Coping Strategies, Accumulated Wealth and Shifting Markets: The Story of Opium Poppy Cultivation in Badakhshan 2000-2003

The Haji

A respondent in Khustak reported that he had 30 jeribs of land, 5 irrigated and 25 rainfed. He reported that there were 7 people in his immediate family and that he cultivated the land with his brother (and his family). During the drought he reported selling his carpets, crockery, as well as his plough, and 65 livestock (including his horse) in order to pay off his household debts to creditors in the village and in Baharak. He reported that he began poppy cultivation 2 years ago and that last year he cultivated all of his irrigated land with poppy and 5 jeribs of his rainfed land. The rest he planted with wheat. He reported that he only planted during the spring due to the altitude of the village. He obtained 14 kg of opium from his irrigated land and only 7 from his rainfed land. He had sold the opium in the bazaar in Baharak so as to obtain a better price of US\$120 per kg (compared to US\$102 per kilogram locally). With the proceeds from his opium this year he had paid off his seasonal loans and purchased carpets and crockery to replace the items he had sold. This year he will be going on Haj with three of his fellow villagers. He reported that this would not have been possible if he had not cultivated opium poppy. He reported that this year he would probably plant all 5 jeribs of his irrigated land with poppy but was unsure about his rainfed land. He did however indicate were there to be a shortage of rain he would look to cultivate some wheat on his irrigated land and reduce the amount of poppy. He suggested that this was due to concerns over food security and the need to have wheat straw for the livestock he wishes to purchase when he returns from Haj.

The Old Man

A respondent in Khustak reported that he had only 1.5 jeribs of irrigated land of which half he had mortgaged to a man in the neighbouring village He reported that many of his fellow villagers had done the same and that the drought had been the main cause of this recent loss of assets. Initially, (in 2001) the respondent had sold many of his household possessions and 100 cattle in order to pay off his accumulated debts. However, last year he had to mortgage three quarters of a jerib to pay off some of the US\$800 debt that had accrued. He indicated that last year he cultivated one quarter of a jerib of his land with opium and obtained 1 kg which he shared equally with his creditor (as interest). The rest of his land was cultivated with wheat. He reported that he would cultivate the same amount this year. He indicated that he would not cultivate more as he did not have the labour within his own household (he had eleven children many of them very young) and would have to hire the labour. High wage rates and the need to pay wages daily would, the respondent indicated, mean that he would need to obtain further credit to meet these costs driving him further into debt. He was unsure if he would get his land back, but was concerned that the recent fall in opium prices would make it even harder for him to pay off his debts.

The Carpenter

A respondent in central Jurm, living close to the bazaar, reported that he cultivated 16 jeribs of land, 8 that he owned and 8 that he sharecropped. All of this land was irrigated. There were 11 members in his family, five of working age. Due to lower yields during the drought in 2001 he had been compelled to sell 5 of his cows. He did not need to sell anything else as he had income from working as a carpenter. Currently he was working with his eldest son and was currently earning the equivalent of US\$10 per day. He reported that he was particularly busy this year due to the amount of house improvements in the area. In fact he had only recently completed building a new guesthouse in his house in which he had installed a television set and video purchased in Kunduz. The respondent reported that he provided loans to farmers in the area. These loans were only provided to opium poppy farmers and were in the form of an advance payment on the future crop. So far this year he had purchase 9 kilograms of opium in advance of the harvest of the winter crop. The respondent indicated that he had increased his level of poppy cultivation from 5 jeribs in 2000 to 8 jeribs in 2003 (4 cultivated in winter and 4 in spring). He reported that he had planted 4 jeribs of opium and 4 jeribs of wheat as a winter crop and will plant a further 4 jeribs of each in the spring, as such his level of cultivation would remain the same as last year.

EXECUTIVE SUMMARY

It is estimated that the level of opium poppy cultivation in the province of Badakhshan has increased three fold since 2000. This, combined with the visible displays of conspicuous consumption in and around towns such as Faizabad, Baharak and Jurm has prompted some commentators to raise concerns over the entrenchment of the opium economy within the province. The most commonly cited explanation for the dramatic expansion in opium poppy cultivation is the increase in the farmgate price of opium in Badakhshan, increasing by some 700% from 2000 to 2002. However, this explanation does not capture the changing socio-economic and political environment within the province since the end of the war nor the complexity of rural livelihoods within the area. It also assumes a degree of price responsiveness amongst drug crop producing households that is rarely practicable given the delicate balance between the different elements in their rural livelihood strategies.

