred to as "final price," although as seen earlier they are far lower than prices further downstream in other transit countries and especially in the final consumption markets in industrialized countries. Specifics on the calculation of this final price and other data are given in Annex A. Not surprisingly, where data are available there is a large difference between the price in the last transaction in the exporting country and the first transaction in the importing country, representing the risk of smuggling. This difference is especially high in the case of Iran, not surprisingly in view of the strict law enforcement efforts in that country. Figures 5.8 and 5.9 present estimates of the price chain for opium based on UNODC data. They show roughly how the price for one kg of opium can be decomposed between the different stages of production and transfers.

Following the Taliban ban both the value and the share of opium revenue accruing to farmers increased, as the price for raw opium rose nine-fold between 2000 and 2001 (from US$ 50/kg to US$ 430/kg) and its share in the final price went up from 13% to 42%. The share of farmers remained high during 2002 (33%) and 2003 (35%) before returning to lower percentages subsequently, but still somewhat higher than those seen during the 1990s. The share of the final price accruing at the farm-gate level in 2005 was around 16%, as against 13% before 2000, and moreover this higher share is in relation to a considerably higher final border price. Thus the profitability of cultivation has increased, most probably reflecting compensation for the risks associated with stronger enforcement actions against opium and in particular threats of eradication.

Figure 5.8: Price Chain for Opium (Percentage of the Final Price)



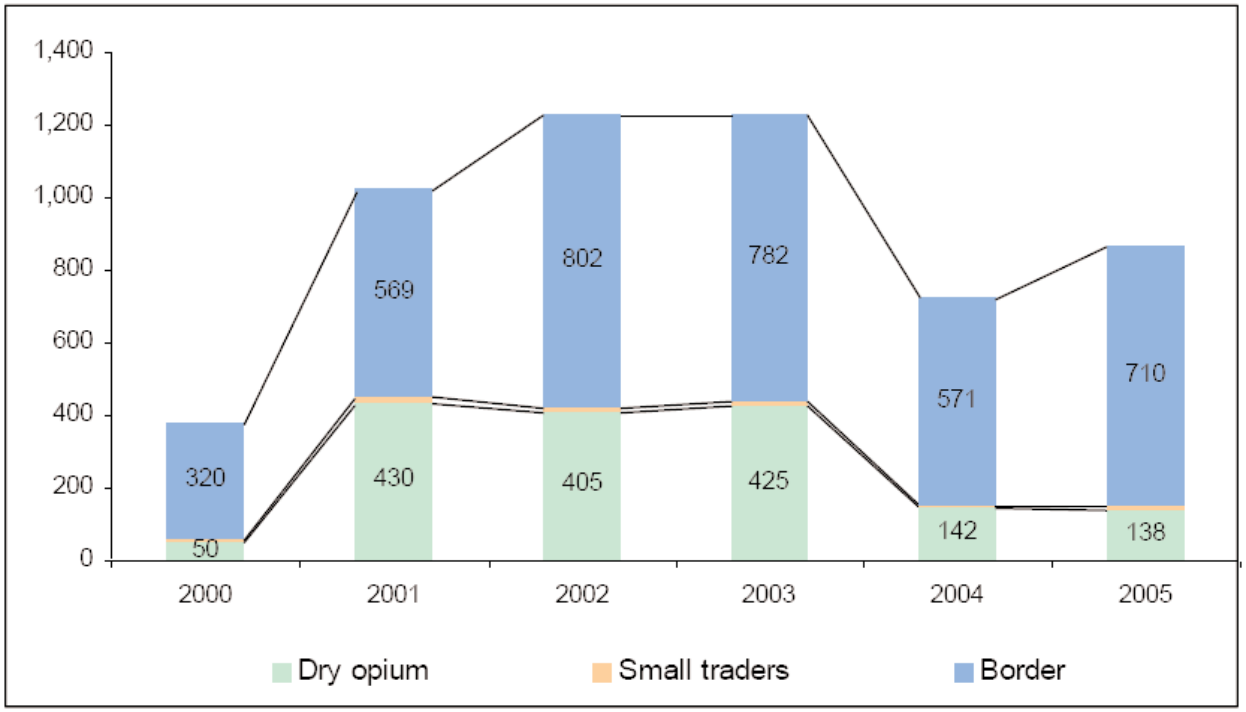
Source:Based on UNODC data.

The border price has been estimated in these figures based on UNODC data on opium wholesale prices in neighboring countries, especially Iran, which appears to be the major opium transit country around Afghanistan (and also is a major consumer of opiates including raw opium). As shown in Figure 5.9 and in Annex 5A, the "border" price also has been fluctuating by large margins, and price movements at farm-gate level and at the border are not always even in the same direction. While interesting and suggestive, these results are rendered less meaningful by the fact that, with most opium now processed into heroin or morphine within Afghanistan, raw opium prices in neighboring countries are less important than prices of processed opiates.

The Opiates Price Chain

The price chain for opiates is more difficult to estimate, as processing creates products of different quality and with conversion factors that vary with the quality of raw opium and the efficiency of the conversion process. The transformation of opium into morphine or heroin requires the use of different chemicals, whose quality combined with the skills of the refiner affects the output. Different opiates do not have the same purity, and their price depends on their quality and characteristics (e.g. brown/white heroin and different levels of purity). The conversion ratio globally is reported by UNODC to range between 6 and 10 to 1 for heroin and morphine (i.e. one kg of heroin or morphine is made out of 6-10 kg of opium). The actual ratio in Afghanistan by all accounts is toward the low end of this range, given the relatively high quality of raw opium. A 7 to 1 ratio appears to be commonly used when heroin labs in Afghanistan process raw opium into heroin on behalf of customers (see Mansfield, 2006, for some examples). Since the heroin labs presumably make some "profit" by actually converting at a better ratio, this suggests that the physical transformation ratio may well be slightly below 7 to 1. In any case, applying a ratio much above 6 to 1 in calculation of the price chain during the boom in raw opium prices would result in apparent gross losses for refiners, as heroin prices in neighboring countries did not experience such a boom as dry opium prices in Afghanistan. Therefore the ratio used to construct the price chain is 6 to 1.

Figure 5.9: Estimates of the Prices in US$ at Various Stages of the Opium Chain

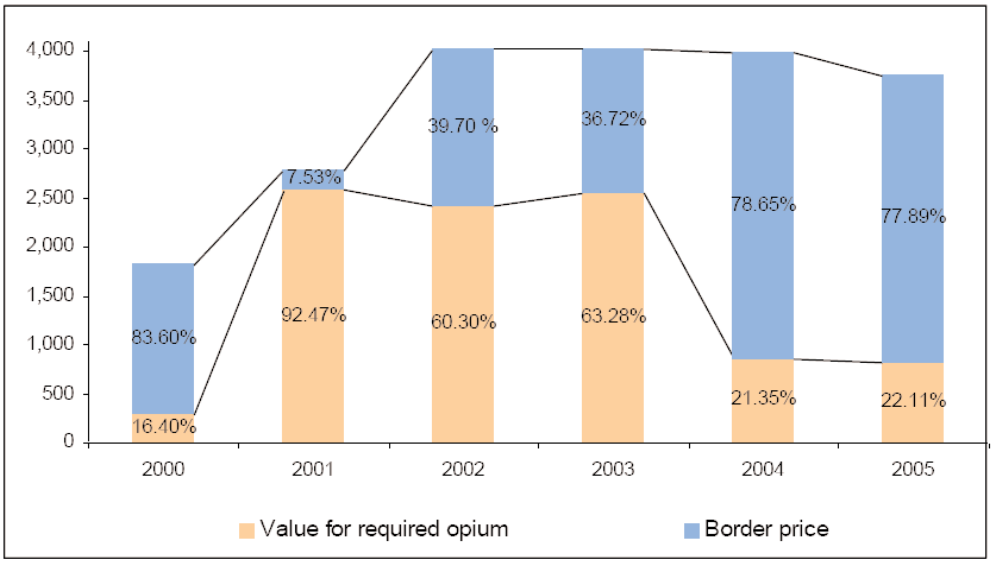


Source:Based on UNODC data.

Another difficulty concerns border prices, as they depend on restrictions imposed in the different neighboring countries (for example, Iran has a severe policy against narcotics, resulting in higher prices). Moreover, the export pattern of opiates is not well known, nor the share of opium processed into heroin or morphine within Afghanistan. (UNODC's estimates of these shares are based on information about seizures.) The border price chosen is a weighted average of prices in foreign markets around Afghanistan, especially Iran and Pakistan where a large portion of heroin seizures are made.

Figure 5.10 shows estimates of the price chain for heroin. The level of uncertainty in these estimates is even higher than for opium. The proportion of the final price of heroin attributable to processing and trafficking was greatly reduced during the boom in opium prices following the Taliban ban, and reached very low levels particularly in 2001. This appears to reflect an apparent lack of elasticity of heroin prices in foreign markets to opium prices in Afghanistan. This inelasticity can be related to numerous factors, such partial absorption of opium price increases by intermediate traffickers in the neighboring countries (resulting in a sharp temporary reduction in their profits), and also due to inventory adjustments (many traffickers must have accrued large capital gains on their inventories. On the demand side, some studies suggest that downstream wholesale and retail dealers prefer adjusting quantity and especially purity rather than price, which would dampen observed adjustments in prices at downstream stages.

Figure 5.10: Estimates of Heroin Price chain (US $/kg)



Source: UNODC; staff estimates.

These price chain estimates are consistent with UNODC's methodology for estimating gross opium export potential (discussed in Chapter 2). UNODC estimates the total opium production and share exported as opium or processed into opiates (heroin/morphine). With the calculation of a border price for opium and opiates, the gross potential export value for opium is roughly estimated. The results for export value and farm-gate value (calculated with regional prices and productions) are shown in Figure 5.11 and illustrate the same findings as the previous figures.

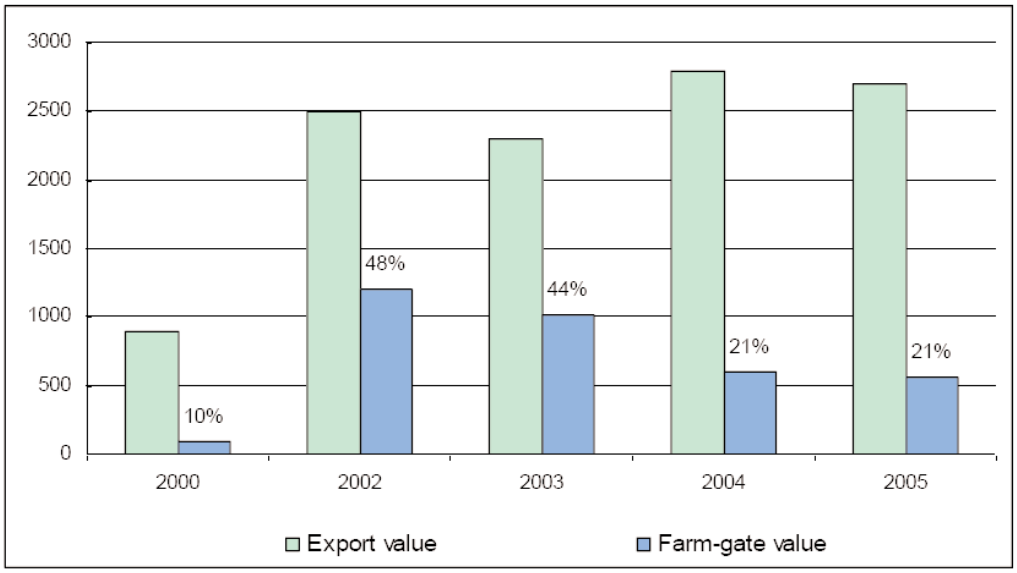
Price Formation and Pricing Behavior

The "value chain" for opium and opiates (heroin and morphine) has some important characteristics. The stylized facts are as follows:

- The value of raw opium at one end of the chain comprises only a tiny fraction of the final retail value of heroin in Europe or the United States. This feature is common among agricultural products that go through processing, branding, and packaging before final consumption (although there is only limited branding and packaging of opiates), but it is found in extreme form in the drug industry.
- These huge price differentials tempt some actors to bypass the stages of the chain and, for example, smuggle small amounts of heroin directly from Afghanistan or Pakistan to Europe. But this is a high-risk activity, and it appears that most opiates travel through each stage of the chain.
- There have been great price fluctuations at the upstream end of the value chain, whereas prices appear to have been much more stable at the downstream end (although there is evidence of substantial adjustments in purity). This means that there must be absorption of price shocks coming from the upstream end of the value chain, in transit countries and perhaps in wholesale markets of consuming countries. Inventory adjustments may also play a significant role, but on their own have not prevented sizable fluctuations in prices of opium or (in neighboring countries) heroin. Thus absorption of price increases (especially those perceived to be temporary), with a corresponding impact on profits, must be taking place.

- At both extreme ends of the value chain, markets are characterized by numerous actors who are "price-takers" and individually have little or no ability to manipulate prices. Both farmers producing opium and the traders who purchase directly from them are price takers (the traders from the next stage downstream). At the opposite end, final consumers are numerous, have at least some choice of suppliers, and individually have no ability to manipulate prices. The same is broadly true of the retail street dealers who sell to final consumers.

Figure 5.11: Estimated Farm-gate Value and Potential Export Value (US$ million)



Source: UNODC.

These stylized facts, together with qualitative evidence that the number of actors in the market is much smaller at some of the intermediate stages than at either end,[7] strongly support the argument that active price-setting and price manipulation is occurring in the opiates industry, concentrated at crucial stages around the middle of the chain (see Pietschmann, 2004). While it is not possible in this chapter to go deeply into the organization and behavior of the opiate industry in transit and consuming countries, some tentative hypotheses are offered below about the objectives and modalities of price-setting behavior. Clearly this is an area that needs more research and analysis.

First, there may be some premium placed on avoiding very sharp overall movements in wholesale and retail prices for individual consumers (before changes in purity are taken into account, see below).[8] In this context, adjusting purity (which is not observable by purchasers in advance, and perhaps not at all in the case of relatively small changes) may be considered a better adjustment mechanism than large adjustments in nominal prices per gram or other unit weight.

Second, at the opposite extreme (opium at the farm-gate and small trader level), prices clearly do adjust in the face of supply shocks (e.g. weather conditions) and changes in risk premia associated with law enforcement etc. From the perspective of the drug industry as a whole, flexible price adjustment at the upstream end of the value chain may be seen to elicit the necessary supply and incorporate changing risk premiums.

[7] See, for example McColm (2004, p. 101); also see Chapter 7 for a discussion of apparent increasing control exercised over the drug industry in Afghanistan by a small number of actors.

[8] As noted in Reuter and Caulkins (2004), there is relatively large dispersion in retail prices of illicit narcotics, as well as great variation in purity. However, the extent of variability in purity-adjusted prices is found to be stable across drugs, market levels, and time.

Third, the possible dual objectives of avoiding sharp changes in nominal prices at the downstream end and flexible price adjustments at the upstream end would appear to be pursued through several main instruments: (i) inventory adjustments to maintain supply in the face of production shocks; (ii) partial absorption of changes in upstream prices by adjusting profit margins at key intermediate stages; and (iii) adjustments in purity rather than in retail (and downstream wholesale) prices in the consuming countries.

Finally, there has been considerable debate around the issue of whether price adjustments in response to price changes at upstream stages of the value chain (e.g. in the farm-gate price of opium) are "additive" or "multiplicative."[9] This issue is discussed in Box 5.1. Policy implications of these two different price mark-up patterns diverge. An additive mark-up process would imply that restrictions on the supply side would not strongly affect consumer prices, whereas a multiplicative pattern would mean that price changes at the upstream end would have large consequences for prices at the downstream end. Clearly, heroin price behavior has not been related simply and linearly to the evolution in opium prices. Pietschmann (2004) argues that prices for opium and opiates do not react in an additive or a multiplicative way but in a manner that falls between these two extremes.

Box 5.1: Additive versus Multiplicative Price Mark-ups

There has been considerable debate in the literature over whether pricing behavior in the drug industry follows an "additive" or "multiplicative" mark-up practice. It should be noted at the outset however that neither of these hypotheses is backed up by an explicit model of the behavior of the actors concerned, whether based on optimization or another approach. As a result the debate lacks analytical depth. At most there are some underlying assumptions about the factors (costs, risks) determining price mark-ups. These can be summarized as follows:

Multiplicative factors include most importantly the element of risk to the capital committed, i.e. the risk of loss or seizure of the shipment; a roughly constant risk premium in this regard would translate into a multiplicative impact of prices at the upstream end on prices further down the value chain. There could also be an element of maintaining a constant profit rate on capital committed.

Additive factors include costs that are related to the physical volume of shipments (transport costs, fixed bribes and other payments). The risk to persons involved in the shipment (i.e. the risk of being arrested, jailed, or killed) may also be to some extent of a fixed nature, i.e. the cost being related to the person(s) involved rather than to the value of the shipment per se.

However, the superficially neat demarcation of factors between additive and multiplicative types breaks down on close scrutiny. In particular, some factors that may be additive for relatively small upstream price changes may easily become multiplicative for large changes. For example, bribes paid could be expected to be adjusted upward in the face of large price increases and thereby higher shipment values, since prices would be known to the recipients of bribes. Similar considerations may apply to the risks and costs associated with persons, e.g. bribes to get transporters out of jail are likely to increase with the value of the shipment. (If smaller shipments are used as a risk management device, the larger number of individual shipments would likely preserve the multiplicative character of price adjustments.)

While multiplicative factors would appear to be important, on the other hand price adjustments may be dampened at the downstream end, although supply shortages are translated partly into reductions in purity rather than price increases. The more general point is that although some patterns are emerging, further research and analysis is needed into pricing behavior in the opiates industry, going beyond seeking simple rules of thumb.

[9] An additive mode of price adjustment would imply that a change of $1 in the original price (farm-gate price here) leads to a $1 change in the final price. A multiplicative price response would mean that a 10% change in the initial price results in a 10% change in the final price.

Implications for Counter-Narcotics Strategy and Policies

The first point to consider is whether, and if so how, counter-narcotics objectives would be served by efforts to trigger price changes at different stages of the value chain. There is evidence, most notably from the Taliban ban, that strong counter-narcotics actions can have a substantial impact on farm-gate prices, and also less dramatic evidence that prices at downstream stages can be affected by increased counter-narcotics activity.

At the upstream end, successful efforts to reduce opium poppy cultivation almost inevitably will stimulate as a side effect higher opium prices, at least for a period of time until other sources of supply emerge at the global level. However, there appear to be no good reasons that such price increases should be seen as desirable in their own right. In fact, increases in farm-gate opium prices have the following problematic effects:

- They increase the incentives for opium production, including expansion into new regions and localities and more marginal farming areas where opium cultivation becomes viable only at higher prices.
- They increase the value of opium inventory holdings, which in general enriches larger traffickers and others holding sizable inventories.
- If the price increase is due to eradication or other measures to force farmers not to cultivate poppy, then those whose crops are not eradicated will be better-off, whereas those eradicated or prevented from cultivating opium will be far worse off. Since the latter most likely tend to be poorer (unable to afford bribes, not well-connected with local officials), poverty would be exacerbated.
- The large amount of opium-related debt in Afghanistan's rural economy, well into the hundreds of millions of dollars based on rough estimates (see Zia et al, 2005), means that price increases exacerbate the burden of the debt, again worsening poverty since most of such debt is borne by poorer farmers.

Turning to the downstream end, it has been seen that rising prices emanating from upstream parts of the chain, and/or supply shortages, tend to be translated into reductions in purity as well as higher prices per gram (or other unit of measure). Lower purity does of course mean there is less actual supply of narcotic content in consuming markets. There is evidence that a "heroin drought" in Australia reduced heroin consumption and associated problems (see Mattick et al, 2004). However, since higher prices and lower purity may also have some undesirable effects (e.g. increased crime to fund more costly drug habits, risk of overdoses due to changes in and uncertainty about purity, adulteration of narcotics with other harmful substances, substitution of other drugs for the one whose price has increased, etc.), reductions in illicit drug consumption should be sought rather than higher prices as a goal in their own right. This highlights the importance of demand reduction in the global fight against drugs.

These considerations suggest that <u>lower</u> prices of opium/opiates, achieved through demand reduction measures, are more likely to support holistic counter-narcotics objectives. For example, a lower price of opium in Afghanistan, which could result from overall demand reduction or interdiction at downstream stages of the value chain to disrupt markets and demand for opium from traders, would reduce price incentives to produce opium, lower the burden of opium-related debt, and reduce the value of opium inventory holdings. This reasoning strongly suggests that the best targets for enforcement efforts in drug producing countries like Afghanistan are opium traders and refiners as well as their sponsors. At the down-

stream end, demand reduction would be difficult (particularly in terms of achieving a global reduction in demand, not just in one or a few countries), but this would not only be beneficial directly but would also help contain criminal behavior and other side effects (including substitution) associated with high prices of opiates, while not increasing incentives on the supply side.

While any tendencies toward lower prices might well be offset by other factors including shrinkage of supply, the key point is that the counter-narcotics strategy should not explicitly target higher prices in their own right, and nor should higher prices be seen as necessarily supporting the full range of broader and medium-term counter-narcotics objectives.

V. MARKET INTEGRATION IN AFGHANISTAN'S OPIUM ECONOMY

Combining time series and spatial patterns for opium prices (discussed in Sections II and III) further enriches the analysis. Use of econometric techniques can provide insights into the extent to which opium markets are integrated–the technical definition of market integration being that prices in different markets are closely related, generally move together, and do not get too far out of line with each other (although there could well be differences in price levels across markets due to transport costs and other factors).

A number of studies have attempted to assess the integration of geographically distinct markets for the same good, principally food markets, with the objective of detecting market inefficiencies and making recommendations to improve their functioning. Analysis of market integration to ascertain the flaws of a market so as to exploit them (in this case for counter-narcotics purposes) can use the same techniques, but for the opposite purpose. Assessing the integration of opium markets could provide, in this sense, better knowledge on how to respond to the drug industry and limit its size.

Several techniques exist to assess market integration, discussed in Annex 5B. The following data are used (see also Annex 5A). Monthly opium price data collected by UNODC cover the period from 1997 to March 2006 for Nangarhar and Kandahar and from 2003 or 2004 to March 2006 for four more markets: Helmand, Mazar-i-Sharif, Herat, and Badakhshan. Analysis of integration of wheat markets is also conducted for comparative purposes, based on monthly wheat price data collected by WFP/VAM on six markets from 1996 to 2005 : Kabul, Kandahar, Jalalabad (Nangarhar), Herat, Mazar-i-Sharif, and Faizabad (Badakhshan).

Analysis of Market Integration

Statistical and econometric techniques are used to analyze the relationships between geographically distinct markets for opium in Afghanistan, in the order in which these techniques were developed and with increasing sophistication. We start with simple correlation coefficients and move on to simple regression analysis developed for assessing market integration (Goletti-Ravallion), and then to more recently developed co-integration techniques and Granger causality tests.

Opium Price Changes Exhibit Some Strong Correlations. As shown in Table 5.5, there are very strong correlations between opium prices for some markets. Most notably, prices in Helmand and Kandahar are very strongly correlated. Nangarhar and Herat do not have as strong pair-wise correlation, but both them exhibit stronger correlations with Helmand and Kandahar, implying that these two markets are in some sense "central" (this point will be discussed more later). Badakhshan and Mazar-i-Sharif, on the other hand, are characterized by more individualized price moves and relatively low correlations with the other markets. This is not surprising, and reflects among other things distance from the main markets in the south and, particularly in the case of Badakhshan, access to separate trafficking routes through northern borders.

Table 5.5: Pair-wise Correlation of Opium Prices on the Different Markets

	NANGARHAR	KANDAHAR	HELMAND	HERAT	MAZAR	BADAKHSHAN
NANGARHAR	1.000000	0.935625	0.945638	0.235977	0.010075	0.342776
KANDAHAR	0.935625	1.000000	0.998463	0.820647	0.504112	0.141393
HELMAND	0.945638	0.998463	1.000000	0.842141	0.583061	0.249043
HERAT	0.235977	0.820647	0.842141	1.000000	0.063795	0.344527
MAZAR	0.010075	0.504112	0.583061	0.063795	1.000000	0.244513
BADAKHSHAN	0.342776	0.141393	0.249043	0.344527	0.244513	1.000000

Source : UNODC Opium Price Monitoring, correlation based on pair-wise time availability in the data

Market Integration Between Nangarhar and Kandahar Decreased after the Taliban Ban. The Goletti-Ravallion technique (using ordinary least squares regression of current price in one market against past prices in that market and current and past prices in another market– see Annex 5B) gives the results shown in Table 5.6. According to this technique, the opium markets of Nangarhar and Kandahar were integrated over the entire period from 1997 to 2006, but this result is probably biased by the very large, "outlier" price change induced by the Taliban ban, which had a massive, similar, and time-wise almost identical effect on both markets. Breaking the time series into two periods– before and after the Taliban ban–demonstrates that although all forms of market integration cannot be rejected for the period before the Taliban ban, market integration appears to have decreased after the ban, with only the hypothesis of long-run market integration remaining viable (see Annex 5B for an explanation of these tests).

Table 5.6: Tests of Market Integration Hypotheses (Goletti-Ravallion Methodology)

Hypothesis :	Whole period	Before the ban	After the ban
Market segmentation	No	No	No
Short-run integration	Yes	Yes	No
Long-run integration	Yes	Yes	Yes
Weak integration	Yes	Yes	No

Note: A "No" in a cell, means that the hypothesis can be rejected at 5% level, otherwise, we consider that the hypothesis cannot be rejected.
Source: UNODC Opium Price Monitoring.

[10] Possible reasons include Kandahar/Helmand's closer proximity to the main trading route for opiates through the southern border with Baluchistan Province in Pakistan; slight difference in products, transport costs, etc. In fact, transport costs can affect the relation as, for example, a linear model cannot take into consideration threshold effects of transport cost: arbitrage happens only when the price differential between the two markets is high enough.

Use of the Co-integration Technique Gives Similar Results. As in the case of the Goletti-Ravallion method, co-integration techniques indicate that when the whole period is considered, Nangarhar and Kandahar prices are co-integrated. This means that they share a common factor that prevents them from departing too far from each other in the long term. More specifically, the long-term elasticity of Nangarhar prices to Kandahar prices is estimated at 0.788. This co-integration coefficient is significantly different from 1, and a number of reasons can be proposed for this result.[10] However, as in the case of the Goletti-Ravallion methodology, the common shock on prices induced by the Taliban ban could lead to overestimation of the extent of integration between the two markets, so separate tests were conducted for the sub-periods before and after the ban. Before the ban, there is co-integration, with the long-term elasticity of Nangarhar prices to Kandahar prices estimated at 1.13.[11] On the other hand, there is no stationary co-integration equation after the Taliban ban, indicating a weaker relationship between the two markets.

These results, as well as the similar findings using the Goletti-Ravallion approach, provide strong evidence that integration between the two markets decreased after the Taliban ban. There are a number of possible reasons, which require further investigation:

- The Taliban ban, although it applied only to production and not trade, may have upset relationships between different opium markets in poorly-understood ways which may have persisted after the fall of the Taliban. However, this explanation is not very convincing since the Taliban ban was effective in virtually all parts of the country under Taliban control, including both Kandahar and Nangarhar.
- Counter-narcotics initiatives in the post-Taliban period, which intensified in late 2004, have been implemented in an uneven and fragmented manner across different provinces and localities, which could have had a negative impact on the integration of opium markets by having differential effects on different areas.
- More specifically, the much stronger counter-narcotics efforts and sharp fall in production in Nangarhar during 2004-2005 (by some 95%) appears to have largely ended the latter province's status as a major production and trading center for opium, with associated effects on its integration with other opium markets. This is supported by the fact that the deviation in prices in Nangarhar from those in Kandahar and Helmand after 2004 was in an upward direction (see Figure 5.2).

Helmand and Kandahar Appear to Form a Central Market for Opium. The number of observations for other markets is too small to reliably implement the more sophisticated tests, so only a few comments based on simpler methods will be presented here. As mentioned earlier, the pair-wise correlation coefficients suggest that the six localities for which data are available tend not to comprise single integrated market. Indeed, Badakhshan and Mazar-i-Sharif seem to exhibit fairly isolated price behavior, whereas the links between Herat, Helmand, and Kandahar on the one hand and between Nangarhar, Helmand, and Kandahar on the other hand seem to be more solid.

More specifically, Helmand and Kandahar not only are very close geographically but also have very similar prices and price variations–indeed they have had exactly the same price since July 2005. Thus they can be considered as effectively one market. Despite the lack of co-integration between Kandahar/Helmand and Nangarhar after the Taliban ban, the correlation between their prices remains strong, suggesting continuing market linkages. More generally, two groups of linked markets can be identified, connected to each other

11 It should be noted that the coefficient is rather different, suggesting that the relationship between the two markets has not been very stable.

through the central market of Kandahar/Helmand: (i) Helmand, Kandahar, and Nangarhar and (ii) Helmand, Kandahar, and Herat.

Application of the Granger causality test (see Annex 5B) indicates that Helmand has a significant influence on three other markets: Kandahar, Nangarhar, and Herat. In other words, price developments in Helmand tend to predict future price developments in these other markets. Keeping in mind also the large volume of production in Helmand and the demise of Nangarhar as a major production and trading center since late 2004, this finding supports the conclusion that Helmand is a central market for opium in Afghanistan. Close to the Pakistan border, not too remote from Iran, and also by far the largest opium producing province in the country, Helmand clearly plays a central role in Afghanistan's opium economy. The lack of security and central government control in this province reinforces its status in this regard.

Comparison with Integration in Wheat Markets

The characteristics of wheat markets are different from those of opium markets. Wheat is a consumption good and is needed throughout Afghanistan (whereas opium is mainly destined for export). Markets are more likely to be integrated due to the legality of wheat, and improving infrastructure allows more trade between markets. However, wheat as a low-value bulky commodity faces higher transport costs than opium. Afghanistan is an overall net importer of wheat, contrary to the situation for opium.

Due to the larger number of markets, only co-integration tests are conducted for wheat, which provide a richer set of results than bilateral tests. The main finding is that integration of Afghanistan's wheat markets appears to be stronger than in the case of opium markets, while not being complete. A first look at the data for wheat prices shows that the correlations are a little lower than for opium markets. Two groups of markets seem to emerge: on one side Herat, Jalalabad, Kabul, and Kandahar, and on the other side Mazar-i-Sharif and Faizabad.

Turning to the co-integration tests, since the wheat market did not undergo such a major shock as the Taliban opium poppy cultivation ban, these tests can be straightforwardly applied to the whole period. A group of three markets (Herat, Kandahar, and Jalalabad) show complete co-integration at the 10% confidence level, with co-integration coefficients very close to 1. Moreover, the degree of integration is quite high overall, and the wheat market appears to have been less segmented than the opium market in recent years. Granger causality tests indicate that the price series for different wheat markets have strong connections and that the causality pattern is more complicated than in the case of opium. Given the fact that in most years Afghanistan imports large amounts of wheat particularly from Pakistan, it is likely that the driver of Afghan domestic wheat prices is the wheat prices in neighboring countries, especially Pakistan.

Implications for Counter-Narcotics Strategy and Policies

To summarize, the main findings that emerge from the econometric analysis presented in this section are as follows:

- There are strong correlations between prices in some of the opium markets in

Afghanistan, but with Mazar-i-Sharif and especially Badakhshan appearing to be more isolated.

- In the case of the two markets for which a longer time series of price data is available (Kandahar and Nangarhar), the markets appear to have been integrated prior to the Taliban opium production ban, but thereafter integration was reduced.
- Helmand and Kandahar for all intents and purposes can be viewed as a single opium market.
- Based on analysis of the price data available for recent years, Helmand/Kandahar appear to be functioning as a "central market" for opium in Afghanistan.

Several possible implications of these findings for counter-narcotics strategy and policies can be put forward. First, significant counter-narcotics actions can disrupt opium markets and apparently reduce the degree to which they are integrated. To the extent that efficient market functioning is good for the drug industry, this disruption is a positive outcome. More concretely, such disruptions could result in higher costs, less efficient adjustment to various shocks, and other difficulties for the drug industry. However, the impact should not be overstated, particularly in the case of more localized interventions.

Second, it is doubtful whether the Taliban ban was the major factor behind the reduction in market integration, since it applied to production of and not trade in opium, and since it was applied virtually nationwide. Moreover, there are signs of continuing close links between markets subsequent to the ban. The important finding that the opium markets in Kandahar and Nangarhar were no longer integrated after the Taliban ban most likely is primarily due to the subsequent sharp reduction in opium production and trade in Nangarhar, including raids on and closure of opium bazaars. More generally, the criminalization of the opium trade since 2001, significant (albeit patchy and selective) law enforcement efforts as well as eradication, and associated higher risk premia and likely more extortion of "taxes" from farmers and traders, have probably combined to reduce the openness and integration of opium markets in different parts of the country.

A final question concerns the implications of Helmand/Kandahar functioning as a single market and in particular the implications of Helmand serving as a "central market" for opium in Afghanistan as a whole. Would focusing counter-narcotics law enforcement efforts –notably interdiction of trade and destruction of processing labs and large stocks of opium etc.–on the Helmand/Kandahar nexus be effective in disrupting opium markets more generally in Afghanistan? This question demands further thought and analysis, as although such an approach would appear promising, the high mobility and flexibility of opium production may well reduce the effectiveness of such an effort. For example, the opium economy in Afghanistan overall has continued to thrive even after the successful counter-narcotics efforts in Nangarhar.

VI. CONCLUSIONS

This chapter has presented an initial analysis of prices in the opium economy in and around Afghanistan, along three dimensions: (1) the "time structure" of opium prices, i.e. their evolution over time; (2) the horizontal structure of prices–their spatial pattern, mostly within Afghanistan but with some consideration of the spatial pattern of prices in neighbor-

ing transit countries; and (3) the vertical structure of prices–along the "value chain" from raw opium to processed opiates (especially heroin). Econometric analysis of available time series of opium prices at different locations in Afghanistan has been conducted to assess (4) market integration in the opium economy(based on an explicit technical definition). Some possible implications for counter-narcotics strategy and policies are briefly summarized below (the concluding part of each section provided a more detailed discussion of policy implications).

While data weaknesses and limitations must be kept in mind, nevertheless some of the findings are of interest and have implications for counter-narcotics strategy and policies. These include, among others, the following:

- Opium prices at the farm-gate level do reflect supply factors, risk premia, etc., and hence provide useful information on such developments. However, the existence of sizable (in aggregate) inventories–decisions in respect of which appear to be responsive to price signals–needs to be factored into the equation.
- The value chain for opium/opiates, while anchored in price-taking behavior at either end, appears to involve much more active price setting in the middle stages, where flexible adjustments to shocks (including law enforcement shocks) appear to be the norm. This is not surprising in view of the very large profit margins and relatively smaller number of actors at these stages. It would appear that, however difficult, attacking and disrupting the more secretive and concentrated middle stages of the value chain could have high pay-offs.
- There do not appear to be good reasons to pursue higher prices (in particular at farm-gate level but also for opiates at downstream stages) as a target of counter-narcotics policy in its own right. The key focus should be on reducing illicit drug consumption. Thus demand reduction–whether for final consumption demand or for derived demand for raw opium at farm-gate level (by targeting drug traffickers and processors)–has clear benefits from a counter-narcotics perspective.
- Counter-narcotics actions within Afghanistan (notably interdiction) can disrupt markets and reduce market integration, which presumably is a positive result from the counter-narcotics perspective. In this context, an important question is whether such efforts should be focused, to the extent possible, on the identified "central market" for opium in Afghanistan, i.e. Helmand.

In closing, it should again be emphasized that the analysis, findings, and suggested policy implications put forward in this chapter should be considered preliminary. It is hoped that the paper demonstrates that even with their limitations, available price data on opium and opiates are useful and worthy of analysis. It is also hoped that the findings of the paper provoke further thought, discussion, and research.

ANNEX 5A: OPIUM/OPIATES PRICE DATA FOR AFGHANISTAN AND NEIGHBORING COUNTRIES

Table 5A.1: Opium Price Series

Date	Nangarhar	Kandahar	Date	Nangarhar	Kandahar	Helmand	Badakhshan	Mazar	Herat
01/01/1997			01/15/2002	423	407				
02/01/1997			02/15/2002	409	395				
03/01/1997	93		03/15/2002	416	343				
04/01/1997	102		04/14/2002	583	450				
05/01/1997	108		04/25/2002	361	385				
06/01/1997	114		05/07/2002	381	304				
07/01/1997	91		05/15/2002	444	376				
08/01/1997	97	34	05/20/2002	444	380				
09/01/1997	97	33	06/09/2002	514	480				
10/01/1997	86	33	06/15/2002	514	436				
11/01/1997	83	30	07/15/2002	380	422				
12/01/1997	66	34	08/15/2002	398	350				
01/01/1998	67	46	09/09/2002	418	370				
02/01/1998	76	53	09/23/2002	434	414				
03/01/1998	95	41	10/01/2002	450	430				
04/01/1998	70	38	11/30/2002	481	538	541			
05/01/1998	65	38	12/15/2002	506	602	602			
06/01/1998	83	44	12/31/2002	524	556	553			
07/01/1998	54	49	01/15/2003	512	640	642			
08/01/1998	55	67	01/31/2003	499	609				
09/01/1998	63	54	02/14/2003	529	577	579			
10/01/1998	78	59	02/28/2003	447	577	553			
11/01/1998	96	54	03/15/2003	445	509	509			
12/01/1998	101	56	03/31/2003	381	444				
01/01/1999	116	59	04/15/2003	299	386	386			
02/01/1999	100	60	04/30/2003	355	426				
03/01/1999	100	50	05/15/2003	430	469	470			
04/01/1999	80	45	05/31/2003	416	452				
05/01/1999	91	43	06/15/2003	353	436	434			
06/01/1999	86	41	06/30/2003	339	415	416			
07/01/1999	82	37	07/15/2003	353	423	425			
08/01/1999	62	39	07/31/2003	327	379	379			
09/01/1999	61	36	08/15/2003	272	375	376			
10/01/1999	40	33	08/31/2003	286	432	435			
11/01/1999	38	31	09/15/2003	261	312	311			
12/01/1999	39	32	09/30/2003	247	321	326			
01/01/2000	41	31	10/15/2003	221	303				
02/01/2000	43	30	10/31/2003	197	249				
03/01/2000	46	29	11/03/2003	219	225				
04/01/2000	44	30	12/03/2003	229	203				
05/01/2000	42	30	01/01/2004	211	184				
06/01/2000	38	31	02/01/2004	184	177				
07/01/2000	44	35	03/01/2004	193	159	163			
08/01/2000	87	78	04/01/2004	176	154	155			
09/01/2000	76	43	05/01/2004	138	145	147		98	163
10/01/2000	124	70	06/01/2004	143	143	143	84	101	176
11/01/2000	107	61	07/01/2004	140	98	113	111	75	146
12/01/2000	159	101	08/01/2004	126	142	156	121	76	254
01/01/2001	173	128	09/01/2004	129	223	224	118	195	
02/01/2001	214	162	10/01/2004	158	197	197	137	99	
03/01/2001	367	205	11/01/2004	158	197	235	224	161	
04/01/2001	383	260	12/01/2004	273	234	202	147	111	
05/01/2001	398	270	01/01/2005	190	222	222	165	107	310
06/01/2001	368	250	02/01/2005	165	173	173	167	95	263

Date	Nangarhar	Kandahar	Date	Nangarhar	Kandahar	Helmand	Badakhshan	Mazar	Herat
07/01/2001	424	288	03/01/2005	166	149	151	160	87	241
08/01/2001	657	446	04/01/2005	156	148	148	152	91	200
09/10/2001	700	650	05/01/2005	141	115	115	164	83	162
09/15/2001	194	180	06/01/2005	137	165	162	112	60	219
09/24/2001	95	90	07/01/2005	187	188	188	127	89	228
10/10/2001	134	150	08/01/2005	208	173	174	160	102	231
10/15/2001	190	327	09/01/2005	207	159	159	157	85	228
10/28/2001	210	270	10/01/2005	205	142	142	157	85	217
11/01/2001	327	340	11/01/2005	200	132	134	155	104	208
11/05/2001	330	350	12/01/2005	213	128	128	161	103	182
11/19/2001	343	364	01/01/2006	211	129	129	161	92	204
12/15/2001	316	275	02/01/2006	208	129	129	145	130	199

Source: UNODC Opium Price Monitoring.

Data Collection

Two series of price estimates are available.

- UNODC conducts regular opium price monitoring, collecting fresh and dry opium prices from farmers and traders monthly in several provinces, (the data are shown in Table 5A.1). About 170 farmers and 160 traders are interviewed each month.
- Second, as part of the opium survey, price data are collected in Afghan villages, through surveys led by UNODC's field offices. Surveyors are selected from a pool based on their performance and are trained specifically for these operations. The sampling of villages is made following a stratified sampling method (each village was placed in a category depending on its irrigation or rain-fed situation). Six percent of villages were randomly selected in each category.

Important constraints which affect the use of these data are listed below:

- The frequency of collection is sometimes inadequate, and moreover as indicated in Chapter 4, substantial daily fluctuations in prices can occur, although only monthly prices are reported.
- Data are only available recently (2004 or later) for most of the regions and only since 1997 for Nangarhar and Kandahar.
- Price data are regulary collected only in a few provinces.
- They are published as provincial averages even though significant sub-provincial price discrepancies can be expected to exist.

All these caveats are related to the particular nature of the opium trade, and UNODC's data provide very useful information in an area where data are scanty and hard to collect. The methodology used by UNODC gives acceptable error margins, sufficiently low to support various estimates and statistical tests.

At the downstream end of the chain (see the following tables) data constraints are also severe and levels of uncertainty are high. Evaluation of opiates and opium prices in neighboring countries is made difficult by the general uncertainty related to the environment in which data are collected (urban versus rural areas, for example); the exact purity, quality, and origin of the products sold (there can be large differences); and the time at which price collection is made (often annual averages are reported).

Hodrick-Prescott Filter

Hodrick and Prescott (1980) have established a methodology to obtain smoothed time series. This methodology consists of optimizing, for a time series $\{p_t, t = 1,..., n\}$, a criterion represented below, with $\{\tilde{p}_t, t = 1,..., n\}$ the smoothed series :

$\min_{\tilde{p}_1, \tilde{p}_2, ..., \tilde{p}_n} \left\{ \sum_{t=1}^{n} (p_t - \tilde{p}_t)^2 + \lambda \sum_{t=2}^{n-1} ((\tilde{p}_{t+1} - \tilde{p}_t) - (\tilde{p}_t - \tilde{p}_{t-1}))^2 \right\}$ where λ is suitably chosen (i.e. its value is adapted to the frequency of the data–monthly, quarterly, yearly…)

In this study, the value chosen for λ is 14.400 as this is considered to be an appropriate smoothing parameter for monthly data.

Estimates of the Border Price for Opium and Heroin

The border price for opium, shown in Table 5A.2, was estimated as follows :

- estimated share of opium going to Iran: around 90 %
- estimates share of opium going to Pakistan: 6 %
- estimated share of opium going to Tajikistan: 4 %

These export share estimates were made according to UNODC's estimates based on seizures in neighboring countries. They can differ significantly from the actual shares but are considered to be decent estimates.

Table 5A.2: Opium Price Estimates (Farm-gate and Border)

	Dry opium	Small traders	Opium price in Iran	Opium price in Tajikistan	Opium price in Pakistan	Border
2000	50	55	400	190	113	375
2001	430	450	1090	310	427	1019
2002	405	420	1300	480	590	1222
2003	425	440				1222
2004	142	150	745	600	445	721
2005	138	150	930	363	314	860
2006	150	160				

Source : UNODC Opium Surveys, and Drug Reports.
Border price in 2003 was taken as in 2002 because of lack of data

The border price for heroin, shown in Table 5A.3, is calculated as follows:

- estimated share of heroin going to Iran: 30 %
- estimated share of heroin going first to Pakistan (much of it onward to Iran): 50 %
- estimated share of heroin going to Tajikistan: 20 %

These export share estimates were made according to UNODC's estimates based on seizures in neighboring countries. They can differ significantly from the actual shares, but no firm information is currently available to improve the estimated shares.

Table 5A.3: Estimates of Border Prices of Opiates

	Dry opium : 1 kg	Dry opium needed Ratio 6:1	Dry opium needed Ratio 8:1	Heroin price in Iran	Heroin price in Tajikistan	Heroin price in Pakistan	Border
2000	50	300	400	2400	1270	1709	1829
2001	430	2580	3440	3312	3000	2392	2790
2002	405	2430	3240	3410	4750	4113	4030
2003	425	2550	3400				4030
2004	142	852	1136	3900	5500	3445	3990
2005	138	828	1104	3800	4375	3459	3745
2006	150	900	1200				

Source : UNODC Opium Surveys, and Drug Reports
Border price in 2003 was taken as in 2002 because of lack of data

ANNEX 5B: STATISTICAL TESTS OF MARKET INTEGRATION

Pair-wise Correlations

The pair-wise correlations are calculated as follows :

For two prices series $p_{t,t=1...n}$ and $q_{t,t=1...n}$, the correlation between the two series, noted $\rho(p,q)$ equals $\frac{\sum_t (p_t - \overline{p})(q_t - \overline{q})}{\sqrt{\sum_t (p_t - \overline{p})^2 . \sum_t (q_t - \overline{q})^2}}$, where $\overline{p}$ and $\overline{q}$ are respectively the means of the two series. So this statistic does not give information on the respective levels of the series, but on their variations.

Granger Causality

This concept of causality, introduced by Granger in 1969, consists of asking the question whether knowing the past values of a time series, together with the past values of a second time series, helps in explaining the present value of this second time series. This relation can be reciprocal and this notion is not exactly the same as the more common notion of causation; instead it refers more to a notion of precedence in information. A time series Granger causes another series when the knowledge of its past values provides statistically significant information on future values of the other series.

Testing for Market Integration

Earlier studies on market integration relied primarily on ordinary regression analysis, as developed in Ravallion (1986) and Goletti (1994), until the concept of co-integration was developed by Engle and Granger.

The notion of market integration is quite clear: the different sub-markets are all parts of a single market and share the same information and shocks. Practically, when working with price series, this means that there is effective transmission of a price shock or of a variation of price in one market to all the others, within a short period of time.

The concept of co-integration is based on the notion of integrated time series (i.e. of the form : $p_t = p_{t-1} + \delta_t$, an autoregressive time series with a unit root, noted I(1)). Such series are non-stationary, but some linear combinations of two or more of them can be stationary. When this is the case, the two or more series are said to be co-integrated, and the stationary linear combination is called a co-integration equation. For two price series, being co-integrated means having a long-term relationship which prevents them from moving too far away from each other. This concept is closely related to the notion of market integration.

It should be noted that neither definition requires that prices in different markets stay at or converge toward exactly the same level. Transport costs and other factors could result in long-term price differences for markets that are fully integrated. Thus the notion that prices move more-or-less in the same direction and do not diverge too much from each other over the medium-term is key.

It should also be kept in mind that assessing market integration based on price series is not straightforward, as common trends or variations can sometimes be caused by unobservable effects (common weather conditions for example) and different price evolutions could be caused by various reasons other than lack of market integration (institution of a tax in a particular market, for example).

Goletti-Ravallion

In this methodology, how prices in one market are determined by their own lagged levels and the lagged prices of other markets is assessed.

With respect to the analysis of opium prices in Nangarhar and Kandahar, this technique involves the estimation of the following equation:
$p_{n,t} = \sum_{i=1}^{L} \alpha_{ni} p_{n,t-i} + \sum_{i=0}^{L} \beta_{qi} p_{q,t-i} + X_{n,t}\gamma_n + \varepsilon_{nt}$ with $\varepsilon_{n,t} = \rho_{n,t}\varepsilon_{n,t-1} + \eta_{n,t}$ and $\eta_{n,t}$ is white noise, i.e. a random process normally distributed with expected value of zero and a constant finite variance. The term n refers to Nangarhar and q to Kandahar, $P_{n,t}$ is the price on the Nangarhar market at date t, is a vector of exogenous variables, and L the number of lags chosen. To refine a little (and as in the paper by Ravallion), we consider that the residual is AR(1).

Four tests can then be implemented, corresponding to different hypotheses :
- Market segmentation : $H_0 : \beta_i = 0$, for all i : the other market has no influence on the considered market.
- Short-run market integration : $H_0 : \beta_0 = 1$: all the variations in the prices of the other market are immediately and completely communicated to the reference market.
- Long-run market integration : $H_0 : \sum_{i=1}^{n} \alpha_i + \sum_{i=0}^{n} \beta_i = 1$: in the long-run, prices are constant over time and this causes . $p_n^*\left(1 - \sum_i \alpha_i\right) = p_q^* \sum_i \beta_i + X_n\gamma_n$.
- Weak integration : $H_0 : \sum_{i=1}^{n} (\alpha_i + \beta_i) = 0$: all the lagged effects compensate.

This methodology is quite simple, and allows the testing of different assumptions, but it is not adapted for analysis of integration across a large number of markets.

Co-integration

The main criticism of the Goletti-Ravallion methodology is the rigidity of the possible structures exhibited (only bilateral integration can be tested or radial market structure, i.e. a central market to which all the others are linked without having connections other than through the central market).

The first step leading to a co-integration analysis is to check whether the time series are integrated or not. For this purpose, an augmented Dickey-Fuller test on the log-prices in wheat and opium markets was used. The results are not presented here, but the main finding is that the hypothesis of the existence of a unit root could not be rejected at the 5% level for any of the series and the periods considered.

The methodology used in this paper to measure to detect and analyze market integration is the same as in Gonzalez-Rivera and Helfand (2002) and in Jha, Murthy and Sharma (2005).

It consists of evaluation of a VAR mechanism in the following form:
$P_t = A_{n\times s} f_t + \widetilde{P}_t$ where $P_t = \{p_{1t}, p_{2t}, ..., p_{nt}\}$ is the vector prices in the different markets at date t. f_t is a s*1 vector of common unit root factors, and $\widetilde{P}_t$ is a vector of stationary components. With this representation, the different prices move together in the long run, and this representation is valid when there are n-s co-integrating vectors. The elements of the matrix A and the common factors are determined using a vector error correction model (because of the Granger theorem, such a VAR mechanism can be rewritten as a vector error correction model), and the number of co-integration equations can be found. Complete integration is considered to be present when n markets share n-1 co-integration equations, and the methodology used here consists in searching the largest groups of *p* markets which share *p*-1 co-integration equations.

The use of such a methodology gives an idea of the spatial extent of market integration but there still lacks a conclusive way to analyze the degree of integration. So for the purposes of this paper, conclusions were drawn only about the spatial extent of market integration.