This Study explores the reasons for the expansion in opium poppy cultivation within Badakhshan over the last 3 years. It suggests that the combined effect of the drought, the shift in the regional market for opium, and the end of the civil war has created the conditions by which opium poppy could expand. In particular, the Study documents the unequal distribution of income generated from opium poppy. It illustrates how those households that were worst hit by the drought have used opium poppy cultivation as a coping strategy, using the income they gained from its cultivation to purchase the basic commodities they sold to survive the rigours of the drought. It documents how, despite unprecedented high prices for opium, this resource-poor group has only succeeded in repurchasing the household commodities they sold during the drought but have systematically failed to regain their long-term productive assets. It highlights how the sale of livestock (a traditional source of credit) and the mortgaging (and sale) of land, continues to leave this group dependent on opium poppy as a means of survival.

In stark contrast the Study illustrates how those households with good quality land, low levels of household debt, sufficient livestock, and sources of non-farm and off-farm income not only escaped the rigours of the drought but have benefited disproportionately from opium cultivation. Their increasing control over land and access to credit is consolidating high levels of opium poppy cultivation within the province, despite reductions in the farmgate price. Indeed, the Study concludes that whilst the factors that have stimulated the rapid increases in opium poppy cultivation over the last few years have largely run out of steam, the longer term impact of the drought and the Taliban ban on opium have conspired against a fall in opium poppy cultivation in the coming years. Instead, it is anticipated that cultivation will not grow at such a dramatic rate.

Perhaps of particular concern for the future is the fact that Badakhshan is more akin to the areas of illicit drug crop production that we have become used to in South East and South Asia, as well as in Latin America. Typically these areas are characterised by their isolation from the state and its functions, their proximity to international borders, difficult terrain, and poor physical and social infrastructure. Minority groups that are in political, economic, and sometimes military, conflict with the central authorities often inhabit these areas. Within this context, and assuming progress in reducing opium poppy cultivation in the more accessible areas of Afghanistan where opium is currently concentrated, those commentators that refer to the entrenchment of the narco-economy in Badakhshan may well be proved right.

1. Objective

To identify the reasons for the rapid expansion of opium poppy cultivation in Badakhshan over the last three years and establish whether cultivation will continue to expand during the 2003/4 season.

2. Introduction

In July 2000 the Taliban imposed a ban on opium poppy cultivation in Afghanistan. By July 2001, much to the surprise of many observers, it had led to a 91% reduction in the level of opium poppy cultivation compared to the previous years total of 82,172 hectares (ha).¹ Whilst many questioned the sustainability (and motives) of the Taliban ban it was clear that opium had been all but eliminated from Taliban controlled areas.² As the province of Badakhshan fell outside the control of the Taliban authorities the ban on opium cultivation was not imposed there.

Despite the fragmented nature of the opium market in Afghanistan,³ the intensity of the shortages in the traditional opium poppy heartlands of Helmand and Nangarhar led to a significant increase in opium prices in Badakhshan, rising from US\$52 in May 2000⁴ to US\$365 in July 2001.⁵ By the end of August 2001 the United Nations Office on Drugs and Crime (UNODC) reported that Badakhshan was the major producer of opium poppy in Afghanistan producing 6,342 ha compared to 2,458 ha in 2000. By 2003, UNODC reported cultivation had increased to 12,756 ha. Between 2002 and 2003 the United States Government (USG) reported even more significant increases in poppy cultivation in Badakhshan (although lower levels of cultivation) with increases from 2,100 ha in 2002 to 8,000 ha in 2003.

Both the UN and USG estimates now rank Badakhshan as one of the three largest opium poppy cultivating provinces in Afghanistan producing approximately fifteen per cent of total cultivation. Badakhshan's prominence in terms of cultivation is seen as all the more stark when it is considered that prior to the Taliban ban 2001 it was a relatively minor player, which according to the UNODC, produced less than 6% of the total level of cultivation in Afghanistan.

Conventional wisdom has it that the dramatic increase in opium poppy cultivation in Badakhshan is a function of sheer economic opportunism and that Badakhshani farmers have simply sought to capitalise on the increase in the farmgate price of opium following the Taliban ban on opium production. Indeed, many of those who have visited Badakhshan more recently have commented on the growing prosperity of

¹ See 'The Impact of the Taliban Prohibition on Opium Poppy Cultivation in Afghanistan, 25 May 2001. Paper prepared for the Donors Mission to Afghanistan, 23 April – 4 May 2001.