It should be noted that the co-integration coefficients can be interpreted as long-term elasticities when the logarithms of the variables are used. The demonstration is technical and appears in a paper by Johansen (2005) but can be more intuitively and imprecisely explained since the long-term equation with log prices could be written as follows:
$\log(p_{t,\infty}) = \alpha.\log(q_{t,\infty})$ with p_t and q_t the prices in two different regions.
This gives: $p_t = q_t^{\alpha}$ and α can be interpreted as the long-term elasticity of p_t to q_t.

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Chapter 6

THE NEXUS OF DRUG TRAFFICKING AND HAWALA IN AFGHANISTAN

Edwina A. Thompson[1]

I. INTRODUCTION

During recent years, informal money service providers, or *hawaladars*, have gained an enhanced role as an important informal institution and key economic agents in Afghanistan. The *hawala* system, handling both financial transfers and currency exchange, was important in Afghanistan even before the war. But during the long period of conflict, and especially under the Taliban regime, the *hawala* markets fully replaced the formal banking system, providing people with the only facility to transfer money into and out of the country. These markets became host to a complex interplay of actors from the benign through to the ethically questionable and patently criminal.

There are currently two documents in the public domain that should be read in conjunction with this chapter. The first examines total opium production and trade figures for Afghanistan (UNODC, 2005a) and the second is a World Bank report that investigates the current mechanisms of the *hawala* system in Afghanistan (Maimbo 2003). This chapter is based on survey research that represents the first attempt to focus primarily on obtaining feedback from the *hawaladars* themselves. the research is based on an investigative sample of 54 dealers across the major financial centers of Afghanistan during a five-month period from March-July 2005. This sample comprises 6% of an estimated 900 significant *hawala* shops in the country. Reading this chapter in conjunction with the above documents provides an opportunity to verify or challenge existing data and add new insights on the issue of drug money laundering in Afghanistan.

For obvious reasons, the *hawala* markets comprise an extremely difficult target from which to glean accurate information. As a result, the quantitative estimates are presented in wide ranges and need to be viewed with considerable caution. This chapter does, however, build an understanding of drug money laundering methods from the ground up. The results also help to corroborate figures already in the public domain that were developed on a more macro, top-down basis.

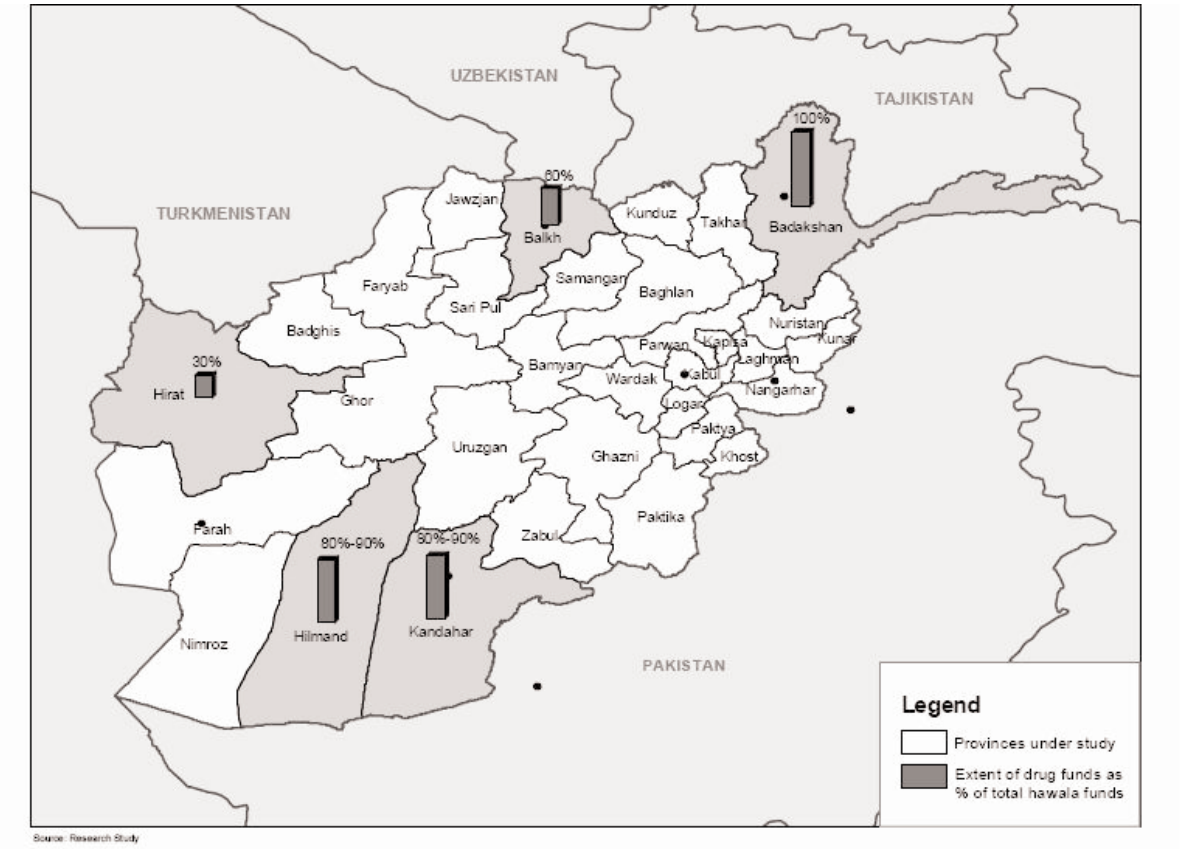
Background, Objectives, and Structure of the Chapter

Media and law enforcement investigations into the 9/11 terrorist attacks prompted criticism of the *hawala* system as one of the sources of criminal money laundering and terrorist financing in Central Asia and the Middle East (Passas, 2003). But in a country where an estimated 80-90% of economic activity is in the informal sector (World Bank, 2005), it would be mistaken to presume that Afghanistan's *hawala* system, which is currently the most effective, reliable, and sometimes sole method for moving funds across the country, deals only with dirty money. In practice, there are no clear boundaries between the illicit and licit economies, where networks have developed over time with complex overlapping connections.

[1] The support of UNODC in particular by Doris Buddenberg for conducting this study is greatly appreciated. Comments on the chapter by Doris Buddenberg, William Byrd, Samuel Maimbo, and Thomas Pietschmann are gratefully acknowledged. The views, findings, interpretations, and conclusions expressed in this chapter are those of the author and should not be attributed to the United Nations Office on Drugs and Crime or to the World Bank, its affiliated institutions, its Executive Board of Directors, or the countries they represent.

A detailed analysis of the placement and integration of drug earnings in Afghanistan's economy beyond the farm-gate level is long overdue. On account of the Afghan government's and international community's commitment to combat Afghanistan's illicit narcotics production and trade, the pressure to launder drug money in the world's largest opium-producing country should not be underestimated. Drug traffickers are faced with the additional task of disguising profits that remain among the highest in recorded history (see Figure 6.1 below).

Figure 6.1: Estimated Percentages of Drug-related Funds in Provincial *Hawala* Markets



It is no secret that the system remains to a large extent statistically unknown. Available information on it is limited, often vague, and contradictory, which results in counter-narcotics policies being based on a limited understanding of the processes at work. There is an urgent need to redress this gap through proper research and analysis.

The objective of this chapter is to enhance our knowledge of the *hawala* system and the methods used to launder the proceeds of drug trafficking in Afghanistan. It is a first attempt to build a qualitative story of the nexus between drugs and the *hawala* system together with an analysis of fresh quantitative data. It demonstrates how- reliable research into the mechanics by which drug money enters the system can help guide decision-makers in designing appropriate policies affecting both the illicit opiate industry and national economic reconstruction.

The chapter is structured in the following manner. The introductory section briefly maps out some key features of Afghanistan's contemporary political economy. This is followed by a discussion on the dynamics of the "informal" or parallel economy in Afghanistan

and a review of the related drug money laundering problem. The next major section provides background material on the mechanics of the *hawala* system, including an explanation of regional networks, trading risks and trust. The fourth section explores key provincial *hawala* markets as they relate to the drug economy. Monthly revenue calculations for medium-sized and top-end drug *hawaladars* are used to derive estimates of drug money entering the *hawala* system. The concluding section of the chapter summarizes the main findings and offers some preliminary observations on policy implications.

Broader Perspective

Contemporary political economy of Afghanistan. With a per-capita legal domestic product of less than US$ 300, and some of the lowest indicators of human development from a global perspective, Afghanistan is one of the poorest countries in the world. Annual domestic revenue of the Afghan state is only around 5% of licit GDP. Together with the lack of security and governance capacity, the level of poverty in the country makes reconstruction a daunting task (Rubin, 2005).

During the decades of conflict, trust in the government was progressively eroded and transposed to kinship, ethnic, and other social connections. As a result, traditional tribal loyalties that existed before the war were strengthened, leading to the collaboration of groups in forging or strengthening informal institutions. A group of alternative power holders, including predatory warlords, commanders and organized criminals, emerged to control important political and economic networks that governed drugs and trade. Aside from their potential graduation to politics, there are few incentives for these groups to engage meaningfully with the national government. There are arguably even fewer incentives for those on the margins, particularly the *hawala* operators, who have benefited materially in remaining hidden from view.

The *hawala* system was central to the survival of Afghanistan's economy through the long period of conflict. Today, *hawala* continues to be the system of choice for most cash payments, transfers, currency exchange, and remittances in the country. This is partly due to restricted public access to modern banking services. As of October 2005, 13 licensed banks were operating in Kabul,[2] but their high fees, stringent policies and minimum balance requirements alienate the local population, of which only 36% are literate.

There are four major sources of externally generated income in the country: opium production and trafficking, unregulated trade in legitimate goods, remittances from abroad, and donor assistance. The narcotics sector has been by far the most important, adding value of US$ 2.7 billion to an economy otherwise producing about US$ 5.4 billion of goods and services in 2005 (UNODC 2005). A World Bank study found that the gains appear to accrue mainly to traffickers and commanders and only secondarily to farmers, many of whom are heavily indebted (Byrd and Ward, 2004). However, while some groups experience discrimination in accessing certain markets, the narcotics trade has fostered cooperation among all groups and regions. Even during the war between the Taliban and the Northern Alliance, opium produced in Taliban areas was trafficked through Northern Alliance-controlled areas (UNODC, 2000).

[2] These included the following international banks: the National Bank of Pakistan, Standard Chartered Bank, the Habib Bank of Pakistan, Afghanistan International Bank (managed by Dutch ING Bank), Kabul Bank, and Punjab National Bank.

In an attempt to capture some of the income generated by narcotics and tax-free international organizations, the government of Afghanistan has levied a new tax on high housing rents in Kabul. Although potentially effective, strategies such as this are not sufficient to mitigate the deleterious effects of an economy to a large extent based on illegal production, trade, and aid.

A government report estimated that a growth rate of 9% per year in the non-opium economy was the minimum needed for longer-term economic development while phasing out the drug industry over time. In 2002/03 and 2003/04 the legal Afghan economy was estimated to have grown by 29% and 16% per year respectively, but this was the result of a rebound in agricultural production due to good rains following severe drought, and an influx of foreign aid (World Bank, 2005, cited in Rubin 2005). In January 2005, the IMF reduced its growth projection for 2004/05 to only 8% (IMF, 2005). In 2005/06, economic growth rebounded to 14%, primarily as a result of a weather-related recovery of agricultural outputs (IMF, 2006).

There is a risk that growth will stagnate without major new investments and improved security. Effective government monetary and fiscal policy, combined with the influx of aid, has abated hyper-inflation, although there has been significant albeit moderate inflation. After decades of hyper-inflation, the new currency that was introduced by the reformed central bank (Da Afghanistan Bank, DAB) at the end of 2002 has remained stable, largely thanks to foreign exchange reserves earned through narcotics exports, remittances and the expenditures of foreign organizations (Rubin,2005). The real appreciation of the currency (i.e. stable nominal exchange rate while domestic inflation has been higher than global inflation) may reflect a "Dutch disease" problem resulting from a single-crop (opium) economy, pricing other exports out of the market (see Chapter 2).

<u>The informal economy</u>. This constitutes the bulk of economic activity in Afghanistan (World Bank, 2005). It is supported by the *hawala* system, which carries out the majority of the country's cash payments and transfers. *Hawala* dealers choose to label their money "black", but they do not readily associate this with a negative subtext. While many acknowledge that their clients predominantly consist of Afghan business traders (who regularly trade "legal" goods "illegally"), they are quick to defend themselves against accusations of dealing in "illegal business", such as drug money laundering. These examples illustrate how difficult it is to separate legitimate and illegal financial trading in a country such as Afghanistan where the economy has existed in a legal vacuum over a prolonged period of time.

<u>Trade and *hawala*</u>. Official trade with countries in the region, such as Turkmenistan, Uzbekistan, Tajikistan and China, is gradually growing while attempts have been made to secure trade agreements between Afghanistan and several of its neighbours. In 2003, Afghanistan certified two trilateral transit and trade agreements (Afghanistan-Iran-India and Afghanistan-Iran-Tajikistan) and four bilateral transit and trade agreements (with Iran, Turkmenistan, Uzbekistan, and India). But the Afghan Transit Trade Agreement (ATT) that was signed in 1965 by Pakistan and Afghanistan governs the most well-known and well-trodden trading routes in and out of the country. The Agreement grants freedom of transit between the territories via two land routes (Peshawar-Torkham and Chaman-Spin Boldak). It also guarantees that "no customs duties, taxes, dues, or charges of any kind whether national, provincial or municipal regardless of their name and purposes, shall be levied on traffic in transit".

It is not surprising that smugglers seeking to avoid Pakistan's stringent taxes and duties on foreign goods have exploited this facility. Many of the items imported via the ATT, which range from fast-selling to high-end consumer goods, were never meant for sale in Afghanistan. During the transit process these items make a U-turn to be sold in the local bazaars, such as Peshawar's sprawling Karkhano market. This route provides an important conduit of smuggled goods in the region. Another important channel is the import of goods directly from Dubai or through Iran for subsequent unofficial re-export, mainly to Pakistan but also elsewhere.

Millions of dollars related to trade circulate outside of formal legal reckoning in the extra-state banking system. The latest published estimate of annual "unofficial" imports and exports from Afghanistan to other countries, principally Pakistan and Iran, is an estimated US$ 1.1 billion (World Bank, 2001). While this figure offers some insight into the extent of the shadow economy, what remains unexplored is the link between this unofficial trade and the trafficking of opiates.

Anecdotal evidence suggests that there is a strong relationship between *hawala* and smuggling. Trade in goods was often identified by *hawaladars* as a strategy to settle remaining balances from *hawala* transactions. Complex linkages between the trafficking of drugs and import of legitimate goods, whether by licit or illicit means, also emerged in the border areas where legal and illegal flows–of arms, cars, drugs, edible oil, fuel, and other consumer goods–are highly complex and interrelated.

Drug money laundering. The pressure to launder drug money in the world's largest opium producing country is arguably greater than ever before. The international community's commitment to combat Afghanistan's drug trafficking networks is complemented by an increased sense of domestic responsibility to tackle the problem. A government ministry has been established to deal exclusively with counter-narcotics, along with a dedicated counter-narcotics police force. Various efforts to curb illicit drug flows at the border have also been stepped up, with the recently established Afghanistan Border Security Force manning key points along the border with Iran, one of the primary routes for export of opiates. Within this environment, traffickers are faced with the difficult task of disguising their profits, which remain among the highest in recorded history (see Figures 6.2 and 6.3 below).

A more detailed analysis of the placement and integration of drug money in Afghanistan's economy beyond the farm-gate level is long overdue. But before any analysis, it is important to obtain a sense of the volume of profits generated by the production and export of illegal opiates. First, domestic profits should not be confused with those amassed internationally. While the aggregate estimated value of the international trade in Afghan opiates is in the neighbourhood of US$ 40 billion, the total export value of opium to neighbouring countries is estimated to be US$ 2.7 billion in 2005. Gross revenues accruing to Afghan farmers are calculated to be on the order of US$ 560 million, while Afghan traffickers are estimated to receive roughly US$ 2.14 billion (UNODC, 2005a). Needless to say this is a very significant amount of money for a very poor post-conflict developing economy like that of Afghanistan to manage, especially in the absence of a fully operational banking system. The question remains as to in what amounts, which forms, and by what means drug money arrives in the country.

Figure 6.2: Value of Opiate Exports (US$ billion) 2000-2005

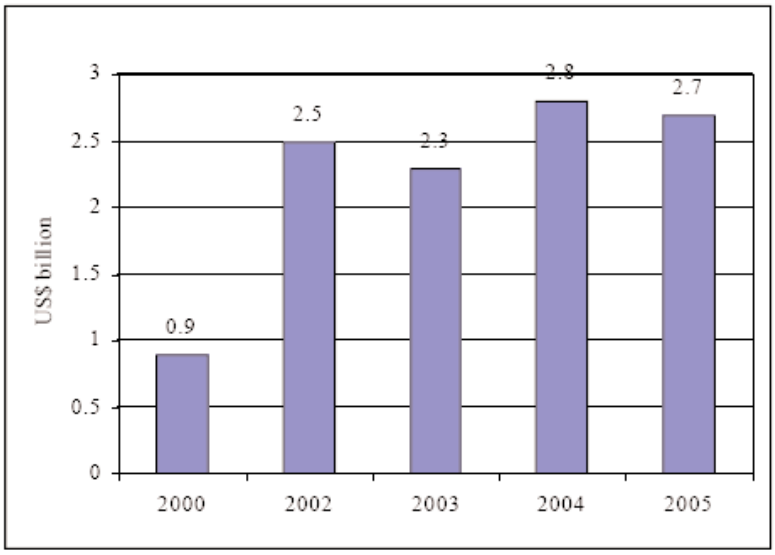
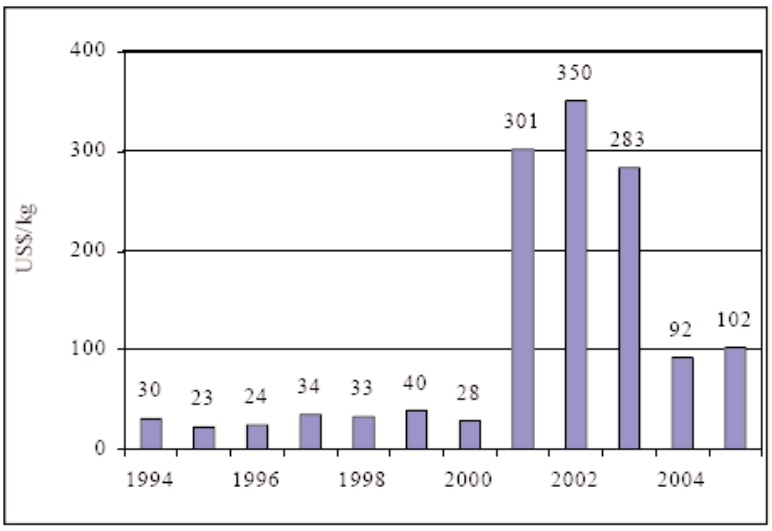


Figure 6.3: Opium Farm-gate Prices (US$/kg), 1994-2005



Overall size of the *hawala* market. Based on the information available to the author, Table 6.1 was compiled with rough estimates of aggregate *hawala* flows into and out of Afghanistan for 2004/05(See Table 6.1). Any estimate of the overall size of the *hawala* market in Afghanistan should however be viewed with extreme caution.

Most of the figures provided in this chapter relate to inflows of funds into Afghanistan through the *hawala* system. It is important to be aware, however, that the system relies on a two-way flow of funds. At the end of each accounting period most of the flows are balanced and any net residual is relatively small and/or settled among the *hawaladars* concerned. Hence, as per the table below, there should be almost equal outflows. An estimation of outflows was beyond the scope of this chapter, so it supplies no empirical data on their composition. Nevertheless, Table 6.1 provides us with some idea of what the counterflows are likely to be. Included in the list of items, for example, is the import of goods, which is often used to balance an inflow of money.

Because the *hawala* system experiences an incredibly high turnover rate of funds, *hawaladars* can manage a very high flow of funds while keeping only small balances of funds in their hands.

Table 6.1: Rough Estimates of Aggregate *Hawala* Flows in Afghanistan (2004-2005)

Item	Inflow (US$ million)	Outflow (US$ million)
Opium trade~	1,700	?
Unofficial re-exports^	1,100	1,000
UN agencies*	500	?
NGOs**	1,300	?
Inward remittances and informal investments***	1,000 - 1,500	?
Imports of goods	---	?
Expatriation of opium profits	---	?
Other outward capital movements	---	?
Total:	5,600 - 6,100	5,600 - 6,100

~ The figure used here includes all farm-gate proceeds of the opium economy (because it is reasonable to assume that these do flow into Afghanistan), but only half of the aggregate profits accruing to Afghan traffickers (because it is not reasonable to assume that all of the "value added" at the processing and trading state enters Afghanistan).

^ These figures are based on World Bank 2001 estimates. It is possible to offer an estimate on the out flow here because the import bill cannot be too much less than the export bill on unofficial trade (a 10% margin on the unofficial re-exports is assumed).

* This figure accounts for the amount of funds transferred by two major UN agencies through the *hawala* system, as verified by the author.

** This figure emerged from interviews with major NGOs operating in Afghanistan.

*** This figure includes regular remittances from migrants and refugees in Pakistan and Iran, and irregular foreign direct investment from the diaspora.

II. METHODOLOGY

Data Base

Primary data forms the basis of the research on which this chapter is based. Intensive investigative fieldwork was conducted through formal and informal discussions with a wide variety of informants in Afghanistan, Pakistan, and the United Arab Emirates. These included formal and informal money service providers, NGO workers, opium producers and traffickers, business traders, accountants, and Afghan politicians. Collection of this primary data focused on two subsets aimed at (i) quantifying the nexus between drugs and the *hawala* system, and (ii) assessing the importance of *hawala* networks for the movement of drug-related profits.

The study involved a sample of 54 *hawala* dealers across the major financial centers of Afghanistan during a five-month period, from March to July 2005. Comprising 6% of the estimated 900 significant *hawala* shops in the country, this provided a reasonable sample with which to work. The dealers were selected on the basis of the following criteria:

1. recommendation by trusted informants or colleagues;
2. geographical spread;
3. category, i.e. small, medium, large;
4. type, i.e. those who dealt in money, goods, and/or opium;
5. variation in ethnic group;
6. length of time spent in the business (most had 10-25 years' experience); and
7. those with partners in the world's major trading centers.

In order to verify the claims made by the *hawaladars*, the following groups were also interviewed on the basis of their expertise or knowledge of the system:

1. the *users:* drug dealers, businessmen, traders, international aid workers;
2. the *regulators:* government officials, DAB personnel; and
3. the formal *service providers:* private bankers, accountants.

The task of quantifying monetary transfers–particularly those relating to drugs–is exceedingly difficult, but it is nevertheless worthwhile to make use of figures gathered during fieldwork in an effort to reach more reliable estimates on the extent of drug money in the *hawala* system. To manage the enormous range in figures gathered, the dealers are separated into small, medium, and large categories. This categorisation was complicated by some *hawaladars* who claimed to be a lot smaller or bigger than their monetary transfers would indicate. All currency conversions were made according to the exchange rate on the day of interview.[3]

The topic under investigation could not be properly understood by studying a single site. Therefore fieldwork was conducted in the country's main financial centers where the *hawala* system is most active. The author travelled to five regions of Afghanistan, which included visits to Faizabad (Badakhshan), Gardez (Paktya), Herat (Herat), Jalalabad (Nangarhar), Kabul (Kabul), Mazar-e-Sharif and Charsang village (Balkh), and the North West Frontier Province (Pakistan).

In 2004, the top three poppy cultivating provinces–Helmand, Nangarhar and Badakhshan–accounted for 56% of the total area under poppy cultivation. These provinces not only have been major production sites, but are concomitantly important transit points on drug smuggling routes and major centers for drug money laundering. For these reasons, it was important to explore these sites in some depth.

Security

Due to security considerations, it was not possible to travel to Kandahar and Helmand. Instead, interviews were conducted indirectly with certain key drug dealers and *hawaladars* through trusted informants. The author is therefore particularly grateful to a number of people who helped in this process, but who unfortunately cannot be named due to the nature of the topic. The author's planned research in Jalalabad was interrupted by an unexpected local riot causing her to be evacuated immediately to Kabul. Any future research should explore this site more fully.

[3] During the five-month interview period, there were only minor fluctuations in the rate of the Afghani and Iranian Toman against the US Dollar.

Seasonal Aspects

Both the illicit drug industry and financial markets share one crucial characteristic–large fluctuations over short periods of time. Together with lack of openly available statistical data, this makes quantitative study of either extremely difficult. In all surveys, therefore, the informal money service providers were asked to take into account the fluctuations in the market. This proved particularly important when measuring the median volume of drug-related transfers.

Kandahari *hawaladars* explained that there are some months when shops receive very little money from the drug business. This is the case, for example, during the months of February, March, and April when opium poppy is at the growing stage. On the other hand, during the poppy cultivation months (from October to December) the *hawala* market experiences a huge influx of funds reflecting advance payments to farmers for crop cultivation. The market also experiences large fluctuations from the end of April, to June because the opium is ready for purchase. The *hawaladars* therefore reported figures of the highest order during the two phases of opium poppy cultivation and harvesting.

The inflow of advance payments for opium at the time of planting suggests that there is a chain of credit not just from farmer to first-level trader but also beyond, including internationally. Reports suggest that, on receipt of a drug order, a buyer transfers another payment, although in a smaller amount, to the trafficker, either in Afghanistan or to an account held outside the country.

In contrast to drug inflows, outflows of funds do not appear to be seasonal. While *hawaladars* have to allow for fluctuations in the drug market, they do not have the same problem with the steadier outflows that mostly finance trade in goods.

Data Limitations

In view of the clandestine and illicit nature of the subject, and the many grey areas surrounding it, the figures and results in this chapter must be treated with caution. This study is the first of its kind and should be understood in the context of the shortage of data available on the subject and the difficulty in redressing this deficit. Representative data samples are provided wherever possible, covering a specific time period from February to July 2005, and tentative conclusions are drawn out of the data collected.

In spite of the data limitations, the study has achieved an overview of the nexus between drug trafficking and the *hawala* system in Afghanistan, and offers useful insights for the design of drug control strategies and the shaping of economic policies relating to the financial services industry.

III. THE MECHANICS OF THE HAWALA SYSTEM

Background

In Arabic, the term "*hawala*" (حوالة) means "transfer", and in simple terms denotes the practice of transferring money and value from one place to another through service providers, known as *hawaladars*. The practice is understood in Arabic legal commentaries as the "exchange of debt", particularly in its historical context of long-distance trade. When the word was adopted into Hindi and Urdu (हवाला / حوالہ) , it retained this sense but gained the additional meanings "trust" and "reference", which reflect the code by which the system functions. Afghans involved in the trade tend to call themselves *sarafi*, or the singular, *saraf* (صراف),which means "money changer".

The *hawala* process consists of three main functions: money exchange, the sending and receiving of money ("outbound" and "inbound" transmissions), and the settlement of transactions. In the transfer of money, various intermediaries tend to be engaged, but this does not generally delay the payment or affect its reliability, cost, or convenience to the customer. These features make it the remittance system of choice for many labour migrants wanting to remit money back home.

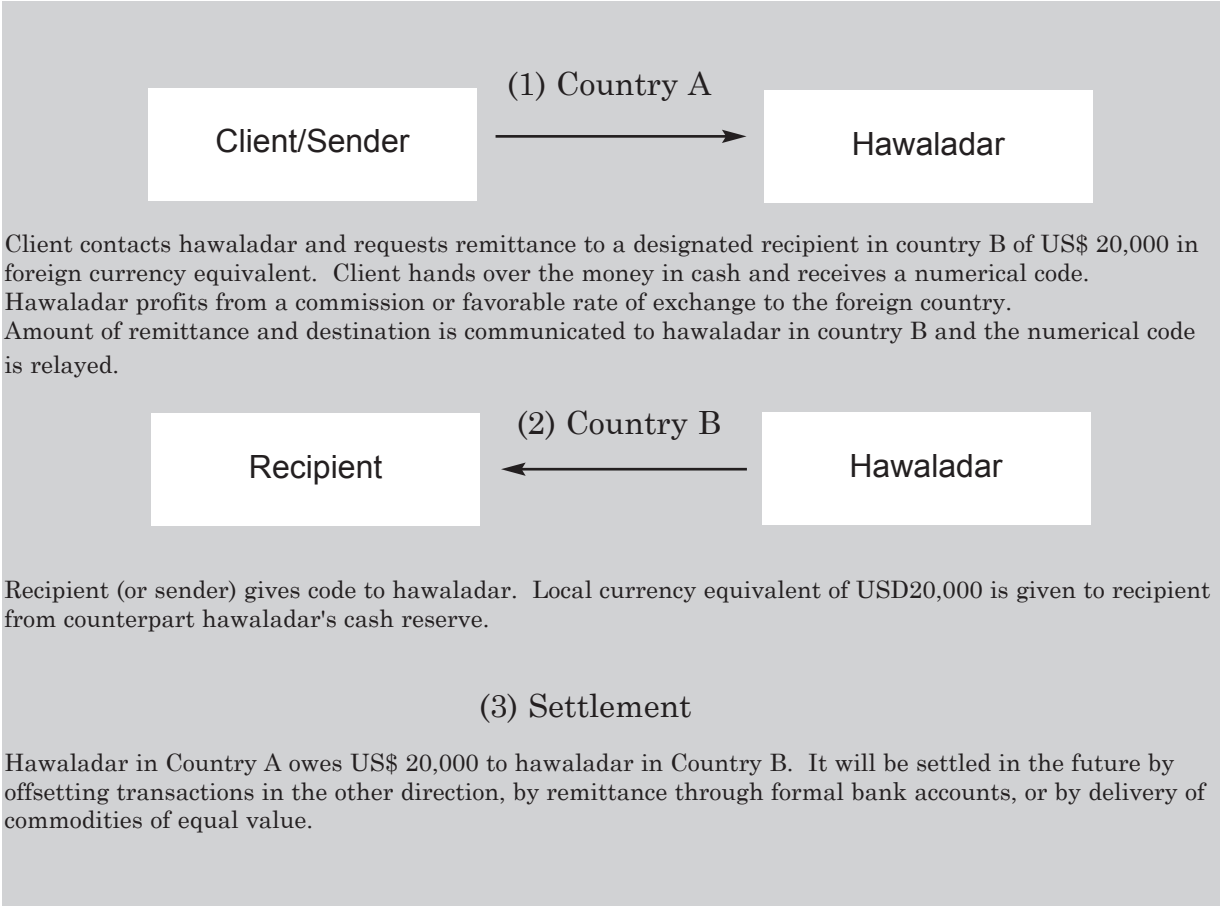
When a *hawaladar* sends payment instructions to his counterpart, an informal debt is created which must at some stage be settled. Kinship and family ties usually ensure a smooth settlement process (Passas, 2003). In Afghanistan, intermarriages between the families of *hawaladars* are commonplace because they are seen as a way of cementing the trust between parties. It is common for a number of brothers to operate in the same *hawala* business, covering some of the world's major financial centers such as Karachi, Dubai, London, Mumbai, New York, and Shanghai.

Despite the emphasis on familial connections, it should be noted that the business is like any other, driven first and foremost by profit. In this sense, *hawaladars* should be perceived in their true form as financial entrepreneurs operating as part of the informal economy; instead, they are portrayed in some accounts as motivated primarily by ethnic ties to distant relations abroad, or tarnished with the brush of terrorist and insurgent financing in others. In reality, if it maximizes profit to deal with a Tajik when the dealer is Pashtun, he will not hesitate to do so after verifying that the other party is trustworthy. This is particularly the case in the trafficking of drugs; in Kaldor district of Balkh, the author encountered an Uzbek, Turkman and Pashtun that cooperate with 10-15 others at the border to transport opium for 4-5 commanders in the North. Ethnicity is thus a poor explanatory factor in the cooperation among *hawala* dealers.

Table 6.2 below provides a simplified outline of the stages involved in a typical *hawala* transaction.

Hawaladars utilise the services of formally constituted banks– especially TT and SWIFT facilities–to effect transfers. Deposits are occasionally fragmented and wired to various banks throughout the world before being brought back together in an aggregate (the "starburst" effect), or they can be sent on a circuitous trip and returned back to the account of origin (the "boomerang" effect) (Boaden and Kenney, 2004). The movement and layering of funds from informal to formal institutions blurs the boundary between the two, making it impossible to separate one from the other. The formal and informal banking systems become interlocked, just like the official and unofficial markets serviced by the *hawala* system itself.

Table 6.2: Stages in a Typical *Hawala* Transaction



Source: Adapted from an earlier version presented by Carroll (2002).

The fieldwork conducted indicates that the widespread perception of the *hawala* system as being paperless is incorrect. Access to financial records reveals that each transaction is carefully logged, and follows its own accounting procedures. Not surprisingly, transfers made on behalf of drug traffickers tend to be kept more discreet, either by maintaining very simple notes locked in the safe, or by not keeping a record at all. However, one *hawaladar* confided that he documents all of the shop's drug-related financial transfers on his son's computer at home.

It should now be clear that, while anonymity and potential for nominal documentation make the *hawala* system an attractive means to transfer money, these qualities also make it vulnerable to abuse. But it is notoriously difficult to draw a simplistic distinction between the illicit and licit forms of Afghanistan's informal economy, especially when evaluating the extent of drug money passing through the *hawala* system. A glance at the various users of the system reveals that it is critical to the movement of both illicit and licit finance.

Structure of Hawala Markets

Regional and transnational networks. The *hawala* system relies on the extensive networks of mainly Pashtun diaspora and refugee communities in Iran, Pakistan, Saudi Arabia, Europe, and the United Arab Emirates (UAE). The groups link to the political, religious, and socio-economic networks within the core countries of Central Asia, three of which share a border with Afghanistan, and well beyond the region to the Middle East, the UK, and the US.

Anecdotal evidence points to close relations between different regional centers. Typically, each province connects to its closest neighbour; for example, the provincial markets in the north, at Mazar-i-Sharif and Faizabad, are articulated toward Tajikistan and Pakistan, while the markets in the west are articulated toward Iran. The presence of the respective foreign currencies provides confirmation of these close regional ties. In the case of southern Afghanistan, the markets depend on trading centers in Pakistan's North West Frontier Province (NWFP).

Both within Afghanistan and more broadly across the region, triangular flows of various kinds can be found between *hawala* dealers. An illustrative example includes the following movements of funds:

1. A drug payment arrives in Peshawar, Pakistan, by TT from the UK.
2. The payment is fragmented, and part of it is transferred to a *hawala* operator in Helmand province.
3. The profits are then used to finance imports from Dubai through Herat.
4. The settlement process could take several weeks to complete.

One step removed from this process there is likely to be an Afghan drug trafficker, based in southern Afghanistan, who determines the flow of funds and goods. In this scenario, he instructs a *hawala* dealer in Helmand to purchase the imports on his behalf. And after receiving the goods that enter Afghanistan via Herat, he is then provided with the option to sell them on for a further profit.

Dubai (UAE), China, Japan, and Germany are the main sources of imported goods for Afghan traders, while cities in Pakistan, UAE, and Saudi Arabia are the main transaction centers for the Afghan *hawala* markets. Dubai operates as the central "clearing house" for transactions. Major financial centers further afield, such as London and New York, host fewer *hawaladars* but are responsible for sending some of the largest amounts of money related to drugs. Although most drug *hawaladars* in Kandahar and Helmand identified London as their main source of drug orders, the payments are often routed to Afghan partners in UAE and Pakistan, where the money is reinvested or used to settle other transactions (as in the illustrative scenario above). Afghan *hawala* businesses make use of corresponding Pakistani networks, which often have greater reach in countries such as the UK.

In recent years, extensive networks have also developed throughout East Asia. Discussions with most *hawaladars* alluded to the importance of China to their business. Trading families, such as those belonging to the Afridi clan, also commented on the extension of their links to China and Japan, and often explained how they would establish their own *hawala* businesses as a "support center for their trade" (interviews conducted in 2005). This provides a further indication of the intermingling of the trade and money transfer businesses and marks an important shift in the expansion of the *hawala* networks beyond the immediate region.

Afghanistan's geographical location and transnational social networks underscore the impossibility of disentangling the contemporary political economy of the country from its wider regional and international context.

Trading risks. All *hawaladars* reported that the chief sources of risk are related to insecurity, both financial and personal. While they expect to encounter the normal trading risks of any conventional business, they talked of many additional risks. It is important to note the difficulty not just in identifying the major potential windfalls of *hawala* transactions but moreover to extract stories of market risks and downside outcomes.

Most examples that combine both financial and personal risk involve the transport of money. Intercepted couriers, either delivering funds to a client or to a banking institution for deposit, are major targets of organised criminal groups. Many *hawaladars* in Pakistan reported losses incurred in their Afghan partner shops by this method. Couriers travelling by taxi appear to be routinely targeted by criminal organisations, while there are also the obvious hijacking attempts on personal vehicles. There were several unconfirmed reports of victims being "drugged" by some kind of aerosol and waking up later to find that their money had been stolen. One *saraf* reported that his courier had been intercepted with a cash cheque for Afs1,100,000 (US$ 25,700). On leaving Sarai Shah Zadar, Kabul's money market, the man hailed a taxi to the National Bank of Pakistan branch. The taxi driver asked whether he could collect two relatives en route, and the courier obliged. When the two men entered the vehicle, the man was assaulted and the cheque stolen. Each informant had stories of a similar nature, all involving the theft of money and/or the violent deaths of people they knew, including family members.

There were also cases that appeared to be personal vendettas against *hawaladars* themselves–for example, in Kabul last year an organised crime group murdered five children of one shop owner. Neighbouring *sarafs* argue that this could only be in retaliation for a "bad deal", or too close an association with a controversial political figure. Various sources suggested that criminal groups target couriers delivering cash to politicians as a way of striking at their most vulnerable point, and depleting their power to influence through money.

The problem of personal security could be partially solved by opening bank branches closer to the money markets. At present the formal financial sector is based in another part of Kabul city, which makes it difficult for dealers to deposit and withdraw funds safely. After one company's recent loss of US$ 500,000 to a group of organised criminal hijackers, it employed a full-time armed escort for the transport of its money to the bank. The vehicles are subcontracted to other *hawala* shops also wishing to move their money overnight for safekeeping. This is perceived to be more secure than storing money in the shop's safe at the market.

Some dealers admitted to lacking the courage to report thefts to the authorities because of the association between some organised criminal groups and high-level political officials. In Pakistan *hawaladars* frequently complained of the confiscation and theft of their money by Pakistani government officials. Four years ago, one man officially reported the government's unlawful confiscation of Pakistan Rs 4 million from his shop. He spent several years submitting paperwork to retrieve the funds, and paid a total of Rs 500,000 worth of bribes in the process. The money was never returned to him – a familiar story among the *hawaladar* community, and one involving a lot less money than many other cases in similar circumstances.

The remarkable aspect of these financial and personal risks is that, although there are many stories of bankruptcies, they appear to be due more to "bad" currency speculations than to theft or injury. The assurance that "we can recover easily" was commonplace in almost every interview. Risks are viewed as a necessary gamble in the business, and any proposal for external interference (i.e. with regulation or state protection) is usually resisted. This was the case in interviews with medium and top-end dealers; the smaller dealers revealed a much greater sense of insecurity and perceived personal risk. In one interview, two *hawaladars* in Gardez, Paktika, were surprisingly open to the introduction of formal banking institutions in the province. They complained of serious and multiple security risks in transporting money from Kabul to Gardez by road, and expressed the need for a more structured, regulated banking system in the region. These complaints became more real when at the time of writing, on 7 July 2005, it was reported that unidentified gunmen on motorcycles killed a money changer in his car in Gardez, while only days earlier Rs 200,000 was stolen from his friend.

Many of the risks facing *hawala* dealers, such as theft, personal security, and price fluctuations, are similar to those in the drug trade, and also more generally in the informal economy (see Chapter 4 and Lister and Pain, 2004).

Trust. Although there are considerable risks involved, and customers do at times lose their money, the system generally works. It is widely recognised that a significant degree of trust must be in place for this to happen, but reports often conflate the issue without properly differentiating the various networks in play.

The following list outlines at least five networks of trust operating in the system:

1. *hawaladar* C1 + *hawaladar* C1
2. *hawaladar* C1 + *hawaladar* C2 (+ *hawaladar* C3 etc)
3. *hawaladar* + client (both remitting and receiving)
4. *hawaladar* + regulatory institution (i.e. Central Bank)
5. *hawaladar* + law enforcement agency (i.e. police)
6. business client 1 + business client 2 (business loans)

It is important to start with the first category because without this foundational level of trust the system could not function. As networks between *hawaladars* develop, they form a web of careful co-operation and competition, where each single strand might be weak, but the whole fabric is made strong through their interaction (Braithwaite and Drahos, 2000). While trust is essentially a transactional concept, its role in any given transaction depends entirely on the context. Generally speaking, most *hawaladars* operating in the same company (as outlined in item 1 above) have familial connections, which provide a firm basis on which to build trust between the company's various nodes spanning different parts of the globe.

The issue of trust becomes more complicated in networks that combine nodes from various companies, as demonstrated in item 2. In this instance, each transaction optimally increases the mutual trust between dealers, which serves to strengthen the system as a whole.

The third category, involving networks of trust between the *hawaladar* and client, seems fairly straightforward. The remitting client must trust that the *hawaladar's* counterpart will deliver the agreed amount of money to the recipient. There are cases where people pose as agents, while not officially being part of the system itself. These impostors are often guilty of abusing trust by failing to deliver the client's money. Although *hawaladars* rarely admit that dealers defect from the system, quite a number of examples were found where this has taken place, and at a great loss to clients. The instances that were cited were primarily from times of conflict, where the situation was particularly unstable, and one could not rule out the possibility of the dealer himself being killed or imprisoned, resulting in closure of the business.

An interesting aspect of the *hawaladar*-client relationship is the dealer's dependence on the client to honour the promise to provide funds punctually. For example, it is the policy of major INGOs and NGOs using the system to remit payment only on receipt of the money in the desired destination. These transactions can vary from US$ 20,000 to US$ 3 million. NGOs frequently reported instances where they were late with payments, which caused a souring of relations with the *hawaladar*. In these cases, the dealer is not provided with the necessary liquidity to meet his settlement demands. With barely any physical movement of money between *hawaladars*, it is crucial for each dealer to have sufficient cash pools to cover the other's debts. When the cash pools are inadequate, and the dealer has pledged to deliver his counterpart's money, the trust between *hawaladars* becomes strained.

Just as the use of trust increases the level of trust among groups (as with the *hawaladars*), its non-use diminishes trust. This particularly applies to the cases in items 4 and 5, where interactions between dealers and formal institutions have historically been weak. Contact with regulatory institutions and "lawful" law enforcement agents is especially limited during conflict and continues to be strained during the early stages of state-building. As per "the sum constancy principle", the more trust shown toward "outsiders" diminishes, the more identity and trust is strengthened between "insiders" (Offe, 1999).

Hawaladars view law enforcement agencies with suspicion and often contempt. Unlike other informal sector enterprises, such as the drug trade where there are close alliances with elements of the police for example (see Chapter 7), *hawaladars* have an adversarial relationship with law enforcement and view them as a major source of corruption and theft. Anecdotal evidence from central Afghanistan suggests that the police seek details of a theft to determine their share in the loot rather than to ensure that justice is done.

IV. PROVINCIAL AND REGIONAL CONTEXTS

This section explores key provincial sites where drug money transfers and laundering are occurring through the *hawala* system. These locations were selected on the basis of their varied importance to the drug economy. Four main aspects will be discussed:

- the distinctive characteristics of the province
- opium production and trade

- the structure of the *hawala* industry and markets
- provincial variation in the transaction volumes.

Due to the recent increase in opium production in the North and Northeastern regions of the country, Badakhshan is the first key province to be explored. The money market in its capital, Faizabad, is small and saturated with drug-related funds originating from the porous border with Tajikistan to the north and from Pakistan to the east.

Herat in the Western Region is the second key site under examination. It is a much more developed city than Faizabad, with good infrastructure and a number of excellent roads linking it to major cities in neighbouring countries. It derives much of its income from customs duties collected at the borders with both Iran and Turkmenistan. Its money market combines a mix of licit and illicit transfers related to trade, remittances, and opium trafficking.

Two major provinces in the South, Helmand and Kandahar, are the next focus of enquiry. Helmand not only accounts for more than aquarter of the total area under poppy cultivation and opium production in Afghanistan, it also dominates the country's opium trading networks. Located at the heart of the Pashtun belt, the province is therefore ideally placed to exploit the extensive Pashtun trading networks that reach many of the world's key financial sites (Schetter, 2004). When asked to describe the relationship between the Helmand and Kandahar *hawala* markets, one *saraf* commented, "you may as well see them as one and the same market" (see also Chapter 5). Helmand and Kandahar together were responsible for close to 40% of Afghanistan's opium production in 2005, and a considerably hight percentage in 2006.

This section ends with a brief analysis of Peshawar's *hawala* market in Pakistan, because it is impossible to examine the overall system without taking into account its regional partners. Afghanistan's political economy is so deeply constituted through regional and international associations that it would be a mistake to view it in a purely national context.

Northeastern Region – Badakhshan

Background. Badakhshan is a remote and mountainous province, bordering Tajikistan, China, and Pakistan. Major parts of the province are reachable only by foot, donkey, or helicopter. Badakhshan is particularly vulnerable to food insecurity and has always been one of the poorest areas in Afghanistan. Due to its location it depends on subsistence agriculture and trade, and was a main opium production center of the country during the 19th and 20th centuries, with a high-quality yield.

Opium production and trade. While wheat and barley have been the predominant crops in the region, strong increases in opium production have been reported, with cultivation in Badakhshan rising by 43% over the 1994-2000 period. In 2001, after the Taliban ban affected opium production in almost all of the rest of the country, Badakhshan accounted for 83% of total opium poppy cultivation in Afghanistan, although the situation changed again in 2002 with the resumption of opium production in the South and East (UNODC, 2004). By 2004, Badakhshan was the country's third major source of opium, accounting for 12% of the

national total. After it had experienced a considerable increase in the area under cultivation for the fourth consecutive year, in 2005 the province's reduced its area of opium poppy cultivation by 53%, making it the fifth largest contributor to national opium production (UNODC, 2005b).

Structure of *hawala* market. Badakhshan is host to a relatively modest number of money service providers in comparison with the other main money markets in Afghanistan. This should not, however, belie its significance to drug money laundering schemes in the informal banking structure. While the number of currency exchange dealers (predictably) decreased after the currency reform and consequent reduced opportunities for speculation over changes in the value of the national currency, the number of recognised *hawala* dealers increased to 5-6, compared with around 3-4 in previous years. This was attributed in large part, to the arrival of more international organisations and NGOs in the province.

Response to government action. One informant revealed that the threat of drug interdiction by the Afghan National Police (ANP) and special CN police had driven a large proportion of the *hawala* trade in the Northeast underground, in contrast to the open nature of the market during the previous few years. The *hawaladars* also indicated that their businesses had suffered from the decline in opium trade, which they suspected was a result of a decline in either provincial opium production or local storage of drugs. ANP and CNPA claim that their 2005 eradication campaigns were successful in reducing the area of Badakhshan's opium poppy cultivation by 144 ha. Far more important than eradication as such, however, was the perceived threat of eradication which discouraged farmers from planting opium poppy in the first place. Thus the area under poppy cultivation in Badakhshan declined from 15,600 ha in 2004 to 7,370 ha in 2005, a decline of 53%.

To counter the decline in business resulting from decreased drug funds, some *hawaladars* have opted to acquire new clients from the international aid community.

Aid money. The introduction of more development projects in the region was universally viewed as a positive influence on the provincial *hawala* markets. NGO personnel stressed the importance of the *hawala* networks for delivery of aid money to projects and staff. The *hawaladars* can deliver money efficiently and routinely to border districts of neighbouring provinces, such as Baghlan and Takhar, which are too difficult for NGOs to reach regularly. A UN World Food Program (WFP) representative in Badakhshan reported that their Wheat Distribution Program, which covers the months leading to winter (September to December), would not be possible without the payment facilities provided by the *hawaladars*. In serving the international aid community, the *hawala* networks thus offer an indirect means of development to people who would otherwise have few alternative means of survival.

Hawaladars were confident that trade would fill the gap left by the eventual departure of the international community, and that this would signal a time of better development and more opportunities to move into other sectors.

Transaction volumes. Variation in the demand for drugs causes both large fluctuations and huge injections of cash into the market. All reports confirm that an increase in demand for drugs causes a concomitant rise in the amount of money entering the *hawala* system; liquidity in the market naturally increases, therefore, when drug dealers provide

advance payments to farmers, or when traffickers receive money from abroad for transfer of drugs. These fluctuations make the task of measuring monthly averages of financial transfers particularly difficult. A top-end *hawaladar* confided that, in a good day, he might receive a transfer of US$ 5 million from Peshawar, and US$ 200-300,000 from Jalalabad. But on an average day, he may transfer around US$ 500,000 in total.

Bearing these considerations in mind, the following table provides rough estimates on the inflow of funds of each *hawaladar* identified in Faizabad, as provided by the dealers themselves.

Table 6.3: Inflow of Funds of *Hawaladars* in Faizabad

Size of hawaladar	No of hawaladars	Monthly average (US$ million)	Annual total (US$ million)
Large	1	5.0	60
Medium	3	1.5	54
Small	2	1.0	24
Total:	6	1.9	138

Source: Author research interviews

Another way of measuring the liquidity of the main *hawala* shops in the province is by gathering data on the amounts of money routinely delivered to NGOs on the ground. On average, a number of international agencies collect US$ 150,000 per month for distribution to staff and to cover operational costs. One UN worker disclosed that, within 2 hours, his agency's *hawaladar* can deliver US$ 450,000, "always". Although it is important to note that there are only very few *hawaladars* in each province that have this amount of money available on site, the above example provides a good indicator of how liquid a top-end *hawaladar* can be at any one time, even in a remote province such as Badakhshan. Payment to *hawala* dealers is made via their formal bank accounts in cities such as Dubai (UAE) and Peshawar (Pakistan).[4] It is then the responsibility of the *hawaladar* to deliver the cash to a representative from the NGO in the respective province. Logic dictates that they must have the liquidity to meet these routine demands.