² 'The Displacement of Opium Poppy Cultivation: A Shift in the Regional Threat?' A Briefing paper for the Drugs and International Crime Department, Foreign and Commonwealth Office, (FCO) August 2001, by David Mansfield .

³ See UNODC Strategic Study#2: The Dynamics of the Farmgate Opium Trade and the Coping Strategies of Opium Traders. Islamabad: October 1998.

⁴ UNODC Afghanistan Annual Opium Poppy Survey 2000. Islamabad: September 2000. page 16.

⁵ UNODC Afghanistan Annual Opium Poppy Survey 2002. Islamabad: September 2000. page 39.

the area. The presence of luxury items in the markets, the increasing number of motorbikes and four-wheel drive vehicles on the roads and the growing incidence of satellite dishes have all been noted. Many observers have attributed this shift in trade and consumption patterns to the growth in opium poppy cultivation in the area. However, in general, this explanation of opium poppy cultivation as a simple function of price fails to recognise the complexity of rural livelihoods in Afghanistan. In particular, it ignores the dramatic changes that have taken place in the political and socio-economic situation in Badakhshan during the drought in 2000 and since the fall of the Taliban in November 2001.

This Study outlines the different factors that have led to the dramatic increase in opium poppy cultivation in Badakhshan over the last two years. It draws on the views of respondents and key informants in the area as well as on extensive research that has been conducted in other parts of Afghanistan on the multi-functional role of opium poppy in rural livelihoods.⁶ No one factor is singled out as being the sole determining factor behind the increase in Badakhshan. Rather the dramatic increase in opium poppy cultivation is explained in terms of the synergy between the impact of both the drought and the ban on opium imposed by Taliban. The Study suggests that these two incidents have led to adjustments in household livelihood strategies and an increasing dependence on opium poppy that will be hard to reverse. It illustrates that the subsequent shift in the regional market for opium and the redistribution of assets that has occurred as a consequence of these events will continue to drive current levels of opium poppy cultivation - even in the light of the recent reductions in the farmgate price for opium.

3. Methodology

This Study is based on 27 in-depth interviews conducted in the districts of Jurm and Baharak between 10 and 20 November 2003. Jurm and Baharak were identified due to the Agha Khan Development Network (AKDN)'s activities in these areas over the last few years and their existing research on rural livelihood strategies undertaken in conjunction with Gesellschaft für Technische Zusammenarbeit (Gtz)⁷ and the Afghan Research and Evaluation Unit (AREU).

To identify both local and generic factors that influence opium poppy cultivation, fieldwork was undertaken in a range of different sites within Jurm and Baharak. Sites for fieldwork were selected on the basis of distance from the district centre, history of opium poppy cultivation (intensity and duration), access to land (ownership and quality), and access to water (proportion of total land that was irrigated). Initially the upper valleys of Wadooj Bala (Baharak) and Khustak (Jurm) were the primary areas

⁶ See 'The Economic Superiority of Illicit Drug Production: Myth and Reality - Opium Poppy Cultivation in Afghanistan' and . Paper prepared for the International Conference on Alternative Development in drug control and cooperation, Feldafing, January 7-12, 2001 by David Mansfield; and UNODC Strategic Studies Series 1-6 & 9.

⁷ See Adam Pain 'The Impact of the Opium Poppy Economy on Household Livelihoods: Evidence from the Wakhan Corridor and Khustak Valley in Badakhshan.' A Study for the AKDN Badakhshan Programme funded by Gtz, January 2004. This paper gives an excellent account of the impact of the opium poppy economy on household livelihoods based on analysis at the village and inter-village level.

of fieldwork due to AKDN's ongoing research activities in the area. However, with the emergence of the initial findings, the area of research was increased to include the lower areas around the district bazaars of Jurm and Baharak.

Past experience of conducting qualitative research in illicit drug crop cultivation indicated that interviews should be undertaken with individual farmers. Given the objectives of the Study, preference was given to conducting interviews during the period of planting (typically with farmers in the field). Follow up interviews were also conducted with a number of key informants from the area. Interviews focussed on a number of key issues relating to agricultural decision-making. They were conducted in a conversational manner. Due to the sensitive nature of the subject, notes were not taken during the interviews but written-up once the interview had finished and the interviewer had departed.

Given the limited number of respondents interviewed for this Study it is not considered representative. Instead, the methodology intends to explore the different factors and motivations that influence opium poppy cultivation across the different socio-economic groups involved in its cultivation. This is achieved by comparing the results of in-depth interviews from field sites with often opposing characteristics. As such, the results of this work should be seen as indicative, exposing the disparity in terms of both assets and returns of opium poppy producing households and how this influences household decision-making. It is intended that this Study will complement a number of more comprehensive pieces of work that the AKDN is undertaking on conflict and livelihoods in Badakhshan.