Another international aid worker provided a further insight into the question of liquidity. He explained that, when the agency receives salaries sent from its central office via the *hawaladar*, the money is counted, delivered to the national staff, and passed right back into the hands of the same *hawaladar* for further transfer to the worker's place of residence. This money, therefore, does not actually move physically from the *hawaladar's* shop in this example that involves several transactions. This might help explain how these *hawaladars* can so readily supply clients with cash. But at one point in time the money must have physically arrived in the province.

Origin of payments. All reports indicate that the majority of funds are transmitted from Pakistan. This was corroborated by NGO workers who observed that the fresh US dollar notes they receive bear Pakistani stamps. At times, money arrives in Badakhshan circuitously from Pakistan (i.e. via Kabul), and at other times via less conventional routes. During several interviews, the author was witness to *hawaladars* arranging for the transport

of large quantities of US dollars from Kabul to Badakhshan. On all occasions, this was done by road. The dealers commented that both the removal of roadblocks and the presence of ISAF troops had vastly improved conditions for this mode of transport. Previously, large sums of money had been stolen on the road, vehicles hijacked, and cars stopped at check-points controlled by commanders and other political elements.

Money is also transported by air, although this seems to be less common for everyday transactions. One (seemingly) exceptional incident occurred in July 2002, just after Hamid Karzai was elected as President of the transitional government. There was a hasty move to shift drugs out of the province, perhaps in anticipation of increased interdiction efforts. Two commanders reportedly arrived by helicopter to collect 3,700 kg of refined opium (heroin) plus some dry opium. They arrived with an estimated US$ 14.8 million. From Faizabad the drugs were transported to Tajikistan. Observers in the city speak of huge injections of cash into the market at this time–as much as US$ 1 million per day over a brief period. It is perfectly reasonable to deduce that INGOs, the PRT, inbound remitters, and/or legitimate traders then absorbed this money.

Conclusions. The estimated transaction volumes for Faizabad's *hawaladars* came to an annual total of US$ 138 million. The estimated aggregate value of opium produced in Badakhshan in 2003/04 (close to US$ 97 million at farm-gate prices as of January 2005) is of the same order of magnitude as the estimated annual total *hawala* transactions. This tends to substantiate the qualitative accounts that the essential liquidity in the province is derived from the drug trade. The international agencies and NGOs implementing projects in the province and surrounding areas are thus presented with a dilemma. Field research indicates that their liquidity is derived from *hawala* dealers whose capital base depends on illicit trade in goods and opium.

While there are clearly large inflows of money through the *hawala* markets in Badakhshan, associated with both drugs and UN/NGO expenditures, there are also corresponding outflows of funds. *Hawaladars* tend to balance their books mainly through the purchase of commodities and capital flight. Bordering Tajikistan, there is a lucrative trade in stolen luxury cars (imported from Russia), gemstones, flour, vodka, and weaponry.

Badakhshan is our first example where the legal and illegal sectors of the economy meet. Discussions with informants suggest that this might not be sustainable in the long term, but that this might be the beginning of a natural progression away from the illegal sector. If, for example, opium crop eradication efforts are taking effect, and the criminal economy is shrinking, then there could be a general movement toward legitimate business activities on the part of the *hawaladars*. As the INGOs and other traders bring more business to the area, the money traded is gradually being laundered from the illicit to licit.

Western Region–Herat

Background. Herat is the regional capital of western Afghanistan. During 2002 and subsequently, a series of public works projects brought electricity, irrigation, good roads, and parks to the city. Many of Herat's inhabitants boast that it acts as the country's real financial center. At the time of fieldwork, Herat reportedly collected an estimated US$ 5-10 million per month in customs revenue. Most of the business is derived from both official and

[4] This process of transferring funds to hawaladars via banks in Pakistan and the UAE was noted in Maimbo (2003).

"unofficial" trade. The substantial trade that passes through two major land ports bordering Turkmenistan (Torghundi) and Iran (Islam Qala) explains the large supply of foreign exchange in the informal financial markets.

Structure of the hawala market. In contrast to Badakhshan, a much larger and more vibrant informal market exists in Herat city, with an estimated 300-400 money exchange shops occupying two parts of the central business district. There is still a high turnover of exchange dealers due to the decreased opportunities for currency speculation after the currency reform. Those who stayed in the business continue to make significant profits from major *hawala* transactions, both domestic and international. Three large *hawaladars* in Herat were identified, who handle significant trade deals and drug profits, and there are also some 50 medium-sized dealers, as well as roughly 100 small dealers who use the *hawala* business as a supplementary source of income. The money market is articulated more toward Iran than Turkmenistan, as most of the trade from UAE transits through borders with Iran. Afghan *hawala* dealers in Iran, who have been forced underground due to discriminatory treatment by the state and local communities, broker trade deals between UAE and Afghanistan.

Opium production and trade. Herat has never been a significant drug producing area, although it does play an important role in drug trafficking and laundering of proceeds. Various sources estimate that only three or four *hawaladars* in Herat's money market specialize in the laundering of drug proceeds. However, interviews with non-specialists indicate that they too assist in the layering and integration of drug money, making it appear to have been obtained from legitimate sources. This may not be, and often is not, the primary aim of the *hawaladar*. He sees himself simply as a facilitator, transacting wherever the most profit will be generated.

While Herat is a conduit for opium trade from other provinces, it is also a major channel for imports of legitimate goods destined for other provinces. The extensive trading networks of the region connect imports of cars, building materials, edible oils, and glass to drug exports. It was consistently reported that key business figures offer their "legitimate" services, such as transport networks and contacts with customs officials, to those seeking to launder and transform their money into respectability. Most businessmen argued that they did not need to know the origin of the money–they would receive a commission in the process.

While it is widely recognised among Herat's financial community that legal commodities are traded for opium and other illicit goods, it is less well understood that there is a continuum of engagement between the trades. Some opium exports are directly linked to trade in legitimate goods, whereas others are removed to the point that it becomes impossible to link the commodity back to the illicit trade. The following are two simple hypothetical scenarios based on information provided in interviews, which fall at different places along the continuum.[5]

Scenario 1: Several *hawaladars* broker a deal between a trafficker in Afghanistan wishing to export opium and a businessman in UAE wishing to purchase the drugs. The trafficker prefers to receive commodities (e.g. vehicles) in return for the drugs, increasing the potential for profit. In this case, the *hawaladar* would facilitate the exchange of goods through his various trading partnerships in UAE, Iran, and Afghanistan. When the drugs

are delivered to the buyer's representative in Iran or at the Turkish border, the payment is either (i) provided in cash to the *hawaladar's* partner shop in Iran or Dubai, or (ii) transferred electronically to the *hawaladar's* bank account. It is then the *hawaladar's* responsibility to broker the purchase and import of vehicles to complete the deal. In this instance, legitimate and illicit trade are directly connected with the knowledge of both clients, but the *hawaladar* may not be aware of the criminal origin of the investment.

Scenario 2: When a drug trafficker in Afghanistan wants to spend some of his profits from drugs (and his money is kept in Dubai, for example), he contacts a *hawaladar* to assist him in importing goods into Afghanistan. Alternatively, when he wants to transfer money into the country for investment, the *hawaladar* conducts the transaction for him. Again, it is possible that in facilitating the transfer the *hawaladar* is unaware of his role in laundering of drug proceeds. By the time the goods or money arrive in Afghanistan, it is impossible to link them to their illicit origin. Although most *hawala* dealers are aware that their monetary transfers combine legitimate and illegal activities, they insist that this is an inevitable practicality.

Due to the overlapping and interwoven connections between licit and illicit transfers in Herat's financial market, it was not possible to use direct methods to calculate the magnitude of drug proceeds in the local *hawala* system. Instead, qualitative reports from *hawaladars* and drug dealers had to be used in combination with indirect methods. Several *hawala* shops provided the author with access to their weekly record; however it was not possible to ascertain whether the transactions were routine or exceptional. No workable extrapolations could be made from the data.

Transaction volumes. A sample of one *hawaladar* from the large category, four from the medium, and six from the small group was interviewed to obtain a rough breakdown of transaction volumes, shown in the following table.

Table 6.4: Composition of Significant *Hawala* Business in Herat City's Main Market

Size of hawaladar	No of hawaladars	Monthly inflows (US$ million)	Annual total (US$ million)
Large	3	6.0	216
Medium	50	1.0 - 2.0	600 - 1,200
Small	100	0.2	240
Total:	~150	0.6 - 0.9	1,056 - 1,656

Source: Author research interviews.

The next table shows a breakdown of the average monthly inflows of several medium-sized *hawaladars* currently working in the market. Four dealers in this category were surveyed for the data.

[5] It should be emphasized that these are illustrative examples and are not intended to represent actual cases.

Table 6.5: Monthly Average Inflows of Medium *Hawaladars* in Herat

	US$ equivalent*(millions))
Total funds processed	2.3
Total funds processed related to drugs	0.7
Total funds processed related to legitimate trade	1.3

The average total funds processed came to over US$ 2 million per month, around US$ 0.7 millions directly linked to the drug trade and US$ 1.3 million attributed to trade in legitimate goods. This analysis is fully consistent with local reports that roughly 30% of the overall funds processed are related in some way to the drug trade.

An interesting correlation can be made between these figures and "legitimate" trade. There have been speculations in the literature that the movement of legitimate goods across the border facilitates the transfer of drug-related money (Maimbo, 2003). The field research, including interviews with Afghan importers based in Dubai and opium exporters in Afghanistan, produced evidence to support this hypothesis. While there is a wide range of imports brought into Herat, ranging from fuel to fast-moving consumer goods, car imports consistently arose in interviews as a major commodity often traded with drugs. It is interesting to note that estimated daily car imports at one border post are of the same order of magnitude as estimated drug exports at this point, although this is not meant to imply that all car transactions are facilitated with drug money.

Conclusions. In conclusion, contrary to widespread reports, this section reveals that *hawaladars* not only trade in money. They also act as brokers in facilitating the cross-border exchange of goods despite the Central Bank's licensing criteria expressly forbidding this function. In its recently enacted laws on money service providers, foreign exchange dealers and *hawaladars* are required to renounce their trading role and remove "trade" or "trading" from the title of their business.

In comparison with Badakhshan, where almost 100% of the liquidity is derived from drugs, Herat's *hawala* market, estimated at in excess of US$ 1 billion, also relies heavily on trade in goods. It seems fair to conclude that in facilitating legitimate trade the dealers also are directly or indirectly facilitating laundering of drug money.

Southern Region–Kandahar and Helmand

Background. Kandahar is home to some of the country's biggest traders. Located at the heart of the Pashtun tribal belt, it is ideally placed in the center of Pashtun trading networks that extend to many of the world's key financial sites. This makes it an important site to explore the links between informal *hawala* networks and the trafficking of drugs. Helmand is also one of Afghanistan's most important border economies and not only produces the country's largest share of opium but also provides some of the most effective opium trading networks both within and out of the country (see Chapter 4). In spite of the aggressive opium crop eradication efforts in both provinces during 2005, it was possible to glean enough data to develop an idea of the extent of drug money laundering in the region.

Structure of *hawala* market. When asked to describe the relationship between Helmand and Kandahar's *hawala* markets, one *saraf* commented, "you may as well see them as one and the same market". This should be borne in mind when comparing the data for each province. In order to gauge the extent of drug money laundering in these provincial sites, a selection of small, medium, and large *hawaladars* was interviewed in both Kandahar and Helmand.

In Helmand there are five relatively important centers for opium traders, some of which are also key sites for *hawala* business. These are:

- Sangin district center
- Lashkar Gah city
- Dishaw district border area (i.e. Baramcha)
- Musa Qala district center
- Grishk district center

Lashkar Gah city and Sangin district were selected for the sample of *hawaladars* in Helmand province because of their strategic and material importance to both the financial and opium markets.

According to the *hawaladars* sampled in both Kandahar city and at sites in Helmand, the median estimated number of significant financial traders "specialising" in the transfer of drug money in both provinces totals 54 (Table 6.6).

Table 6.6: Number of Specialist Drug Money Launderers

Province and city	No of sarafs specialising in drug monetary transfers
Helmand - Lashkar Gar	14
Helmand - Sangin district	15
Kandahar - Kandahar city	25
Total:	54

There was considerable unanimity among medium-large dealers when asked to estimate the percentage of *hawaladars* indirectly or involuntarily involved in drug money laundering. Helmand dealers estimated that 80-85% dealt in drug funds, while Kandahar dealers estimated that 90% handled drug money. These high percentages are not surprising given the level of opium production and trade in the South.

Opium production and trade. The Southern Region accounted for approximately 36% of Afghanistan's total opium production in 2003 and 2004, reflecting large-scale cultivation in Helmand province where the cultivated area fluctuated around 30,000 ha. Helmand consistently held the top position among opium cultivating provinces in most years (1994-2000 and 2005), while Nangarhar to the east was ahead of Helmand in 2003, and close behind in second position in earlier years. Reliable sources indicate that there are not more than 100 large to top-end opium traders in Helmand, and that there are around 300-350 opium traders

in total (including small, medium, and large) that use the *hawala* system for monetary transfers.

The fieldwork revealed that "healthy" competition exists between drug traffickers operating in Nangarhar and the Southern Region, and that there is actually more cooperation than rivalry. This may be explained in part by the extensive tribal and family networks linking Nangarhar and Helmand. Drug transfers between these two provinces reflect particularly big deals, which is possibly why only top-end *hawaladars* in Helmand reported drug monetary transfers to Nangarhar.

Destination of drug payments. To begin with, it is helpful to follow one series of drug payments made in a *hawala* shop. Four brothers at the top-end of a *hawala* business in Kandahar revealed that they transfer or exchange approximately US$ 350,000 per day in the shop, and that most drug transfers are sent to Chaghcharan in Ghor province, Uruzgan, and Helmand. During the peak times, over US$ 10 million of drug-related funds and legitimate trade transfers are facilitated monthly. The informants reported that Turkish drug traffickers deposit the payment into their Dubai bank account, out of which they can then buy commodities to import into the country. However, the money is reported to originate in Western Europe, mainly the United Kingdom which has a sizable heroin addiction problem.

With the above exception, every medium-large, medium, and small *hawaladar* surveyed in both Kandahar and Helmand claimed that they remit the majority of drug-related funds to Mazar-i-Sharif (Balkh province) in the North. Opium comes to Mazar from other northern provinces after its purchase by big operators. Most drug traffickers from the Southern Region then either visit Mazar to buy the opium themselves, and pay for it there, or place advance orders and remit payment through the *hawala* system. This is done because of the disparity in opium prices between the two regions. For instance, 4.5kg of opium in Mazar was valued at Afs 16,000-18,000 in 2005, while the same amount was valued at Afs 40,000-50,000 in Kandahar and Helmand. It costs the dealer an additional Afs 7,000 to transport this amount of opium, but he will still make a profit of around Afs 17,000 in one shipment. Funds are thus dispatched to Mazar from the southern *hawala* markets for payment both to those who brought the opium from other northern provinces to sell in Mazar, and to the local dealers themselves.

This corroborates information gathered in Balkh where many *hawaladars* admitted to receiving almost 100% of their funds through the business of drug traffickers. Reports from Badakhshan also confirm Kandahar to be one of the three main sources of drug money for the Northeastern Region (Nangarhar and Peshawar in Pakistan were the other two).

Origin of payments. Each of the *sarafs* interviewed in the Southern Region agreed that drug payments are remitted from Pakistan (and Iran), but that they originate first in Europe and the United States. There is patchy evidence on the method of funds transfer at this stage; however, discussions with formal bankers in Peshawar confirmed reports that money arrives electronically into Pakistani banks. The foreign currency used for drug transfers in the region gives some insight into the origin of payments. *Hawaladars* from Kandahar and Helmand primarily operate with Pakistani Rupees.[6] This provides us with a strong indication that the large bulk of drug payments arrives in Afghanistan via Pakistan. The Southern Region has strong links to Quetta, where most of the payments are made.

UNODC concluded in 2005 that 61% of Afghanistan's opiates are destined for Iran, 20% for Pakistan, and 19% for Central Asia (based on information on the distribution of opium production across Afghanistan, intelligence information on trafficking flows, and seizures of opium in neighbouring countries). While most opiates were apparently destined for Iran, the majority of payments were sent to Afghanistan via Quetta in Pakistan.

Fluctuations. A number of opium traders reported that they hold a part of their annual purchase as reserve stock to enable them to respond to unexpected orders, mainly from international traffickers. The *hawaladars* explained that, because these sales are sporadic, they do not have a major impact on the financial market. Instead, the seasonal aspects of opium production and trade were consistently identified as the key determinants of fluctuations in monetary transfers.

During periods of low drug activity, small *hawaladars* in Kandahar and Helmand receive only Rs 15,000 (US$ 250) per month, while the biggest hawaladars obtain as little as Rs 50,000 (US$ 840). It is not uncommon for some of the smallest sarafs or *hawaladars* to receive no money relating to opium during this period because there is no sale or purchase. They tend to be engaged in the *hawala* business mainly on a seasonal basis, while maintaining a shop or other enterprise full-time.

Transaction volumes. Ten *hawaladars* were asked to estimate their individual turnover and the drug component, along with their estimate of the number of local *hawaladars* who are significant dealers in drug money(see table 6.7). There tends to be significant variation among groups in their reliance on the drug trade. Qualitative statements indicate an even higher reliance on drug funds on the order of 80-90%.

There is a certain degree of consistency in the estimated number of significant drug *hawaladars* operating in each of the districts. However, these figures do not include a considerable amount of business done by many additional dealers who also participate to some degree in the laundering of drug money. When the figures offered by medium-large dealers were shown to other hawaladars in both Peshawar and Herat, the response was that the monthly transaction volumes appeared to be accurate, but that the proportion of drug money was understated.

In Table 6.7 the figures in Table 6.6 are extrapolated to another level to show the total number of significant drug-related *hawaladars* and their aggregate annual drug turnover, which could amount to a total of US$ 1 billion in both Helmand and Kandahar. The figures being of a similar order of magnitude for each province adds weight to the notion that they should actually be treated more as one market to avoid the risk of double-counting. By converting these values to drug volume equivalents (assuming a trading price of US$ 400/kg — the median between the farm-gate price of US$ 138/kg and the border price of US$ 665/kg, calculated using the assumptions below), the resulting tonnage corroborates UNODC statistics that this area is responsible for the largest share of Afghanistan's opium trade.

[6] This is also the case in Faizabad, Mazar, and Jalalabad; however, most of the foreign currency that enters Nimroz and Herat in the Western Region is in the form of the Iranian Toman.

Table 6. 7: Inflow of Funds and Drug Component in Helmand and Kandahar (2005)

Hawaladar interviewed	Annual turnover (USDm)	Drug component (%)	Drug turnover (USDm)	Estimated no. of significant drug hawaladars
Lashkar Gah City				
L1	126.0	73	92.0	5 - 9L + 20-30 >av
L2	24.2	63	15.1	15
L3	8.5	18	1.5	11
L4	3.0	15	0.5	15
Sangin District				
S1	12.0	60	7.3	5
S2	3.0	91	2.8	8
S3	2.5	73	1.8	12
Kandahar City				
K1	32.2	32	10.3	17
K2	9.7	14	1.3	30
K3	5.9	82	4.8	27

NB: The informants are listed below.

Note: Summary profiles of key informants in Southern Region

L1 Top-end drug *hawaladar* (Lashkar Gah city, Helmand province)
L2 Large drug *hawaladar* (Lashkar Gah city, Helmand province)
L3 Medium drug *hawaladar* (Lashkar Gah city, Helmand province)
L4 Small drug *hawaladar* (Lashkar Gah city, Helmand province)
S1 Large drug *hawaladar* (Sangin district, Helmand province)
S2 Medium drug *hawaladar* (Sangin district, Helmand province)
S3 Small drug *hawaladar* (Sangin district, Helmand province)
K1 Large drug *hawaladar* (Kandahar city, Kandahar province)
K2 Medium drug *hawaladar* (Kandahar city, Kandahar province)
K3 Small drug *hawaladar* (Kandahar city, Kandahar province)

An alternative approach indicates that Helmand could account for roughly US$ 0.8 billion of Afghanistan's drug-related *hawala* business (see Table 6.8), based on the following assumptions:

- the value of opium traded to Helmand is around US$ 100 million (see table);
- Helmand produces 1,000 tons of dry opium;
- the border price is US$ 665/kg;
- the total farm-gate sales are US$ 560 million, calculated by using UNODC's farm-gate price of US$ 138/kg for 2005; and
- the total export value of opium to neighbouring countries is US$ 2.7 billion.

Table 6. 8: Drug Inflows for Helmand and Kandahar Markets in Sample

	Significant drug hawaladars	Annual drug turnover (US$ thousand)	Equivalent drug traded @ US$ 400/kg (tons)
Lashkar Gah	25 - 39	75 - 1,053	188 - 2,633
Sangin	5 - 12	15 - 324	38 - 810
Helmand total*:	30 - 51	15 - 1,053	226 - 3,443
Kandahar total*:	17 - 30	51 - 810	128 - 2,025

*Assuming no double counting is involved.

Table 6.9: Estimates of Quantity (%) and Value (US$) of Opium Traded to Helmand Before Further Sale (2004/05 Harvest)

Province	2004/05 crop (ha)	Yield 2005 (kg/ha)	Total value at av farm-gate price US$ 138/kg (US$ million)	Opium traded to Helmand	
				Quantity (%)	Value (US$ million)
Badakhshan	7,370	41.8	43.7	20 - 40	8.7 - 17.4
Balkh	10,837	38.8	59.7	40 - 60	23.9 - 35.8
Bamiyan	126	38.8	6.9	80 - 100	5.5 - 6.9
Ghor	2,689	41.4	15.8	80 - 100	12.6 - 15.8
Nangarhar	1,093	44.0	6.8	20 - 40	1.4 - 2.8
Nimroz	1,690	41.4	9.9	80 - 100	7.9 - 9.9
Uruzgan	4,605	37.9	24.8	80 - 100	19.8 - 24.8
TOTAL:					79.8 - 113.4

Both approaches indicate the same order of magnitude for Helmand's *hawala* market as it relates to drugs. The large dealers in both Lashkar Gah city and Kandahar claimed that they deal directly with buyers in Pakistan, Turkey, the United Kingdom, and the United States.

Conclusions. Helmand and Kandahar provinces are key trading sites for moving drug-related funds in Afghanistan, both for outbound inter-province transactions and for inbound international transactions. They are not only the country's top producers of opium but also the leading traders. The Southern Region provides government regulators with a formidable challenge. The predominantly Pashtun *hawaladars* are able to sustain an impressive network of loyal and ready partners across the country and further out into the region.

Pakistan ---Peshawar

Background. With steady flows of refugees from Afghanistan to Pakistan during the long conflict, as well as large exports from Pakistan to Afghanistan in recent years, Afghan and Pakistani markets have become increasingly integrated, with linkages only occasionally and temporarily interrupted by political developments.

Structure of the hawala market. While it may not be immediately obvious to the casual observer, the money market at Chowk Yadgar in Peshawar is heavily populated by Afghan *sarafs* and *hawaladars*. As the majority of Afghans working in the markets are of Pashtun origin, to an outsider they are barely distinguishable among their fellow "Pashtoon" people from the North West Frontier Province (NWFP). Part of NWFP consists of autonomous federally or provincially administered tribal areas (FATA/PATA), where the administrative systems differ substantially from those in other parts of the country. This further enhances the freedom to transfer goods and money with impunity.

The usual response to enquiries about the number of money service providers in Chowk Yadgar is generally that "there are too many to count." Several estimates of currency exchange houses on the order of 200-300 have been reported in World Bank and other studies. But the total number is simply too difficult to calculate when one takes into account the many outlets hidden in butcher's shops, the gold market (which is attached to the money market), various bazaars, and so on. It is slightly less difficult to develop estimates, however, of the number of very large *hawaladars* in the city. One gold dealer confided that there are roughly 30 to 35 dealers trading in gold and performing *hawala* transactions, while a recently retired—but young—*hawaladar*, who entered and left the game before he could incur major losses, speculated that there are 10 to 15 significant *hawaladars* in Peshawar, and countless smaller ones. This same informant pointed out that not one of them is self-reliant —all of the businesses are connected in some way.

Origins and destinations of payments. It is fair to deduce from discussions with *hawaladars* in Afghanistan that their links to Pakistan are crucial for their survival. As has already been demonstrated, a large part of the Afghan market relies heavily on Peshawar and Quetta as a conduit for delivery of money from places further afield. NGOs and other international agencies— important customers of Afghanistan's *hawala* system—frequently send their funds to Pakistan, where the money is deposited and can be received in Afghanistan only hours later. Peshawar is also a recipient of significant inbound remittances from family members living overseas, in countries such as Germany, UAE, and the UK. These funds are routinely forwarded to other family members who stayed behind in Afghanistan, and provide an important contribution to their subsistence. Of course there are also the drug payments to Afghan traders, which depend to a large extent on in flows from Pakistan.

V. NOTE ON THE FORMAL BANKING SYSTEM

An interesting disparity between the domestic Afghan *hawala* markets and the Pakistani markets is their different degrees of interaction with the formal banking system. While the extent of reliance on formal banks in Afghanistan appears to be rather limited, each *hawaladar* interviewed in Pakistan makes regular visits to at least five or six of the major banks in town. Interviews often had to be arranged around the bank opening and closing times, so that *hawaladars* could make their deposits and withdrawals before the day's end. One of the reasons for the frequent interaction with banks is the banks' strategic location in the main centers of town. Pakistani banks were aware that they would attract important custom if they opened branches in the main business areas, especially in and around Chowk Yadgar and Karkhano market. In Kabul, on the other hand, new banks are being established in an area disconnected from the main business districts, making it difficult for the *sarafs* operating in Sarai Shah Zadar to access them.