4. Socio Economic Status

4.1. Landownership

The largest group interviewed for the purpose of this Study (almost 50%) were owner cultivators, households that worked their own land except for during periods of peak labour demand. One third of respondents owned insufficient land to meet their households basic needs and obtained further land on a sharecropping basis. Almost 13% of those interviewed had no land and obtained land through sharecropping. Only one respondent reported that he employed a sharecropper to work his land. In accordance with other fieldwork undertaken in the region, no tenants were found.⁸

The average cultivable land amongst those interviewed was 9 jeribs,⁹ of which on average 4.5 jeribs were irrigated and 4.5 jeribs were rainfed. The highest proportion of irrigated land was reported amongst respondents in the lower areas around Jurm and Baharak district centres where respondents worked on average 7.2 jeribs of irrigated land compared to 1.4 jeribs of rainfed land. In the upper areas of Khustak and Wadooj Bala the average amount of irrigated land was half that of rainfed land at 3.2 jeribs and 6.3 jeribs, respectively, indicating an increased dependence on rainfed land and a greater vulnerability to drought.

⁸ Respondents and other research have indicated that there is a very low incidence of renting land in Badakhshan. See Strategic Monitoring Unit, SMU Area Reports: Badakhshan. Strategic Monitoring Unit Afghanistan: Islamabad. Page 19.

⁹ A Jerib is 2,000 square metres, the equivalent of approximately one fifth of a hectare.

4.2. Increasing levels of poppy cultivation

Four fifths of those interviewed cultivated opium poppy. Opium poppy fields ranged from 0.75 jeribs to 10 jeribs with an average of only 2.75 jeribs. Those that owned land but also worked land on a sharecropping basis cultivated an average of 3 jeribs of poppy compared to owner cultivators that cultivated an average of 2 jeribs of poppy. The only landlord interviewed reported that he had cultivated 8 jeribs of opium poppy this growing season.

Of the 20% that did not cultivate opium poppy, half were owner cultivators and the other half were sharecroppers. The sharecroppers attributed the lack of opium poppy to the landowner's decision and the current crop rotation. The owner cultivators reported that a range of reasons including moral opposition to opium and other wage labour opportunities, including working in the mines of Kuran Wa Munjan, influenced their decision not to cultivate opium poppy.

All of those interviewed reported that opium poppy had increased dramatically over the last two years. Of those that cultivated opium poppy in 2003, one third reported that that they had cultivated opium poppy for the first time in 2001, all of which were located in the upper valleys of Khustak and Wadooj Bala. Only three of the respondents that cultivated opium poppy reported that that they had maintained a static level of cultivation since 2001. The rest reported increases over the last two years of 1-2 jeribs. However, one respondent indicated he had increased the level of cultivation from 1 to 10 jeribs (5 jeribs irrigated, 5 jeribs rainfed).

The expansion in opium poppy cultivation over the last two years was attributed to a wide range of factors, including the price of opium, the need to repay seasonal and accumulated debts, the lack of off farm and non farm income opportunities, the low price of wheat (and its availability in the market), and changing patterns of land distribution. Respondents indicated that behind all these factors lay two key events, the Taliban ban and the drought, and the subsequent impact they had on livelihood strategies within the area.

5. The Impact of the Taliban Ban

The Taliban ban on opium poppy cultivation in Afghanistan was the largest reduction in the level of opium poppy cultivation in any one country in any given year. Cultivation fell from an estimated 82,172 ha in 2000 to less than 8,000 ha in 2001. Globally this reduction contributed to a 75% fall in the global supply of opium. Regardless of concerns over the motives and sustainability of this action there is no doubt that it had a dramatic effect on the market for opium within Afghanistan, even if its impact further down the supply chain was more measured.

5.1. Proximity to the market

According to both key informants and respondents the Taliban ban led to more fundamental changes in the production of opiates within the province that have served to increase household confidence in the continuing demand for the crop. It is argued that the Taliban ban was accompanied by an influx of Qandahari and Jalalabadi processors who have established a number of heroin refineries in the province.¹⁰ Reports suggested that, as opposed to the past where processing was limited to the production of morphine base, these laboratories concentrated on heroin production.¹¹ The increasing seizures of heroin through the Central Asian Republics (and in particular Tajikistan) would certainly seem to support this claim.