Despite the launch of the National Accountability Bureau Ordinance in 1999 that was mandated to increase regulation and awareness of corrupt financial practices in Pakistan, discussions with branch managers revealed that banks in Pakistan are not properly investigating suspicious transactions and client behavior. While it is explicitly forbidden to open and maintain accounts for *hawala* dealers (Jost and Sandhu, 2000, p. 11), bank managers admitted to regularly opening accounts for local *hawala* dealers at the direction of their superiors. On the day of an interview at a bank included in this survey, a customer deposited US$

16.6 million, only to withdraw it again the following day. "We know by their transactions that they're *hawala* dealers," admitted one branch manager; "2-3 million rupees per transaction is simply not routine".

As mentioned earlier, the movement of funds between informal and formal institutions blurs the boundary between the two, making it impossible to separate one from the other. The formal and informal banking systems have become interlocked, just like the licit and illicit markets serviced by the *hawala* system itself. Moreover, as indicated earlier, the linkages of the *hawala* system with the formal banking system do not stop with regional banks but lead indirectly (in terms of the ultimate origin or destination of transfers) to banks headquartered in Europe and the USA.[7]

VI. CONCLUSIONS

There is no doubt that the task of mapping the informal economy and associated money laundering is difficult. As a US Senate Report explained:

> Ultimately, the degree of sophistication and complexity in a laundering scheme is virtually infinite, and is limited only by the creative imagination and expertise of the criminal entrepreneurs who devise such schemes … [In recent years criminals] have mastered the details of modern technology, international finance, and foreign secrecy laws to create a select fraternity of money laundering professionals. As a result, organised crime today uses banks and other financial institutions as routinely, if not as frequently, as legitimate business (US Senate Report, 1986).

An important point is that we should not be looking only at the informal financial systems of developing countries in our search for money launderers, but also at the world's major financial centers. The informal systems of money transfers explored in this study are deeply international and cannot be viewed in isolation from the formal banking sector. Major drug trafficking networks must be seen in the same light. The fieldwork conducted in this study has shown that tracing drug money flows in a country such as Afghanistan is a complicated, time-consuming business.

This chapter has also illustrated how unclear the dividing line is between "licit" and "illicit" transactions. It concludes that most drug-related export revenues are remitted to Afghanistan through the *hawala* system, in the form of either hard currency or commodities, but that these funds do not comprise anywhere near the total amount of funds circulating in the system. On the one hand, the *hawaladar*—who sits comfortably as a lynchpin at the intersection of "licit" and "illicit" transactions—delivers much-needed funds to people with few alternative means of survival, while on the other he provides the cover of anonymity and an opportunity to launder money.

Hence this chapter must conclude that the *hawala* system in Afghanistan is central to processes of development as well as to the laundering of drug money. It would be virtually impossible for a country like Afghanistan to piece together its shattered economy without relying on this kind of informal financial system. Although only occupying small shop fronts,

the *hawala* system is immense, transmitting millions of dollars outside of formal legal reckoning through familial ties, ethnic linkages, and important business partnerships. It remains, legally and morally, an indeterminate grey area where the money changing hands straddles numerous illicit/licit boundaries. Like any other financial market, it is a place where fortunes are won and lost, and those willing to take risks are rewarded accordingly.

As long as Afghanistan depends on the *hawala* system, the door for large-scale money laundering activities remains wide open. Policy makers should thus aspire to develop over time a fully functioning banking system consistent with the Financial Action Task Force on Money Laundering (FATF) guidelines. However, they must also recognize that there will be no quick transition, and that any new banking system has to be developed in a manner that is sensitive to the needs of an emerging licit economy in Afghanistan. The application of rigid rules in this context could turn out to be counter-productive. The business sector and the general public will still have to be convinced of the advantages of a modern banking system. In the meantime, it is also clear that Afghanistan will have to live with its traditional *hawala* system. While recognizing the likelihood of abuse of the *hawala* system for illegal business activities, such as drug-related money laundering, it is also clear that without the *hawala* system, the provision of even basic financial transfers could not be guaranteed in Afghanistan for the time being.

Main Findings

The main findings of this chapter are briefly outlined below, followed by a summary of policy implications. The field research found substantial evidence that the *hawala* system does facilitate the transfer of drug-related funds in Afghanistan. *Hawaladars* reported turnover of the highest order during the two phases of opium cultivation and harvesting. In an attempt to assess roughly the extent of drug money in the *hawala* system as a whole, the chapter offers a provincial breakdown by dealer size and proportion of total financial transactions related to drug money. It was confirmed that in the settlement process the dealers are heavily reliant on formal banking channels throughout the region.

Each of the four sites selected for fieldwork provided a different perspective on the laundering of drug funds, which demonstrates how difficult it is to gain a sense of the aggregate drug money laundering problem in the country. The field research in Faizabad, for example, indicated that during certain times of the year close to 100% of the liquidity in the province is derived from drugs, while in Herat it was estimated that only 30% of the *hawala* market's overall transaction volume was directly linked to drugs. The data gathered at sites such as this, where trade in legitimate goods is the province's primary source of revenue, was complicated by confirmed links between drug money and legitimate imports.

Helmand province has emerged as a key facilitator of the opium trade, both between provinces and exports, while overall estimates of the local *hawala* markets' drug-related component were of a similar order of magnitude to those in Kandahar. This finding adds weight to the notion that the major trading centers in these two neighbouring provinces should be treated as one market. Treating them separately may lead to a risk of double-counting. Bearing this in mind, the study calculated that Helmand could account for roughly US$ 800 million of Afghanistan's drug-related *hawala* business and that Herat is the second largest contributor, with in the range of US$ 300-500 million of drug money laundered annually.

[7] As Ballard (2003, p. 20) notes: "…the implementation of these verbally negotiated hawala swaps not only takes place within the formal sector, but most usually involves wholesale transfers into or out of individual or corporate accounts held at the New York headquarters of one or other of the United States' major international banks.

The southern region (Helmand and Kandahar) is a key center for money laundering in Afghanistan: about 60% of the funds are drug related and 80-90% of the *hawala* dealers in Kandahar and Helmand are involved in money transfers related to narcotics.

Furthermore, Dubai appears to be a central clearing house for international *hawala* activities (see FATF, 2005, p. 16, and Ballard, 2003, p. 14). In addition, various cities in Pakistan, notably Peshawar, Quetta, and Karachi, are major transaction centers.

Overall, the chapter confirmed that the *hawala* system has been key to the deepening and widening of the "informal economy" in Afghanistan (see World Bank, 2005), and has provided the cover of anonymity and opportunity to launder money to those wishing to abuse the system. However, the results of the survey should also be viewed in light of the positive contributions of the *hawala* networks. The system has been central to the survival of Afghanistan's financial system through war and, as demonstrated by Maimbo (2003), "integral to processes of early development and vital for the continued delivery of funds to the provinces". The *hawala* system also plays an important role in currency exchange. It participates in the Central Bank's regular foreign currency auctions, and was instrumental in the successful introduction of a new currency for Afghanistan in 2002-2003.

Policy Implications

In drawing up an appropriate policy response to the *hawala* system, it is crucial for policymakers to:

- **Recognise the positive impact of the *hawala* system on Afghanistan's economy and society.** Without its transfer mechanisms, basic assistance could not have been delivered to people in need, during either the civil conflict or the reconstruc tion process.

- **Involve *hawala* dealers in the policy process.** They are among the most knowledgeable stakeholders in the economy, and their knowledge should be drawn on in designing and planning the reconstruction of Afghanistan. Contrary to existing reports on there being a democratically elected group called the Money Exchange Dealer's Association, *hawala* dealers claim that those members were self-appointed and hence not legitimate. Any selection process must be designed to ensure proper representation.

- **Develop real incentives for compliance with current registration and taxation initiatives.** *Hawala* dealers have had an adversarial relationship with corrupt law enforcement and tax authorities. This needs to be reversed through progressive building of trust between *hawala* operators and government officials.

- **Enhance the effectiveness of the Central Bank's registration program.** Explore opportunities to use the information supplied by dealers in the registration process, and develop a way of measuring the benefits of registration.

- **Ensure that the assistance and business communities are diligent in their use of the *hawala* system.** Proper checks on dealers should be made in order to protect their transactions from becoming intermingled with illicit transfers. Currently, agencies select dealers on the basis of their speed, efficiency, and reliability rather than their accountability.

- **Encourage genuine anti-money laundering compliance in countries with banking links with Afghanistan including Pakistan and Dubai.** While they have publicly agreed to the FATF standards, evidence on the ground suggests that implementation still needs to be strengthened.

- On the other hand, **the FATF guidelines must be viewed within, and if necessary adapted to, the Afghan context.** There is a risk that international banks, applying FATF guidelines in an inflexible way, could alienate the local population. The reality is that 74% of the population is illiterate (including 91% of women), and that most Afghans lack formal identification papers. Under such conditions, demands for strict adherence to FATF guidelines could be counter-productive and would hinder large-scale transfer of financial business to the formal banking sector.

The chapter recognises that there is no immediate or single fool-proof solution to the problem of drug money laundering through Afghanistan's *hawala* networks. Because of its cross-sectoral nature and reliance on regional partners, a combination of interventions is required to deal with the problem satisfactorily, without causing too much collateral damage. These would include:

- **Sustained, effective measures against the opium economy:** the strategy for reducing its size must be gradual and based on proper sequencing of development and law enforcement.

- **Growth of the legal economy:** this will require the identification and development of international markets for Afghanistan, especially for agricultural products.

- **Tightening of the financial system domestically and in neighbouring countries:** a coordinated regional response is fundamental to the fight against money laundering.

Policymakers should aspire to develop a fully functioning formal banking system along the lines of the FATF, while at the same time recognising that this will not be a quick transition, and that it should be done in a manner that is sensitive to the needs of the local people.

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Chapter 7

DRUG TRAFFICKING AND THE DEVELOPMENT OF ORGANIZED CRIME IN POST-TALIBAN AFGHANISTAN

Mark Shaw[1]

I. INTRODUCTION

The people of Afghanistan have suffered from a quarter-century of civil war and external military intervention. The devastation wrought by the conflict has resulted in the collapse of physical, economic, and government infrastructure across the country, a process which is only now being slowly reversed. Afghanistan was very poor before it was engulfed in persistent conflict, but the conflict made the circumstances of the country's people much worse. Recent rapid economic growth and improvements in some social indicators have not fundamentally changed the overall position (see World Bank, 2005, p. 15). Thus whatever the measure used, Afghanistan remains one of the poorest countries in the world, with indicators like life expectancy (46 years) and under-five mortality (257 deaths per 1,000 live births) placing the country's citizens at the lowest levels of global human security and development.[2] Ordinary Afghans deserve a better future.

Throughout the protracted period during which Afghanistan was at war, both with itself and with outside invaders, the political economy of pursuing and sustaining conflicts has been closely intertwined with illicit activities. Indeed, the link between war and illicit activities became progressively stronger over the long conflict in the country. Both a cause and a consequence of this is that a weak central state in Kabul has been unable to govern the country's "borderlands", which given their geographical position and their integration into regional trading and smuggling networks, have often had stronger links to surrounding states–Pakistan in the south and east, Iran in the west, and Central Asia in the north and northeast–than to the occupants of the seat of government in Kabul. Unable to effectively control the geographical territory of the country, the Afghan state has been propped up by external powers, with limited interaction between the state apparatus and the majority of citizens (Goodhand, 2005, p. 196).

Afghanistan now faces a daunting set of challenges. In particular, it faces the challenge of whether legitimate state formation and economic growth will be subverted by the expansion and consolidation of the illicit economy. The dangers for the new government are immense. As Barnett Rubin noted in the final year of Taliban rule: "Ending war in Afghanistan might transform the criminalized war economy into an even faster-expanding criminalized peace economy. Whoever rules Afghanistan, the incentives for misgovernment are nearly irresistible." (Rubin, 2000, p. 1799). However, the establishment of an internationally recognized and democratic state structure in Afghanistan is providing the opportunity to delineate more clearly what is legal activity and in contrast, what is criminal.

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[1] UNODC. Support from the staff of the UNODC field office in Kabul, Afghanistan, as well as provincial offices in the south, north, and east of the country, is gratefully acknowledged. The United Nations Department of Safety and Security (UNDSS) and the United Nations Assistance Mission for Afghanistan (UNAMA) provided invaluable and expert inputs as well as relevant materials. Particular thanks are also due to the Afghanistan Research and Evaluation Unit (AREU) which provided access to its excellent library facilities in Kabul. Comments received from Doris Buddenberg and William Byrd are gratefully acknowledged as are inputs from Ugi Zveckic, Thomas Pietschmann, and Hakan Demirbuken on an earlier version. The views, findings, interpretations, and conclusions expressed in this chapter are those of the author and should not be attributed to the United Nations Office on Drugs and Crime or to the World Bank, its affiliated institutions, its Executive Board of Directors, or the countries they represent.

[2] Given lack of data Afghanistan was not included in UNDP's 2005 Human Development Index. The data that is provided is drawn from basic indicators for countries excluded from the Index. See UNDP (2005, p. 328).

In this context, the debate on the evolution of organized crime in Afghanistan has assumed increased prominence. Leading participants in the Afghan peace and democratisation process have warned of the threat that organized crime poses to state formation in Afghanistan. The former Minister of the Interior, Ahmad Ali Jalali, warned that his country was turning into a "narco-state."[3] The UN Secretary-General has expressed his concern to both to the General Assembly and the Security Council about the growth of narcotics trafficking and organized crime in Afghanistan and its ability to subvert the peaceful transition to a viable democracy, the economic benefits of which should be shared by all citizens.[4] Both Afghans and international officials express similar fears.[5]

The purpose of this chapter is to make a first attempt at an assessment of the development of organized crime in the context of post-war and newly democratic Afghanistan. Its findings suggest that organized crime, as in the case of other post-conflict societies, is a considerable threat. Two features in particular make the development of organized crime, both in extent and impact, more pronounced in Afghanistan than elsewhere. The first is the size and established nature of the illicit economy which arose during the conflict. The second is that state institutions before the onset of the transition to democracy had almost ceased to function. So strong internal and external pressures are driving the consolidation of organized crime in the country, and this process is taking place at the same time that the institutions of the state and economy are themselves consolidating. There is thus a considerable overlap between these two processes, driven not least by the fact that, on account of the country's history, many of the players involved in both the licit and illicit streams are the same, with resources generated in the illicit sector being deployed to influence events in the licit sector.

II. DEFINING AND ANALYZING ORGANIZED CRIME IN AFGHANISTAN

An accurate understanding of the nature and evolution of organized crime in any society must rely on at least a basic agreement as to what is understood by the term. However, the diversity of criminal actors and organizations across the globe – and indeed within single regions or countries – has made consensus as to the definition of "organized crime" difficult to achieve. It has been argued that organized crime groups differ from other crime groups in that they specialize in enterprise as opposed to predatory crimes, have a durable hierarchical structure, employ systemic violence (or the threat of it) and corruption, obtain abnormally high rates of return relative to other criminal activities or organizations, and extend their activities into the legal economy (Naylor, 1997, p. 6). Others have opted for a broader definition: "Organized crime consists of organizations that have durability, hierarchy and involvement in a multiplicity of criminal activities" (Reuter, 1983, p. 75).

The negotiation of the United Nations Convention against Transnational Organized Crime did not lead to full consensus on a definition of organized crime (see Vlassis, 2001). An agreement was, however, reached on what constitutes an "organized crime group, which is defined in the Convention as a "structured group of three or more persons existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences in order to obtain, directly or indirectly, a financial or other material benefit" (United Nations Convention against Transnational Crime, Article 2a).

[3] The comments were made at a press conference in Kabul on13 May 2005, see http://stopthedrugwar.org/chronicle/338/Kabul.shtml
[4] Report of the Secretary-General, The situation in Afghanistan and its implications for peace and security, 12 August 2005, A/60/224-S/2005/25.
[5] See for example the comments of the Afghan Independent Human Rights Commission (AIHRC) in "Afghanistan riddled with drug ties", 18 October 2005, Afghan News Network. Also, the Report of the independent expert on the situation of human rights in Afghanistan, 11 March 2005, E/CN.4/2005/122.

The Spectrum of Organized Crime

In defining "organized crime groups", the negotiators of the UN Convention deliberately opted for a broad definition. It was decided not to limit the scope of application to hierarchically structured or mafia-type organizations, but instead also to cover more loosely organized criminal groups characteristic of many societies and regions. Indeed, recent analyses of the phenomenon have sought to emphasize that criminal networks, not just mafia-like hierarchies, are forms of organized crime which constitute a serious challenge for law enforcement agencies.[6] In reality, different organized crime groups, both in Afghanistan and elsewhere, can generally be represented along a spectrum: from highly organized, hierarchical mafia-type groups which dominate some markets to more loosely organized networks or gangs which are active in others.[7]

The criminal organizations which constitute the greatest threat in Afghanistan increasingly resemble closely structured criminal hierarchies and, with their networks of support and protection, would be identified as organized crime groups even if a relatively restrictive definition were applied. Such groups, in the words of a recent study of organized crime, seek to "govern the underworld". [8] They would constitute a criminal cartel if, acting together or when a limited number of groups become dominant, they are able to regulate prices or outputs in any criminal market. In contrast, more loosely organized networks of criminal operators may constitute an organized crime group under a broad definition and indeed may acquire high levels of illicit profits, but do not seek extensive control over an illicit market or segment of it.

Organized crime groups that seek control over markets often specialize in one specific commodity –that of protection (Gambetta, 1993, p. 23). Importantly, organized crime is willing to offer protection both to legal (but poorly protected by the state) and illegal transactions (Varese, 2001, p. 5). For these reasons, organized crime is often present where state institutions are unable or unwilling to provide efficient protection to legal transactions, be this more generally or in specific markets or localities. In short, "the more confused the legal framework of a country, the more incompetent the police, the more inefficient the courts, the more the mafia will thrive" (Varese, 2001, p. 5). As a consequence, the more that protection of illegal transactions is efficiently provided, the more scope there is for illegal markets to grow.

Post-conflict societies are particularly vulnerable to the growth of organized crime. The decline of authoritarian rule or the ending of conflict often leads to a transition to democratic governance and in many cases steps toward the establishment of market economies. This may frequently take place in the context of a legislative void, lack of transparency, lack of capacity in key government institutions, and, as a result, increased vulnerability to criminal and corrupt practices. Historical and institutional factors, such as continuing political tensions, the existence of patronage networks, non-applicability of the rule of law, and fragile civil society complicate the path to democracy and provide fertile grounds for organized criminal activities. In such circumstances law enforcement agencies often are not capable (due to extensive corruption or involvement in criminal activities themselves), or lack adequate resources or credibility, to effectively combat or prevent illegal activities. Organized crime groups, warlords, terrorists, opponents, and even members of the government (or a combination of these) may take advantage of institutional and legal weaknesses and engage in illegal activities, impeding the establishment of democratic norms and principles. Law

[6] See Coles (2001), and also Chattoe and Hamill (2005).
[7] See the five typologies of organized crime groups in UNODC (2002).
[8] For example, at the height of their power the Medellin and Cali Cartels in Columbia together controlled 90% of the world's cocaine business (Cooper, 1990, pp. 11-12).

enforcement (including any international presence) may be slow in adjusting to new trends, whereas organized crime groups are able to rapidly adapt to changing social, economic, and political contexts (see UNODC, 2004, pp. 15-17).

A Note on Methodology

Understanding the nature and monitoring the growth of organized crime in transitional and post-conflict societies is therefore of utmost importance. This is complicated by the fact that collecting information on organized crime in such contexts is a challenging process. Topics of a sensitive kind, such as organized crime, remain ill-suited to study by means of large and impersonal surveys; hence qualitative interviews are essential to gain adequate levels of understanding (See Brannen, 1988). Organized criminal activity is generally well hidden, and actors engaged in it have good reasons, both to protect their profits and their identities, for not being active and willing participants in data gathering activities. See, for example, Finckenauer and Waring (1998, introduction), as well as Hobbs (1995).

Despite the difficulties involved, detailed studies of criminal networks and organized crime groups generally adopt the same approach: large numbers of unstructured and structured interviews with individuals within the criminal networks themselves, those on the margins of the criminal underworld, or law enforcement professionals – such as policemen or prosecutors, or policy makers in the justice sector – who have access to information or have specific insights on the nature and role of organized crime groups or networks.[9] Such interviews are supplemented by secondary source material, such as published studies, police reports, and media accounts. The key aim of an organized crime threat assessment is, at a relatively high level of abstraction, to draw these various reports together into a single overview of the issue, highlighting new developments, raising issues of concern, and identifying possible future trends.[10]

Information for this chapter was gathered during a month-long period of fieldwork in Afghanistan in October 2005. Over 70 interviews were conducted, with work being undertaken in Kabul and in the north, south, and east of the country by the author. Additional interviews were conducted by UNODC Afghanistan-based staff in the west. Interviews were conducted with Afghan officials at all levels of government, representatives of international organizations, international military and police personnel, representatives of civil society, and several unaffiliated individuals and businessmen identified as having specific knowledge of the changing nature of criminal organizations in Afghanistan. Interviews were also conducted with individuals involved in, or on the margins of, the trafficking networks themselves.[11]

[9] See, for example, the approach adopted in Shaw (2002, p. 293). An excellent example with multiple information sources and interviews with a range of actors is Varese (2001). Also see Winlow et al (2001).

[10] For example, see the introduction to the National Criminal Intelligence Service, UK Threat Assessment: The threat from serious and organized crime 2004/5 - 2005/6.

[11] In a limited number of cases, two or more interviews were conducted with the same person given either that the interviewee wished the meeting to take place in a different location or to explore specific additional issues not adequately covered in the first interview. Given the sensitivity of the study, all interviews were conducted off the record and have not been attributed to any individual. Interviews were not tape recorded since this would have greatly inhibited an open exchange. Interviews were structured as open-ended dialogues, beginning with a more general discussion and then focusing on specific issues highlighted. Notes were taken in the vast majority of interviews and the contents of key interviews typed up. Where it was not permissible to take notes, the key themes of the interview were recorded immediately afterward. A particularly useful method to focus the discussions was to ask interviewees to represent the nature of criminal organizations and networks diagrammatically. Some of this work is reflected in the various illustrations that follow.

In Afghanistan this research process was made more complicated by a number of factors, including: (i) the rapidly changing nature of the political, economic, and social developments occurring in the country; (ii) inadequate law enforcement capacities and widespread allegations of police corruption; (iii) the lack of inadequote public reporting, such as official police accounts and statistics on the nature and extent of criminal activities; (iv) the link between criminal activities and state actors; and (v) widespread rumours about the extent of criminal activities and/or who is or may be involved in them. The comments on general trends and the nature of criminal organizations presented in this chapter have all been collaborated by on several interviewees. It is recognized, however, that this assessment represents an initial attempt to take stock of a difficult and complex area, and it is hoped that it serves to provoke further research and wider debate on the subject.

III. DRUG TRAFFICKING AND THE CONSOLIDATION OF CRIMINAL ORGANIZATIONS

In Afghanistan, both the nature and extent of drug trafficking, and who controls it, have been strongly shaped by political and military factors. Prior to the outbreak of war, i.e. from the late 1950s to the late 1970s, Afghanistan was a weak rentier or allocation state. The state financed just under half of its total budget from external sources, which were used to create basic infrastructure, such as a national network of roads, and a modern police force and army (see Rubin, 2002, pp. 62-105). Despite this, rural communities remained isolated from the state and dependent on agricultural production to survive. An important new dimension was brought to the rural economy in Afghanistan in the mid-1970s when opium poppy cultivation expanded, as opium production was halted in Iran. By the late 1970s opium poppy reportedly was cultivated in half of Afghanistan's provinces (Goodhand, 2005, p. 197). Afghanistan's delicate balancing act between global powers externally and between various political forces and currents internally came undone in 1978, when there was a communist coup and subsequently occupation of the country by the Soviet Union. The early 1980s saw continued expansion of opium poppy cultivation.

War and the Control of Illicit Drug Trafficking

During the major conflict from 1979 to 1992, the value and quantity of illicit activities grew considerably. The counter-insurgency war waged by government and Soviet troops devastated the rural subsistence economy, with food production estimated to have fallen by as much as two-thirds (Rubin, 2000, p. 1792). Massive resource flows were directed to opposition groups, with foreign intelligence agencies using Afghan political parties in Pakistan and Iran as logistical conduits to supply opponents of the central government. Profits accumulated from these flows of external support were invested in, and supplemented by, a number of illicit activities. Critically, and in line with an increase in opium production in Pakistan, Afghanistan developed into a major supplier of opium, producing one-third of total global production by the mid-1980s. As Goodhand (2005, p. 198) notes, in the mid-1980s, "there was an arms pipeline going in, and a drugs pipeline coming out of Afghanistan". By 1989 the seven major Mujahideen groups were responsible for total production of over 800 metric tons of opium.

The flows of foreign aid to opposition groups in effect created both military and economic actors among them. When Soviet troops withdrew in 1989, there was a weakening in the military pressure on the Mujahideen, leading also to a reduction in external financial

assistance to these groups. Combined with the devastation of the rural economy, this created strong incentives for cash producing activities, primarily the smuggling of all kinds of goods and the cultivation of opium poppy. After 1992 when the Mujihadeen took Kabul, the country fragmented into a series of sub-conflicts as local warlords fought each other or turned inward to consolidate their economic activities. This fragmentation of the conflict, with regional warlords having few economic or political incentives to recreate the central state, saw a rapid expansion of cross-border smuggling, and the production of narcotics grew rapidly. By the mid-1990s, Afghanistan produced between 2,200 and 2,400 metric tons of opium per year.[12]

The fragmentation of Afghanistan by the mid-1990s, along with discontent among the population about predatory warlords and commanders and their militias, provided the opportunity for the rise of the Taliban. Expanding from its base in the south with its headquarters in Kandahar, the Taliban eventual conquered of most of the country's territory. Taliban-ruled Afghanistan became strongly integrated into regional trading and smuggling networks, providing the new regime with an important source of revenue. These networks grew in strength and "involved a web of commercial players with far better international contacts and market access than the Taliban themselves" (Johnson and Leslie, 2004, p. 147).

In the first years of Taliban rule there was an increase in opium poppy cultivation; in 1997/98 total production was 2,700 metric tons, a 43% increase over the previous year, with cultivation spreading to new areas. Production peaked in 1998/99 at 4,500 metric tons, representing three-quarters of the world's supply (UNODC, 2003). A drought, the most serious in three decades, then struck the country, and the rural economy, already severely weakened by years of conflict despite some recovery during the 1990s, was devastated. The overall result was an economy further skewed toward illicit activities such as smuggling and opium poppy cultivation (see Maley, 1998, p. viii). The subsequent Taliban edict banning opium cultivation, the reasons for which remain debated, sharply reduced the country's overall output of opium to almost negligible levels, although cultivation increased in areas, most prominently the northeast, outside of the Taliban's control. Following the fall of the Taliban, opium poppy cultivation increased to previous levels and has spread to include all of the country's provinces (albeit remaining very small in many of them). As will be seen below, the political transition since 2001 has had important implications for how illicit drug trafficking is organized and controlled.

The Political Transition and the Evolution of Organized Crime

The Bonn Agreement, signed on December 5, 2001, provided a roadmap for political transition in Afghanistan, culminating in the September 2005 Parliamentary elections. Much has been achieved in this period, including the building of basic state functions and the establishment of rudimentary controls by the centralized state, with the Karzai Government being able to extend its authority to most areas of the country and to curtail the influence of prominent warlords. As a recent assessment of the Bonn process concluded: "Media reports about Afghanistan continue to present the familiar narrative of a stable Kabul, governed by a beleaguered central government, encircled by a lawless periphery that is dominated by voracious warlords. This picture, perhaps accurate in 2001 and 2002, has given way to a more nuanced situation today." (Sedra and Middlebrook, 2005, p. 3). Similarly, static and overly simplistic assessments about who controls the drug trade, and by implication what form organized crime is taking in the new state, need to be avoided.

[12] For a detailed overview of poppy cultivation and the expanding opium economy of Afghanistan during this period, see UNODC,(2003). The figures referred to can be found on p. 81.

The assertion that drug trafficking is in the hands of warlords and commanders, while containing some elements of truth, no longer reflects the greater complexity of the situation. Recent assessments of drug trafficking in Afghanistan have noted some important changes, including that "there are disturbing signs that the opium industry is beginning to move toward greater vertical integration, with increased involvement by organized crime" (Rubin, 2004, p. 1). Others have concluded that entry and exit of participants appears to be relatively easy for both production and trafficking, although fewer and more powerful actors control opium refining and cross-border trading (Ward and Byrd, 2004, p. 33). However, there has been no systematic study of the evolution of organized crime and its involvement in drug trafficking in recent years. To facilitate assessment of the evolution of organised crime in Afghanistan, six overlapping indicators can be used to gauge the extent to which organized criminal activities have evolved and/or consolidated in the period since 2001. The indicators are as follows:

- **From fragmentation to consolidation:** The decline in the number of smaller criminal operators (individuals, loose networks, or small groups) and the appearance of a limited number of larger and more powerful operators.
- **From individuals to groups:** The identification of clear organized criminal groups as opposed to just the naming of individual "smugglers" or "traffickers".
- **A symbiotic relationship between government, business, and criminal indi viduals / operators:** Evidence of close associations between government, business, and criminal enterprises, including elements of the state or business regularly identified as being in criminal hands.
- **Exclusion of new criminal operators / groups:** The exclusion from criminal markets of new operators or groups and the forced exit of some individuals / groups.
- **Dynamic responses to law enforcement interventions:** The evolution of tactics in response to increasingly vigorous law enforcement interventions, including the establishment of higher levels of secrecy in respect of the operation of criminal markets.
- **The rise of a criminal protection industry:** The development of well-organized and systematic mechanisms of criminal protection which are well understood and coordinated by key players in the criminal markets.

While these indicators will not be assessed one by one, they constitute a general guide for the analysis that will follow. Given the important role that warlords have played in the drug trade, an initial examination of their evolving role serves as a useful starting point.

The Transformation of Warlords and Illegal Armed Groups

The year 2003 is cited as a critical period in the transformation of organized criminal activity in Afghanistan from essentially a relatively fragmented and open market to one where a limited number of operators have begun to dominate. A key factor in this shift was the changing nature and flow of resources to warlords and illegal armed groups.

In the immediate aftermath of the Bonn Agreement in late 2001, the core group of Mujahideen fighters that had captured Kabul from the Taliban, as the only cohesive local security formations available, was used to bring a modicum of stability. While these forces were organized under the Ministry of Defence, they were mainly loyal to a small number of key commanders. An important element in maintaining their loyalty was financial payments

channelled through the Ministry of Defence. By late 2002, however, most payments by US military special forces to militia groups and warlord commanders appear to have been stopped, although there is speculation that some payments may have continued particularly in the southeast. This was in part due to the perception that in many parts of the country the war to defeat the Taliban was effectively over, but some groups in the east of Afghanistan, where a threat remained, appear to have been retained on the payroll. A key contributing factor was also that there was public exposure of a number of cases where Mujahideen groups were implicated in human rights abuses. Direct payments from the US military–the simple "handing over of cash" in the words of one well-placed interviewee–began to dry up.

Resources to pay the armed groups were subsequently shifted to the Ministry of Defence, which was to pay the groups directly (through the budget). In theory at least, this should have provided the finances to ensure a degree of control over the armed groups involved. However, pervasive corruption in the Ministry of Defence meant that only a small proportion of the money budgeted for the purpose reached its intended beneficiaries. The total amount to be provided to the groups identified was approximately US $100 million. An assessment conducted at the time concluded that about 60% of the funds were diverted within Kabul itself and did not reach the intended groups in the provinces. Divisional commanders were supposed to receive in the region of US$20,000 each, but in many cases only a fraction of this amount, or in some cases no money at all, was provided. With the system of funding established to buy loyalty during the war weakened in this way, armed groups increasingly began to seek resources through the organized cultivation of opium poppy, opium trafficking, or selling of protection.

While a key requirement was to disarm the formal militarised groups that had taken part in the fighting and ensure their reintegration into society, this process, given the socio-economic realities of Afghanistan, could only achieve so much. A country-wide Disarmament, Demobilisation and Reintegration (DDR) program, which had begun to be implemented in late 2003, completed its disarmament and demobilisation components by mid-2005. Just over 60,000 individuals were successfully disarmed, with all their heavy weaponry collected. What has been less successful, which is in part a reflection of the lack of broader economic opportunities, has been the effort to effectively reintegrate these former soldiers into society; for example, the number of qualified applicants from the former militias able to join the new Afghan National Army (ANA) has been small.

Some armed militias had been excluded from the DDR process either because commanders had kept elements of their forces back as a form of security, or because some groups had never been part of the formal process and had no link with the Ministry of Defence. As DDR itself achieved some impact, the remaining armed groups not included in this process found themselves in a position where they could exert greater influence. Thus as the DDR program neared completion, planning began on a process termed the Disbandment of Illegal Armed Groups (DIAG). Unlike DDR which focused on recognised, structured military forces, DIAG is a program designed to disarm and demobilise armed militias operating outside formal military units.[13]

[13] The aim of DIAG is to remove caches of weapons and ammunition and to monitor the groups identified for continuing involvement in illegal activities. Throughout 2005 a process has been underway to classify illegal armed groups; 1,870 groups have been identified with a membership of 136,835. The initial phase of DIAG calls for voluntary compliance, followed by negotiated compliance and then a final phase involving enforcement.

In summary, two key processes have impacted, and continue to impact, on illegal armed groups. The first is significant changes in the resource flows to such groups, and the second is efforts to disarm them and to de-link their members from their former military structures. The result has been a weakening of the control that military structures have had over their members, although the networks and personal connections remain, in a context in which external resource flows have dried up. A third process, however, also has been underway: entry into the formal political process by former warlords and commanders. This in particular is having an important impact on who is involved in illicit drug trafficking as well as what roles they play. These shifts are critical to understanding the evolving nature of criminal organizations, notably including, at least on the surface, a potentially widening gulf between the formal political process and illegal activities, but also the corresponding development of a criminal "underworld" having complex relationships of pay-offs and patronage with political players operating in the "upperworld".

From Warlords to Politicians

Associated with the DIAG process described above has been the vetting of individuals linked to illegal armed groups who stood for public office in the Parliamentary and Provincial Council elections of September 2005. Two hundred and fifty five candidates were targeted in this regard and their weapons were handed over, with a limited number of individuals being excluded from the election altogether. In this process, an attempt was made to target districts where there has been ongoing conflict or illegal taxation imposed by armed groups, and also districts where government officials are linked to illegal armed groups. While it is still too early to determine the overall outcome of this process, all observers agree that its success is essential not only for ensuring government control over all of Afghanistan's territory, but also for reducing the opportunities for such armed militias to engage in illegal activities or to receive payments for protecting those engaged in criminal activity.

In the past, one senior Afghan official charged with administering the process of disarmament noted, commanders with the "greatest number of weapons held the greatest amount of power". Disarmament has effectively changed this situation, leading to critical shifts in local power relations. In the past, political parties were heavily involved in drug trafficking, particularly in the north of the country, whereas now the political parties and key individuals who are engaged in national politics want to distance themselves from drug trafficking, while retaining some of the advantages associated with the trade. "What used to be business conducted in the open", one senior Afghan official working in the Ministry of the Interior stated, "is now well hidden. The networks are still in place, but the organization is now fundamentally different".

One of the positive outcomes of the process of disarming illegal armed groups and attempting to identify election candidates' links to criminal activities is that former warlords turned politicians are reluctant to be seen to be associated with criminal activities. Even though few candidates were excluded from the election on this basis, the threat that they could be was regarded by several well-informed observers to be key in pushing them to formally de-link themselves from illegal activities. The increasing threat of internationally-driven law enforcement interventions targeting well-known political players is also said to have been a key factor in making political figures much more cautious about direct involvement in drug trafficking. In many cases the individuals involved are said to have garnered

enough resources from earlier involvement in illegal activities and are eager to legitimise themselves by integrating into the formal political process. What cannot be doubted, however, is that, given the volume of resources involved, many retain an interest in illegal activities and still receive resources from these activities in exchange for the "political protection" that they provide.

The overall result of this process is that actual drug trafficking operations have been shifting into the hands of a limited number of key players, who have political connections but do not generally operate overtly in the political arena. These key traffickers, some of whom are relatively new players who have emerged in the last three years, are essentially self-styled "businessmen". The system has evolved into one where emerging criminal organizations engage in a complex system of pay-offs, and where the resulting protection and patronage benefits both parties. In short, criminal activities such as trafficking are less overtly the business of political leaders and more the province of an emerging criminal underworld with strong political connections. Despite the separation between the political "upperworld" and the criminal "underworld", it must be emphasized that it remains impossible to operate in the latter without support from the former. This is achieved by compromising key state institutions to support criminal activities. Nowhere is this process clearer than in the Ministry of Interior.

The Compromising of the Ministry of Interior

In the initial period after the fall of the Taliban in late 2001, the Ministry of Defence was a pivotal institution in the political transition and the key focus of international attention. As this institution became progressively "cleaned up", the locus of interactions between state institutions and criminal interests shifted to the Ministry of Interior. The country was moving toward a phase where institutions of law enforcement, the police, and other criminal justice institutions assumed prominence. While the process of forming the ANA remained critical, it could only involve a limited number of people and so excluded others who were either left to their own devices or were to be absorbed into the institutions of the Ministry of Interior.

The Ministry of the Interior, in addition to being responsible for a number of other functions, also controls the police. The process of police reform and restructuring remains critical to the overall success of the transition to a stable democracy in Afghanistan. The country last possessed a legitimate national police force (albeit with extremely limited presence outside the cities) during the 1960s and 1970s. Police structures broke down during the Soviet occupation. Efforts to re-establish a professional police force were resumed in 1989 under then-President Najibullah, but were short-lived as conflict continued (Sedra, 2003, p. 32). Recent attempts at reforming the police have been hamstrung by the fact that there are very few professional police officers to form the foundation of any new force, with many former Mujahideen unsuccessful at making the transition from guerrilla fighter to civilian police officer.

It is possible that appointment processes in the police have been used by powerful interests in the Ministry of Interior to both protect and promote criminal interests. The presence of high-level protection from elements within the police provides two important advantages for any criminal enterprise. The first, and most obvious, is that it insulates criminal activi-

ties from law enforcement interventions. But secondly, and less obviously, it provides a useful tool to effectively counter the growth of other competing criminal groups in profitable illegal markets. Many interviews highlighted the degree to which the appointment of some provincial or district police chiefs sometimes served to facilitate and consolidate criminal activities. These appointments are essential parts of a now established system of protection in some parts of the country, with state functionaries such as police officers playing a key role. "The majorityof police chiefs are involved" stated a senior professional police officer, "if you are not, you will be threatened to be killed and replaced." This statement was echoed in various forms across several interviews.

In short, there is evidence that the provision of state protection to organized criminal activities may often be linked to the appointment process for senior police officials at the provincial and district levels. While it is tempting to suggest, as was done by several interview respondents, that powerful criminal elements control the Ministry and are in a position to exert considerable control over the drug trade, the actual situation is more complex. Political influence (both from within and outside the Ministry) may be brought to bear to ensure specific appointments or to promote or prevent law enforcement interventions. Despite the difficulty of obtaining hard evidence, this process involving elements of the Ministry of Interior is critical to understanding the nature and recent evolution of organized crime in Afghanistan. The protective network for illicit activities in many areas has been, in the words of one official, "folded into" the formal institutions of the state.

The Development of Pyramids of Protection and Patronage

The analysis presented above suggests that several key developments have contributed to the shaping of emerging organized criminal groups in Afghanistan:

- The ending of most external assistance paid directly to militia forces and the fact that Ministry of Defence resources never reached their intended beneficiaries resulted, from 2003 onward, in the declining significance of armed groups linked to various commanders. While continuing to provide local protection for criminal activities, their overall role has become significantly weaker than in the past.

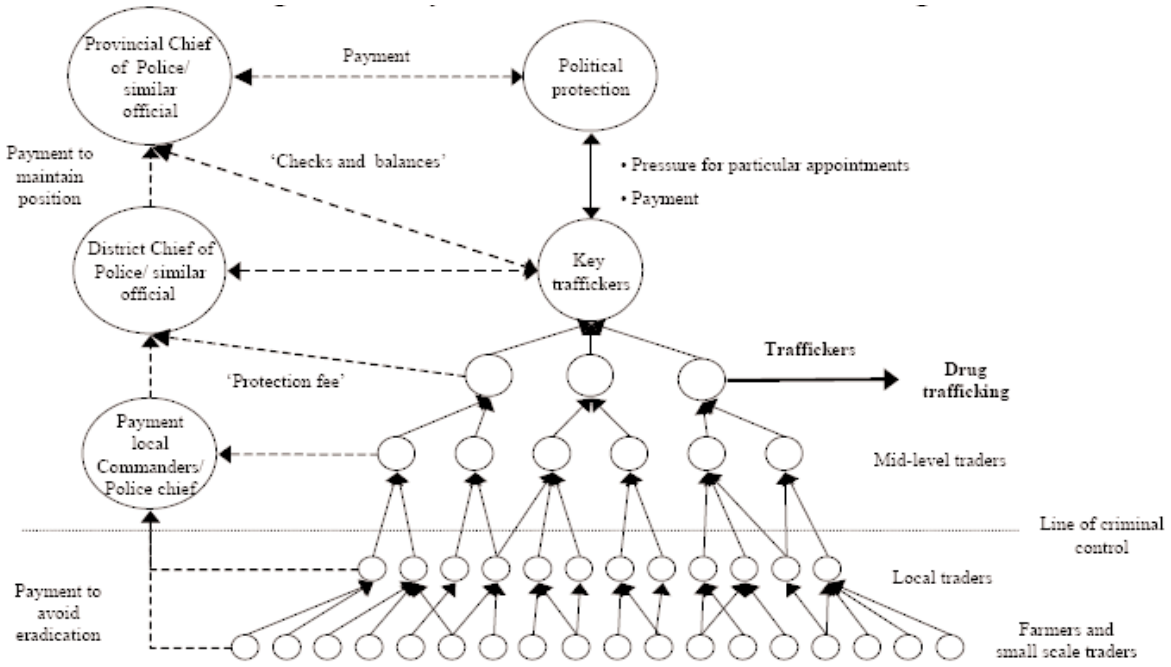
- The political normalizatin process, combined with international influence and over sight, has resulted in pressure for those who wish to participate in the formal political process to distance themselves, at least visibly, from illegal activities, including the trafficking of narcotics. However, given the resources involved, many of these links remain, albeit in a less open form than in the past. A network of influence therefore connects the political process and illicit drug economy.

- The increasing role of elements in the Ministry of Interior in organizing "protection" for criminal markets, including through key appointments in the police structure at provincial and district level, allows both the facilitation of illicit activities and also the "policing" of opposing competitors. The control of police structures at district and local levels, more than other influences, is often critical to the control of criminal activities.

- Increased international pressures and selective domestic law enforcement pressures, in combination with the other factors outlined above, have forced the illicit trade "underground" into the criminal underworld, while at the same time consolidating it in the hands of a relatively small numbers of operators with close links to the political "upperworld".

These developments, in the specific circumstances of Afghanistan, have resulted in complex pyramids of protection and patronage, effectively providing state protection to criminal trafficking activities. A schematic representation of such a pyramid of protection and patronage is shown in Figure 7.1 below. A brief description of the various levels illustrated in the figure is as follows.

Figure 7.1: Pyramid of Protection and Patronage



Farmers: At the base of the pyramid are the opium poppy farmers themselves. A great deal of excellent work has focused on the factors contributing to decisions by farmers to cultivate opium poppy as well as the specific dynamics of the Afghan rural economy. While these issues largely fall outside the scope of this assessment, several specific points are worth recording. First, there is still relatively free entry at the cultivation stage. Farmers who have access to land, credit, and seed (the latter two typically provided by the trafficking organisations themselves) are able to farm cultivate opium poppy. Second, the process of poppy eradication has imposed additional financial burdens on farmers in some areas. That is, payment must be provided to local authorities, usually the police or the local commander, to avoid eradication (see Chapter 4).

Small-scale traders: Also at the base of the pyramid are small-scale traders. These traders generally live within the rural communities and know the opium poppy farmers in their areas well. Farmers often sell directly to such small-scale traders, both because they know them and have developed a relationship of trust over a period of time, and also for the sake of convenience, as it may be difficult for farmers to travel to the village to sell directly

to village traders. Moreover, farmers may, for example, fear that they would have to pay off the local police during such a journey. The market at this, the lowest level, is relatively open, and a farmer generally may choose the small-scale trader to whom he sells. Such small-scale traders are normally local shopkeepers or general traders who may exchange goods such as sugar, flour, or food directly for opium.

Local traders: Generally situated in villages, local opium traders buy up the produce of a number of small-scale traders or farmers. The market at this level also remains relatively open, with there being some choice with respect to who small-scale traders can sell their produce to, although this is generally based on existing networks and connections. Depending on the area, such local traders may have to provide payments to the local police, administration officials, or local commander. Interviews suggest, however, that the relationship between local traders and those they sell to is now much more organized and operates with a greater degree of secrecy than in the past.

Middle-level traders: These traders buy up opium from local traders. The market at this level remains relatively fluid, with middle-level traders still having some degree of choice on who they sell to at the next level. Nevertheless, several informants reported that levels of secrecy at this level are considerably higher now, and that there are now restrictions on who can enter the market. Middle-level traders therefore operate on the edge of the criminal underworld (represented by the "line of criminal control" in Figure 7.1). The individuals and operations above this point in the pyramid are highly secretive, and entry is very restricted for new players without the necessary resources or connections.

Traffickers: Traffickers buy opium from middle-level traders and sell it to connections on the other side of the border. These individuals are reported to be highly organized and comparatively wealthy. Their link to the next level is on the basis of key contacts and connections. Interviews repeatedly confirmed that new operators are excluded from entering at this level, and that the relationship between traffickers and the "trafficking elite" is characterised by a high degree of secrecy and "discipline". In some cases, traffickers at this level may have connections to two or three of the key traffickers (described below), but in the vast majority of cases they owe their allegiance to a single individual. There may, however, be some cooperation between such traffickers, particularly where they owe their allegiance to the same member of the "trafficking elite". Traffickers are engaged in the movement of the drugs themselves and also pay off local commanders and police chiefs as required.

Key traffickers: The apex of the operational component of the pyramid is the "trafficking elite". This constitutes a limited number of players country-wide. The individuals at this level have important political connections which ensure that their operations are not compromised and for which they provide payments. These individuals are extremely wealthy and sometimes play key roles in their communities or political environment. For this reason, they do not "dirty their hands" with the actual process of trafficking. They do appear in most cases to play a critical role in regulating supply, in two ways. The first is supervision of the laboratories and the processed heroin that is produced at them. This includes control over the trafficking of precursor chemicals, although the actual work is done by the traffickers described above. The second is regulating the market through the stock they hold, and when it is released for trafficking. It is estimated that as many as 20-30 traffickers may be clustered around each of the key traffickers.

Paying for Protection

The provision of protection to the trafficking pyramid is surprisingly complex, with what several interviewees described as an in-built system of checks and balances. Protection is paid at all levels of the pyramid, although such payments are much more clearly regulated at its apex. Key issues in relation to the system of protection payments are summarized below:

- Farmers may in some areas have to pay in order to cultivate their crops. The threat of opium poppy eradication has also introduced new protection payments into the system. This generally takes two forms. The first is direct payment to the local police or other authority not to eradicate. The second is an undertaking to turn over a portion of the crop in exchange for not having it eradicated. It was reported in a number of cases that farmers may be "taxed" in this way several times (see Chapter 4). Small-scale, local, and middle-level traders may have to pay some form of protection fee, whether to the local police or to relevant commanders, for them to be able to continue trading.

- The district chief of police (or an equivalent official) receives payment directly from traffickers in order to operate. A separate set of payments is made to move the products themselves (for more detail on this aspect see below). The district level official makes a payment to the provincial police chief (or equivalent official) who in turn provides payment to the individual who provides overall political protection (either at a high level in the provinces or at the center) for the trafficking pyramid to operate.

- The system of checks and balances operates when the key trafficker, who maintains relations with all of the other principal players, "checks" with both the district chief of police (or his equivalent) and his provincial counterpart as to the amounts that have been received. This contact is in part to ensure that traffickers working within the net work are not withholding protection payments for themselves and also to ensure that all relations are being adequately maintained to facilitate trafficking. If the key trafficker is displeased with the protection that is being provided, he may petition the individual providing overall political protection to replace the chief of police, or for the provincial chief of police to replace one of the district chiefs. Players outside of the trafficking pyramid who do not have the required protection will be excluded from the system, which, as argued above, has led to a consolidation of trafficking activities in fewer hands.

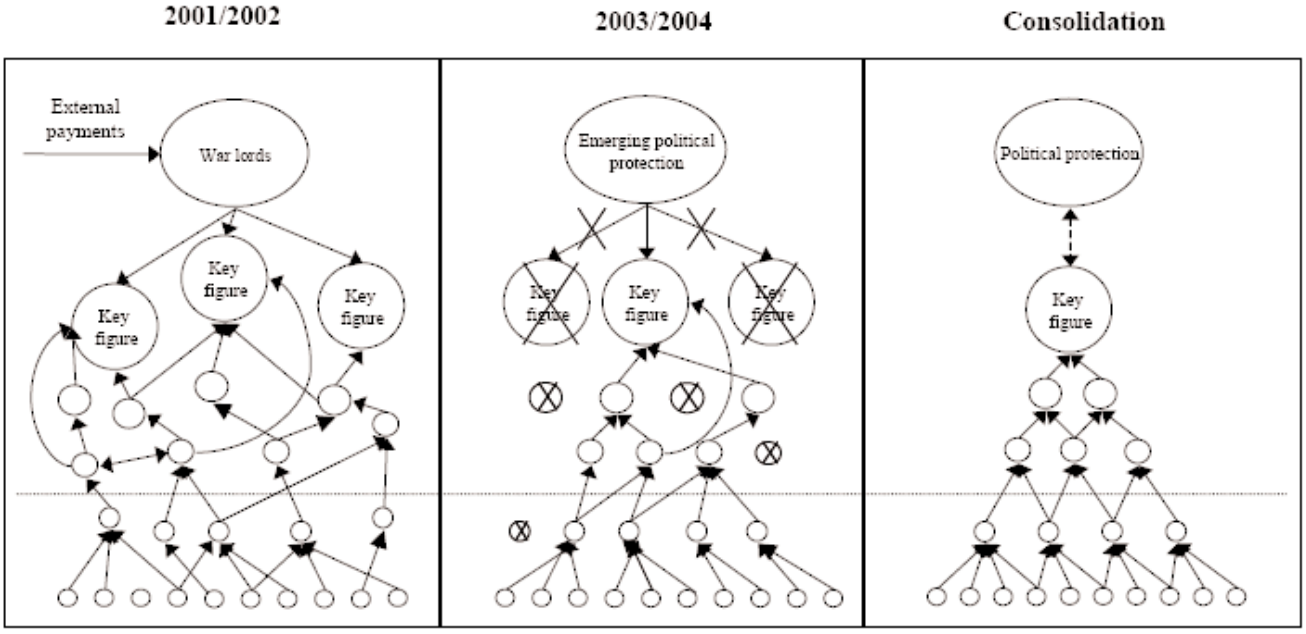
- If the district police chief (or equivalent official) does not provide adequate payment (which means of course ensuring payment from others in the system), he runs the risk of being replaced (or killed). Thus while such posts are lucrative in that a portion of the payments is kept for personal enrichment, there are also inherent dangers in occupying them, and these relationships may often be relatively fragile. For these reasons swapping of police chiefs from various districts or provinces is very destructive to established trafficking networks. Equally, there is anecdotal evidence that some new appointments may have been carried out to favor certain traffickers over others.