Knowledge of the whereabouts of these refineries is relatively commonplace. Moreover, their continued operation (it is argued under the protection of local powerbrokers) does little to instil the view amongst farmers that the demand for opium is likely to diminish in the near future. This has helped maintain the view amongst respondents that opium poppy is a low risk crop, a factor that is likely to encourage its continued cultivation, regardless of price fluctuations.¹²

5.2. Increasing gross, net and actual returns¹³

Fieldwork revealed consistent reports of farmgate prices of the equivalent of US\$ 400 per kilogram in 2002, an increase from US\$365 in 2001. A calculation of the gross return per jerib in 2002 suggests potential returns of the equivalent of US\$3,000 (around US\$ 15,000 per hectare) for irrigated land with a productive potential of 7.5 kilograms per jerib.

However, none of those interviewed during the fieldwork produced anywhere near this amount of opium. In the upper valleys of Khustak and Wadooj Bala, yields rarely exceeded 4 kilograms,¹⁴ whilst many received as few as 2 kilograms per jerib. Even in the lower areas around the district centres of Jurm and Baharak where irrigation and better soils were more abundant, none of those interviewed reported yields in excess of 5 kilograms per jerib. Consequently, analysis reveals that the gross returns per jerib accrued by respondents were found to be closer to between US\$800 and US\$1,600.

The low cost of labour in the 2001/2002 season meant that the net costs of production for opium poppy were relatively low at only US\$216 per jerib.¹⁵ Of course actual net

¹⁰ Key informants suggest that these processors from 'outside' did not disclose their knowledge of the process to those working within the refineries or those powerbrokers that protected the facility. ¹¹ Prior to 2001 Badakhshan was considered to have a relatively limited capacity production producing

mainly morphine base. For instance: 'There have been a number of reports from key informants suggesting that the limited processing capacity in Badakhshan has prompted traders to transport morphine base from Faisabad to Nangarhar for further processing into heroin. Once this process is finished, it is reported that the heroin is subsequently transported back to Badakhshan and across the Tajikistan border'. Strategic Review: The Role of Central Asia as a Conduit for Illicit Drugs to Western Europe. Briefing Paper for Drugs & International Crime Department, Foreign & Commonwealth Office, April 2000. Page 8. ¹² This was prior to action taken against a laboratory by the Afghan Transitional Authority in Jurm in

January 2003.

¹³ Actual returns refers to the income derived from opium once all the actual costs the household incurs are subtracted from their share of the gross return (price times yield) on opium. The net return attributes a financial cost to all labour inputs based on current daily wage rates for each stage of opium

poppy cultivation. ¹⁴ This is the equivalent of approximately 20 kg/ha, which is consistent with UNODC findings in 2000 and 2001 but not 2002 and 2003, where average yields of approximately 40kg/ha are reported. UNODC's vields are based on farmer interviews.

¹⁵ This assumes that the net costs of production consisted of fertiliser (at a rate of 50 kg of Urea and 50kg of Diammonium Phosphate per jerib and a cost of US\$10 per 50 kg), oxen (at a rate of 2 days per jerib and a cost of US\$2 per day)) and labour (at a rate of 8 person days for land preparation and

costs were much lower given the tendency amongst households to maintain a level of opium poppy cultivation that is commensurate with household labour supply, thereby minimising the need for hired labour. This is certainly borne out by fieldwork for this Study where the average amount of land dedicated to opium poppy was only 30% of total cultivable land. If it were assumed that hired labour was only employed during the peak period of labour demand (harvest season), and then only contributed half the necessary labour days), the actual costs of production would be nearer US\$84 per jerib.

For a respondent that was an owner cultivator this would represent actual net returns of between US\$716 per and US\$1,516 per jerib. For a sharecropper who would receive 50% of the final crop (and contribute 50% of the total cash costs and all the unremunerated labour), actual returns on opium poppy would be between US\$358 and US\$758. A landlord would receive the same actual return for his contribution of land, water and 50% of the cash costs.

However, as the sharecropper is responsible for providing the bulk of the labour (which typically constitutes eighty to ninety per cent of the total production costs of opium production), net returns to the sharecropper are lower at between US\$226 and US\$626 per jerib compared to net returns to the landlord of between US\$358 and US\$758 (the equivalent of the actual net returns). As we shall see later, when labour rates increase as they did in 2003, the net returns on opium poppy become even more unfavourable to the sharecropper.