The Consolidation of Control over Drug Trafficking

The system of protection described above has been critical in consolidating the criminal organizations engaged in the drug trade, but also in concentrating control over drug trafficking in fewer hands. As already indicated, two inter-linked processes have been underway in the last few years. The first is consolidation among drug traffickers at all levels, with some players excluded. The second is that overall control of drug trafficking now lies in fewer hands, with the emerging locus of control of the drug market lying increasingly among criminal organizations in the south of the country.

Figure 7.2 provides a simplified diagrammatic overview of the process through which consolidation has been occurring. As already described, until 2001/02 drug trafficking was more loosely organized, with opium being traded openly. While at the more senior levels of the trafficking hierarchy some key figures did exist, below them the market was relatively open, with new players able to enter with relative ease. In some parts of the country local or regional strongmen/warlords levied a "tax" on trafficking and provided protection. Warlord-controlled armed groups remained relatively cohesive and in many cases received external payments, although when these were transferred to the Ministry of Defence the flow of financial resources diminished and slowed.

Figure 7.2: Schematic Overview of the Process of Consolidation of Criminal Groups



The deepening of the political normalization process resulted in important changes during 2003/04. Most critical was the role of political developments in ensuring that (at least publicly) prominent individual warlords and commanders were not involved in drug trafficking. Interest groups within the state used their influence and connections to eliminate some of those involved in drug trafficking at several levels. Some key players who did not have political protection in the emerging order were excluded, as were others further down in the trafficking pyramid. As international pressure increased, and with the closing of open mar-

kets for opium, the level of secrecy under which trafficking is conducted and the level of "organization" and "discipline" also has increased. New players have been effectively prevented from entering the market. The net result resembles the pyramid of protection and patronage described earlier. This process continues to evolve.

It is difficult based on currently available information to provide a reliable indication of the numbers of individuals involved in drug trafficking at various levels, and in particular the number of key traffickers who exert control. Figure 7.3 provides rough estimates of the numbers of people involved in the trafficking hierarchy. These are drawn from various interviews and should be seen as an illustration of the scale of the problem rather than as a conclusive picture.

This process of consolidation and control has been particularly pronounced in the south. UNODC (2003, pp. 54-56) suggested that during the 1990s, "in economic terms, competition in southern Afghanistan could be described as being atomistic". A number of bazaars operated openly, with traders travelling from Pakistan, Iran, and sometimes further afield to purchase opium. In contrast, in the east of the country at the time, control was much more centralised, with trading concentrated in one location. The closing of the opium markets in the south, significant international and law enforcement pressure in the east, and the greater secrecy under which opium trafficking and trading now operate, have led to important shifts in the last few years in how and by whom the illicit drug market is controlled.

Figure 7.3: Rough Estimates of Numbers of People at Each Level of Trafficking

* Of which an estimated of 15 are based in South

The southern region of the country (broadly covering the provinces of Zabul, Kandahar, Uruzgan, Helmand, and Nimroz) has been of great importance in the history of Afghanistan. "If you want to understand changes in the country", one prominent observer based in the south suggested, "you must begin in Kandahar". Significant changes have been occurring in the nature of drug trafficking and the criminal organisations that control it in the south. These changes also appear to have important implications for trafficking in other parts of the country and thus for Afghanistan as a whole. The two most important and interconnected changes in the south are that drug trafficking has been consolidated in the hands of a relatively small number of people, and that trafficking networks from the south have extended northward and have played a pivotal role in the expansion of opium production in the north.

The economic situation in the south of the country is particularly harsh, and the drought starting in 1999 had an especially strong impact there. The vast majority of economic activity in the south is agricultural, and there are not many other licit alternatives. Cultivating opium poppy is therefore attractive to many farmers who have few other ways of earning a livelihood. It should be noted as well that poor security conditions in the south have prevented extensive access by either Kabul-based government officials or international agencies with development funding. Indeed, the vast majority of donor agencies and international NGOs have withdrawn their operations from the southern part of the country due to security problems. The lack of an international presence, high levels of insecurity, and the poor economic situation have provided the conditions in which both cultivation of opium poppy has expanded and control over it has been consolidated.

In 2005 the south accounted for 50% of all opium produced in Afghanistan, with cultivation levels showing strong or very strong increases in three of the southern provinces during 2005 (Nimroz, Helmand, and Kandahar). The southwestern province of Farah also showed a strong increase (UNODC, 2005, p. 17). In Kandahar there used to be an open market where opium was traded. This market has now been closed, and trading of opium takes place outside the city. The risks have also become higher, most notably for smaller dealers operating at the base of the market; if they are caught by the police, their stock is confiscated and then often sold by the police themselves. In this process it is reported that a number of small and medium-level traders have become excluded from the market, with one estimate suggesting that about half of all traders have been excluded in this way, leaving the trade to a smaller number of people who have connections with the emerging organized criminal structure.

Interviews conducted in the south of the country suggest that the opium trade has become much more organized in the last two to three years, and that trafficking is now controlled by a limited number of individuals with powerful political connections. The conclusion of a judicial official in the south encapsulates this point: "The drug business is getting into the hands of fewer and fewer people. The number of traders has been reduced a lot in the last two years. The people at the very top are high-level; they cannot be touched." A judge agreed: "The top drug dealers are beyond the law – no one can touch them. Small-scale traffickers and smugglers are sometimes brought to the court – it gives me shame to sentence them as none of the big traffickers are arrested – they cannot be stopped, their hand is law".

Organized Crime and the Control of Trafficking from the South

The consolidation in the number of key traffickers in the south appears to have been relatively rapid. Asked how many traffickers they believe there were in the past, local law enforcement officials suggest as many as 100. It is estimated currently that trafficking in the south, which also has important trafficking links to other parts of the country (most notably the north), is now controlled by at most an estimated 15 individuals and their trafficking groups. Law enforcement initiatives appear to have had the most consequences for small and medium-sized traders, forcing many of them out of the market, leaving only those with enough resources and political clout to protect themselves. "Police work in the south, such as it has occurred", argues one enforcement official, "has been used to the advantage of a small number of key traffickers. I can't catch them, otherwise they will catch me".

The approximately 15 key traffickers in the south appear to come from a variety of backgrounds and generally style themselves as businessmen. This is very different from the general conception of the warlord-trafficker. The key traffickers appear to be a mix of businessmen, former political players, religious figures, former NGO heads, and simple "bandits". "What unites all of them", according to an international official "is business acumen and a desire to get rich". This consolidation has not been well documented, partly because there is little international media coverage of developments in the south, these developments have occurred under a high degree of security, and ongoing security problems make access difficult.

In short, the south of Afghanistan is the center of the country's illicit drug trafficking economy; it is the "gateway" for smuggling and the place where the major criminal groups, with strong connections to the center, have consolidated. One key development is the link between the growth of a small group of increasingly powerful trafficking organizations in the south of the country and the strong connections between southern traffickers and opium cultivation and trade in the north.

In the north, local and middle-level traders sell their opium to a limited number of traffickers from the south, or to their intermediaries. The traffickers from the south supply money for credit and seed directly to the local traders, who then distribute it to farmers. A senior Afghan counter-narcotics official in the north reported that with plants based on local poppy seed from the north farmers can only collect gum six times, but with seed brought from the outside they can collect gum nine times. Traffickers from the south provide not only better-quality seeds but also expert harvesters from the south who provide skilled support and training in the north. The result has been substantial expansion of cultivation in the north over the last several years. Three northern provinces--Balkh, Sari Pul, and Samangan--have shown a "strong increase" in poppy cultivation during 2005 (UNODC, 2005, p. 17).

A major factor which has encouraged trafficking between north and south is the price differential, with prices being lower in the north than in the south. For instance, in 2005 4.5 kg of opium in Mazar-i-Sharif in northern Balkh province was valued at Afs 16,000-18,000, while the same amount was valued at Afs 40,000-50,000 in Kandahar and Helmand. It cost the dealer an additional Afs 7,000 to transport this amount of opium, but he would nevertheless make a substantial profit on each shipment (see Chapter 6).

It is also important to note that there are no processing laboratories in the north. Opium is transported from the north to the south for processing and then trafficking over the Iranian border. One indication of the extent to which the southern region dominates the drug markets in the north, but also elsewhere in the country, is the amount of funds transmitted from the south to the north through the hawala system. A recent assessment of hawala dealers in the south reported, that with one exception, every small, medium, and large hawaladar surveyed in Kandahar and Helmand provinces remits the majority of drug related funds to Mazar-i-Sharif in the north (see Chapter 6).

The North-South Axis

Interviews suggest that political protection for the operation of trafficking networks from the south in the north runs through Kabul. Traffickers in the north of the country have based themselves in Chara Bolak and Chintal, Pashtun areas with close connections and networks in the south. They are estimated to number about 100. Local (mid-level) traders use motorcycles to go to the villages to collect opium, which they bring to sell to the traffickers, often clearly identified by the expensive cars they drive (4 x 4s). The people who collect the harvest are locals, but the traffickers are from the south, one of them said to even pay for opium in Pakistani Rupees. The trafficking networks that move opium from the north to the south also require the protection of provincial officials and chiefs of police in strategic provinces. In one important northern province, it is reported that the Chief of Police has for the last number of years been appointed from Kandahar. An exasperated local law enforcement official reported that "Most of the 'businessmen' who come from Kandahar stay with the Chief of Police; at one point one of the biggest traffickers was living with the Chief of Police."

One of the factors which have facilitated the development of the north-south axis is that, as already indicated, the ongoing political process in the country has forced powerful warlords in the north to avoid being closely associated with drug trafficking. There is now, several interviewees reported, much greater oversight over what key political figures in the north are doing, and so they have personally withdrawn from direct control over illicit trafficking, allowing the bulk of trafficking to be conducted by traffickers from the south. "The political parties in the north", one observer noted, "want to distance themselves from drug trafficking while still earning the benefits. So they are not now directly involved--but make profits from payoffs, protection fees and 'taxation'. This is essentially a relationship built on money." The turning point in the north was identified by several informants to be around October 2003, after which key faction leaders began to pursue political careers, and so the trajectory of politics (and by implication direct control over illicit trafficking) in the north began to shift.

The drug markets in the east and northeast display different patterns. Of all regions, the east has received the greatest attention from the international community and the Afghan government. As a result there have been significant reductions in cultivation in the eastern provinces during 2004/05, reflecting both high-profile eradication campaigns and various related law enforcement interventions. Officials in the east report that while in the past most of the commanders were involved in drugs, the number of key traffickers in the east has been reduced to only a handful, possibly 5-6. Law enforcement initiatives have also forced many of the laboratories in the east to close, or to shift to more inaccessible areas in the mountains. Drug traders from the south (primarily Kandahar) were reported to have been

active in the east until the fall of the Taliban. Now, however, several informants reported the re-emergence of internal trade between the east and the south, reinforcing the role of the south of the country as the key locus for trafficking.

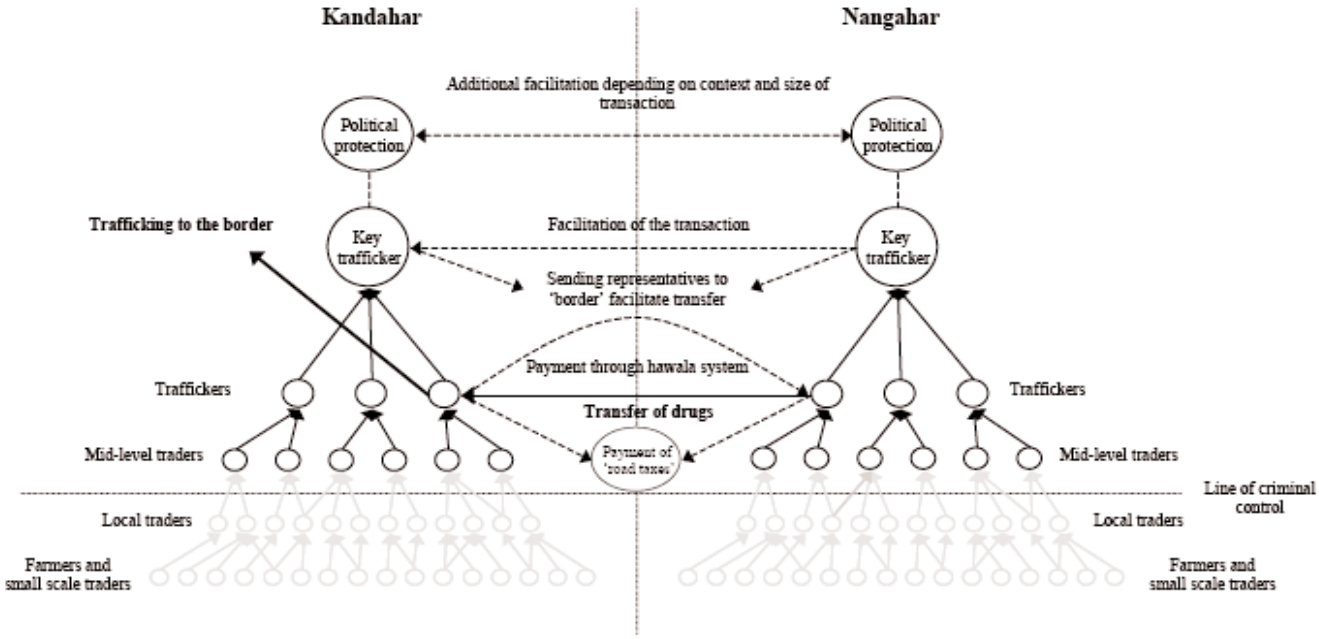
Badakhshan in the northeast, partly due to its geographical position, appears to have remained relatively isolated from the rest of the country's trafficking economy, although even in this case Kandahar is said to be an important source for drug money transmitted through the hawala system (Chapter 6). Most processed heroin from Badakhshan may now be trafficked directly over the border to Tajikistan. Importantly, the northeast has its own well-developed laboratories, making it, unlike the north, able to complete the stages of production to heroin or morphine.

The processes by which internal trafficking occurs, and the organization of the necessary payments and protection that are required, are complex. When consignments are moved from the north to the south, local strongmen (often now appointed as police) are paid off to ensure a smooth transfer. It is reported that, as in the case of the systems of political protection that have already been described, there is some "oversight" of this process, with interventions from central or provincial level possible if required. Bulk consignments are moved southward in convoys, complete with sophisticated communication systems and armed guards.

If transfers are made between the east and the south, representatives of key traffickers may be sent to the "borders" between provinces or areas of influence to meet the consignment and ensure a trouble-free handover. The practical organization of the transfers takes place between middle-level traffickers, although several interviewees report higher levels of "oversight" of the process, including contacts between the key traffickers or if necessary those responsible for political protection at a higher level. The necessary "taxes" are paid to ensure smooth transfer of shipments, and payments for consignment are generally handled through the hawala system. The arrangements required for transferring drug consignments between two criminal organizations in the east and south are illustrated in Figure 7.4.

There is general agreement among those interviewed that Afghan trafficking groups control the drug trade up to the borders of Afghanistan, from where consignments are sold to trafficking networks in the surrounding countries. There is, however, substantial evidence that the networks and contacts of Afghan traffickers, particularly those based in the south, extend well beyond the borders of the country, with Dubai serving as a key financial hub for transactions conducted outside of Afghanistan. There is limited evidence that some Afghan trafficking groups have sought to transport drugs to their end destinations in Europe (where some arrests have been made), but this is not yet a widespread phenomenon.

Figure 7.4: Arrangements for Cross Provincial Trafficking from the East to the South



IV. CONCLUSIONS

Obtaining reliable data on organized crime in any setting is a significant research challenge. In Afghanistan in particular, this challenge is accentuated by the weakness of state institutions, the blurring of political and criminal interests, and the increasing secrecy in which drug trafficking is being conducted. Studying organized crime in such a context has been compared to paleontology (the study of fossils), i.e. the collection of small fragments of evidence from which broader hypotheses can be constructed and tested against other ideas and new finds. Such a process is crucial, since understanding the evolving nature of organized crime in a fragile post-conflict setting such as Afghanistan has critical policy implications.

While the unique circumstances of Afghanistan make the drawing of parallels with other societies difficult, evidence from other post-conflict settings, such as Southeastern Europe and West Africa, indicate that organized crime has strong potential to consolidate itself in the immediate post-conflict phase, constituting an important challenge to state consolidation. It would be incorrect to argue in such cases that the phenomenon is new; indeed, illicit trafficking may often have been linked to the activities of armed groups or to the state itself (for example in "sanction-busting" activities). However, the post-war phase of political and economic change, including increased international oversight and transparency, leads to the consolidation of such activities in an emerging "underworld" (albeit with links to actors operating in the "upperworld"). In such post-war contexts it becomes easier to define these activities as "criminal" and organized for profit by a number of groups or actors (i.e. emerging "organized crime"). Ideological, political, or ethnic motivations which may have provided the organizing framework for illegal activities during or immediately before conflict may fall away, with the strongest motivation in the post-war period (as with organized crime elsewhere) being profit. This may involve various actors of different ethnic or political affiliations

working together for criminal purposes. There are strong parallels between this general picture and the emerging nature of organized crime in Afghanistan.

The chronology of the evolution of Afghanistan's drug industry in terms of its organization (summarized in Box 7.1) highlights the importance of conflict and, more recently, state-building in influencing developments.

Box 7.1: Summary Chronology of Evolution of Drug Industry Organization in Afghanistan

Opium cultivation increased during the period of the occupation. Internal trafficking was engaged in by a growing number of traders who sold opium to trafficking groups at the border of Afghanistan. Local warlords retained control of the internal trafficking of opium by taxing traders.

After the Soviet withdrawal (1989) and especially after the fall of the Communist regime (1992), opium increasingly became the means of financing the activities of warlord groups as foreign assistance to these groups was phased out. This resulted in more comprehensive control of trafficking activities through taxation of traders. Nevertheless the market remained open, with relatively free access for new entrants.

Under the Taliban (1994-2001) the market remained open. The Taliban themselves levied taxes on traders, using the profits to finance their own activities.

The Taliban banned opium cultivation (but not trade) in 2000, in an attempt to win greater international recognition. As a result opium prices soared, which greatly increased the resources of prosperous traders who held sizable inventories of opium.

In the immediate aftermath of the fall of the Taliban (in late 2001), there was to some extent a return to the fragmented control by warlords, although traders who had accumulated resources were in a position to play a more prominent role, both in terms of encouraging cultivation and also in ensuring the necessary protection for their activities.

International intervention in Afghanistan brought new pressures, including the beginning of a process of democratisation and greater public and international oversight over the political process. Two factors in particular influenced the control over the drug trade. First, international pressure forced prospective political players (including a number of warlords) to distance themselves from open involvement in drug trafficking. Second, backed by international resources, the central state began to reassert its influence and thereby gained a greater ability to regulate criminal activities. The Ministry of Interior (important for being in charge of the police and vulnerable because it was not reformed) has become a key instrument in this regard.

By late 2005 consolidation of control over drug trafficking by a limited number of key traffickers, the majority of whom operate from the south of the country, was well underway. This emerging "underworld" is connected through payment and patronage to senior political figures who provide the required protection.

In Afghanistan the most powerful criminal organizations (unsurprisingly given the amount of resources involved) are engaged in the trafficking of drugs. In this respect there is evidence of consolidation of control into fewer hands and of the emergence of a limited number of criminal organizations. The locus of this control is in the south of the country, with strong links to Kabul. The nature of the emerging criminal organizations suggests a close linkage with state institutions--indeed, the protection provided by state functionaries is critical for their survival and prosperity. While it is clear that a considerable degree of consolidation is occurring in the control of drug trafficking in Afghanistan, and that those involved have powerful political protectors, there is no evidence that the key traffickers act together to set prices and regulate the market through a cartel. However, as outlined in this assessment, there does appear to be a surprising level of contact between key traffickers and those who provide them with political protection, particularly in facilitating cross-provincial trading. What form such communications take is difficult to discern, and whether there have been detailed discussions among key players on issues such as how much drugs are "in-stock" and how much should be released is impossible to say. The overall impression is that the market at higher levels still remains competitive, in part because the process of consolidation of organized criminal control is not yet complete. Given the rapidity with which the current consolidation has taken place, it is not inconceivable that a cartel of powerful groups could form in the future.

How best then to respond to the emerging issue of organized crime in Afghanistan? Experience from elsewhere suggests that there are no easy answers, simple formulas, or quick-fix solutions. The response requires an integrated approach involving several elements, some of which are already underway in Afghanistan. Three aspects are worth highlighting in this regard.

First, there needs to be a recognition that the emergence of organized criminal activities may require using new analytical frameworks and dispensing with pre-accepted notions (for example that "different ethnic groups do not work together"). This of course implies more from an analytical and strategic perspective, and that organized crime with its important political implications must not be seen purely as the perquisite of law enforcement (including national or international law enforcement institutions). It should be emphasised that in several other post-conflict and transitional situations, more attention to the issue of organized crime from an analytical perspective would have contributed to better policy making. In the Balkans, for example, the rapid growth of organized crime in the post-war period surprised many observers, with there being little analysis available to determine effective policy options. It should be noted as well that given the current strength of organized criminal interests in Afghanistan and the resources they command, the nature of organized crime itself will continue to evolve in response to state actions. Given this and the fluidity of the ongoing political process in Afghanistan, as well as the difficult security situation and ongoing military operations in the south of the country, the nature of organized crime may look considerably different even within a short period of time. The degree to which a resurgent Taliban seeks to provide protection for drug trafficking could be a key factor in this regard. Thus it will be essential to continue to monitor developments.

Second, countering organized crime in Afghanistan (as in many other places where illicit interests and resources have strong links to the ongoing political process) requires a careful balancing act. Action that is too assertive may risk undermining the political process that is underway, whereas too little action against criminal actors and activities may in the long term lead to a subversion of the political process itself. Policy interventions in this respect should take a two-pronged approach. On one side there must be a concrete focus on ensuring higher levels of integrity within law enforcement and related institutions, including through better oversight (both national and international) of state functionaries and the building of a core group of honest law enforcement officials. In this regard, the reform of the Ministry of Interior must be seen as a priority. On the other side, there may be merit in selecting the cases of a limited number of high-profile traffickers for prosecution, regardless of political affiliation or connections to the ruling elite, for, among other reasons, the important symbolic impact this will have. Such prosecutions may have a divisive impact if they are seen to target some groups over others, or are seen to have an overt political agenda. It is important that any such prosecutions be driven by Afghan officials and in Afghan courts, although it is clear that international support and oversight of the process will be required.

Third, improvements in specialized law enforcement agencies alone are not enough to tackle organized crime, and there must be a focus on attacking the enabling environment for such criminal activities, including reducing the opportunities for control of legitimate economic activities by actors who garner large profits from illicit trafficking. Recent and ongoing economic growth has been taking place in a context in which criminal and illicit activities –most notably, but not exclusively, drug trafficking–have generated substantial profits which

can be used to invest in and build influence over sectors of the legal economy, including through corruption. This, combined with the use of violence (or the threat of it), suggests that criminal elements and groups have substantial potential to impact on the legitimate economic sector. The origins of the penetration of organized crime into the legitimate economy in Afghanistan may be particular to its historical background and the current situation. However, in the context of a weak central state, the political economy of conflict, and large criminal resources from the drug trade and other illicit activities, the outcome is likely to be predictable: greater criminal control of legitimate economic activities, distorted economic growth, and commercial transactions determined by protection payments and corrupt practices. The response must constitute an array of medium to long-term interventions, some of them already underway, such as establishing criminal justice institutions, improving customs and border control, effective regulation of the banking sector, and management of the process of economic reform with an eye to reducing opportunities for criminal control.

Since the signing of the Bonn Agreement in 2001 Afghanistan has made significant progress. The conclusion of this process with the September 2005 parliamentary elections must not be seen as the beginning of international disengagement from the country. In particular, responding to the problem of organized crime must remain high on the agenda, requiring a sustained level of national and international commitment. The nature of the problem of organized crime is of such a degree of seriousness that only a long-term commitment to its resolution is likely to ensure that Afghanistan emerges as a stable and democratic state.

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