Table 1: Calculation of gross, actual and net returns on a opium poppy at harvest time in 2002 differentiated by socio-economic group.				
		Returns on Opium Poppy (US\$/Jerib) at harvest time with yields of:		
		2 Kilogram/Jerib	4 Kilograms/Jerib	7.5 Kilograms/Jerib
Owner	Gross	800	1600	3000
cultivator	Actual	716	1516	2916
	Net	716	1516	2784
Landlord	Gross	400	800	1500
	Actual	358	758	1458
	Net	358	758	1458
Sharecropper	Gross	400	800	1500
	Actual	358	758	1458
	Net	226	626	1326

Based on a theoretical 'average' respondent cultivating 2.75 jeribs of opium poppy, the gross return from opium poppy production cultivation in 2002 would range from US\$2,200 to US\$4,400. Were the respondent to be an owner cultivator this would represent an actual net return of between US\$1,969 and US\$4,169 and a net return of between US\$1,606 and US\$3,806. Distributed between landlord and sharecropper the actual return from 2.75 jeribs is the same at between US\$984.5 and US\$2,084.5. However, the net return from the same piece of land would be reduced to between US\$621.5 and US\$1,721.5 for the sharecropper. The landlord's net return would remain the same as his actual return.

sowing, 20 days weeding , 40 days for harvesting, and 8 days for seed collection and field clearance at a cost of US\$2 per labour day – except for harvesting at US\$3 per day)

5.3 A skewed distribution

This rise in the farmgate price and shift in the market for raw opium have clearly had an impact on the socio-economy in Badakhshan. However, this impact is far from even. In the lower areas around the district centres of Jurm and Baharak increased wealth and conspicuous consumption were visible. New buildings, a vibrant bazaar and increasing amount of traffic, including four wheel drives and motorbikes, were all obvious signs of wealth that were not apparent in Wadooj Bala and Khustak

There was also socio-economic differentiation between respondents both within and between the different areas visited for the fieldwork. In the centre of Jurm a number of respondents were in the process of improving their guest quarters or extending their houses. Indeed, one respondent, a carpenter by trade, reported that he had never been busier and was earning the equivalent of US\$10 per day (prospective clients were offering him US\$20 per day). This individual, who also cultivated 4 jeribs of opium poppy, had recently purchased a new television set and video recorder from Kunduz. However, another respondent in the same area had lost all his livestock and mortgaged his land during the drought and, despite poppy cultivation, it seemed unlikely he would regain ownership.

In the upper areas of Wadooj Bala and Khustak there were no such signs of conspicuous wealth amongst respondents. Most respondents reported that they had used the income they had earned from opium poppy to purchase the items they had sold during the drought. Many had replaced the household possessions they had sold and some had begun to replace the livestock. Relatively few had regained the land they had mortgaged. The most notable indicator of wealth in the upper valleys was from Khustak where one respondent reported that he would be going on Haj this year and that this was being financed by the 10 jeribs of opium poppy that he had cultivated in 2003. He indicated that 3 of his fellow villagers would also be financing their Haj through the income they had earned on opium poppy.

This uneven distribution of the economic gains from opium poppy cultivation can be explained by a range of factors, including the date at which the crop is sold (before or after the harvest), as well as the distribution, and the variable quality, of land. For instance, as will be discussed in more detail later, since 2001 the sale of opium prior to harvest is becoming an increasingly important means of accessing credit in Badakhshan. 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 the opium harvest). For the resource rich, the provision of advances on the future crop allows opium to be purchased at around half the harvest price. In terms of actual net returns per jerib this means a difference of US\$179 to US\$379 for the sharecropper (were he to sell his entire crop in advance) and US\$537 to US\$1,137 to the landlord (were he to provide an advance payment).

It is also worth bearing in mind that in Badakhshan the landlord who employs a sharecropper will have some land of his own on which he will probably cultivate opium poppy using family labour, much as the owner cultivator would do. Some may even have more than one sharecropper (although this would not be so common in Badakhshan) from which they can also accrue the value added of their labour. Were a landlord to have only one jerib of his own and a further jerib that was sharecropped

his actual returns would be US\$1,074 to US\$2,274. If the landlord were to purchase the entire output of his sharecropper's in advance, his actual returns would be between US\$1,253 and US\$2,653 compared to actual net returns of US\$179 to US\$379 to the sharecropper.

Of course the resource rich (landlord's) household can further maximise their returns by selling their final crop later in the year some months after the main harvest, when prices are at their highest (sometimes double the harvest price). By this stage the landlord's actual net return from opium poppy can be as much as 1,400% higher than that of the sharecropper.

Given these returns and the landlord's control over access to land, credit and his ultimate decision over cropping patterns, it is of little surprise that opium poppy has flourished in Badakhshan over the last few years. However, it is not the increase in the farmgate price of opium (although clearly it has helped) that has led to such an uneven distribution of assets since 2001. Instead we need to look to the role of the drought in concentrating assets in the hands of those that would most benefit from opium poppy cultivation.

6. The Impact of the Drought

Respondents indicated that the cumulative impact of the drought was an important factor behind the expansion of opium poppy cultivation in Jurm and Baharak, particularly in the higher valleys. The drought was not only seen as having a direct effect on cropping decisions. It also led to a redistribution of assets both within household and between households within the districts. It is argued that changes in traditional credit arrangements and the concentration of land ownership are particularly crucial in creating the conditions that will continue to encourage opium poppy cultivation in the area.

6.1. The loss of direct entitlement

At the household level it would seem that the drought both constrained wheat cultivation in 2000 but also influenced cropping patterns in the longer term. For instance, reductions in the level of wheat cultivation and disease in 2000 led to seed shortages in Autumn 2001, thereby limiting wheat production for the 2001/2002 growing season. The need to address increasing household food deficits and the shortages of wheat straw (and its high cost on the market)¹⁶ resulted in the widespread sale of livestock¹⁷, which in turn also reduced the need for wheat cultivation in subsequent years.¹⁸

¹⁶ US\$6 for 10 Seers, Strategic Monitoring Unit. SMU Area Reports: Badakhshan. Strategic Monitoring Unit Afghanistan: Islamabad. Page 19.

¹⁷ SMU report that between 1999 and 2000 the price for cattle fell significantly. For instance, a cow sold for half, and in some cases less than a third, of the amount it was sold for in 1999. Strategic Monitoring Unit, SMU Area Reports: Badakhshan. Strategic Monitoring Unit Afghanistan: Islamabad. Page 22.

¹⁸ A finding verified by recent fieldwork in Ghor province (personal communication).

According to reports, the lower levels of wheat production in Badakhshan were also exacerbated by the drought's impact on the wheat export areas of Kunduz and Takhar. The Taliban's control over Taloqan and some of the areas bordering Tajikistan in September 2000 further reduced the supply of wheat to the area. Yet, despite all these constraints, reports suggest wheat was still available on the market in Badakhshan, however, it was at a price. The high transportation (and transaction) costs of moving wheat from Tajikistan or across the frontlines led to a price of around US\$12 per Kabuli Seer¹⁹ – the highest prices in the country.

Facing a shortage of both seed and water for the cultivation of wheat in 2001, households had little choice but to look to purchase wheat on the open market. With the loss of their traditional sources of exchange entitlement, due to falling labour rates and the sale of livestock, the cultivation of high value crops with a relatively guaranteed demand would be one of the only means by which to maintain household food security. As has already been discussed, shifts in the regional market for raw opium during the Taliban ban period ensured that opium poppy satisfied these criteria.

With the end of the drought and the civil war, it seems to have been the inversion of these factors -an improvement in wheat yields, confidence over the continued supply of wheat and lower wheat prices - that have aided opium poppy cultivation. Respondents reported that household cultivation had returned to its pre drought levels of around 100 Kabuli Seers per jerib and that production in Takhar and Kunduz was flourishing with their output readily available in local markets. By 2003 households reported that wheat prices had fallen to less than US\$1 per Seer.

Previous fieldwork has indicated that in such conditions households will opt to cultivate opium poppy over wheat. This is not just due to the lower returns on wheat (as very few households, particularly in Badakhshan, grow sufficient wheat to sell) but due to dwindling concerns over future food supply. Where households are confident that they can purchase wheat on the open market at a reasonable price, households will tend to favour the cultivation of opium poppy. The increasing concentration of opium poppy on irrigated land (instead of the more risk averse combination of rainfed and irrigated areas that was commonly practiced in Badakhshan) displacing wheat is illustrative of the improving climatic conditions and confidence over future food supplies.²⁰

However, where the market price of wheat rises and there are concerns over future access (although clearly not as acute as was the case in Badakhshan in 2001) households shift from the production of opium to the cultivation of wheat. Indeed, during fieldwork respondents were quick to suggest that if wheat prices were to increase and opium prices were to remain static, they would substitute land under poppy for wheat. Some even suggested that if both were to increase, they would still favour wheat cultivation over that of poppy, highlighting the emphasis that

¹⁹ A Kabuli Seer is the equivalent of 7 kilograms.

²⁰ In the past households in Badakhshan have cultivated opium poppy along with wheat in both irrigated and rainfed lands. This has been a risk averse strategy aimed at protecting the household against crop failure and spreading the demand for labour. Given the high incidence of rainfall in 2001, households could concentrate their opium poppy cultivation in the irrigated lands and dedicate more of their rainfed areas to wheat cultivation. By pursuing this strategy households have been able to increase their opium yields whilst maintaining food security.

households give to maintaining a certain level of food production, regardless of more economic rationalist measures of economic return per unit of land or labour.

6.2. The loss of off-farm and non-farm income opportunities

Traditionally seasonal migration has met some of the shortfall in food production in Badakhshan and, as such, has been an important part of household livelihood strategies. Indeed, respondents reported a wide array of occupations that family members pursued at different times of the year. Most of these were outside the province.

The most commonly cited occupation was working in the wheat fields of Kunduz and Takhar. Respondents reported that this work could entail as much as three months work per year. Labouring opportunities in construction in Kunduz and Kabul were also cited. Employment as a soldier or militia member was also regarded as a seasonal activity in which family members could at least get fed, if not paid. Within the province, the mines of Kuran Wa Munjan and the poppy fields (during harvest) of Khash, Jurm and Baharak were the most frequently mentioned forms of casual work.

Whilst in 2003 there has been a growth in seasonal migration opportunities, in 2000 the drought led to a significant reduction in wage labour opportunities. Although the fall in demand for seasonal labourers was most notable in the wheat fields of Kunduz and Takhar, the downturn in the regional economy impacted on other work opportunities, in particular construction. This fall in the demand for labour led to a subsequent reduction in wage labour rates.

The limited wage labour opportunities available to family members will certainly have aided the cultivation of opium poppy growing season of 2000/01. Both the opportunity cost of family labour and the actual costs of hired labour will have been lowered facilitating an expansion in cultivation- an important factor given the labour intensive nature of the crop.

6.3. An evolving credit system

As in other parts of rural Afghanistan, there is a high level of dependency on credit in Badakhshan.²¹ Typically seasonal loans were for a range of different basic commodities including wheat flour, fertiliser, cooking oil, and sugar. These loans were available from within the village either from the local shop (where there was one) or from passing traders but at exploitative rates of interest.

Generally seasonal loans were relatively small and were given in kind, however, repayment was expected in cash. According to key informants interest rates were dependent on the duration of the loan. For instance, in the main bazaar in Khustak in 2003, a Kabuli Seer of wheat could be purchased at US\$1.20. However, if it were to be obtained on credit, the borrower would be expected to repay a cash amount of US\$1.44 after one month, US\$2.16 after 6 months and US\$2.40 after 1 year. If the wheat were to be purchased in the main district bazaar in Jurm, it would cost only

²¹ See UNODC Strategic Study#3: The Role of Opium as a Source of Informal Credit. UNODC: Islamabad; and 'The Economic Superiority of Illicit Drug Production: Myth and Reality - Opium Poppy Cultivation in Afghanistan' and . Paper prepared for the International Conference on Alternative Development in drug control and cooperation, Feldafing, January 7-12, 2001 by David Mansfield.

US\$0.90 highlighting the growing differentials between lower lying areas and the upper valleys.²²

The rules on cash loans were more flexible. However, the smaller the amount borrowed, the higher the rate of interest imposed. Therefore a loan of the equivalent of only US\$40 incurred 100% interest, whilst for a loan of the equivalent of US\$200 a rate of 80% interest was imposed.

Given its liquidity within the area, cash loans were also increasingly being given to lenders in the form of opium. The amount of opium given by the lender was determined by the value of the cash loan and the current price of opium. For instance, in November 2003, an individual that required a loan of US\$300 would be given 2.5 kilograms of opium given the prevailing price of US\$120 per kilogram. However, even though the loan was obtained in opium the borrower would be committed to repaying the debt (and the interest accrued) in cash or its equivalent value in opium at the time of repayment. The debt could not simply be repaid in-kind by returning the equivalent weight in opium plus interest due to the considerable fluctuations in the price of opium.

In Badakhshan, as in other parts of Afghanistan, loans could also be obtained as an advance payment on an agreed amount of an agricultural good.²³ Typically the advance payment would be 50% of the prevailing price of the good on the day that the loan was taken. The lender would agree to provide the agreed amount of the good on a date arranged by the two parties. The amount to be repaid would not be affected by fluctuations in the price of the agricultural good. Respondents reported that this system of advance payments has traditionally been used for obtaining loans on livestock and fruit. Some referred to this system as *raf-e-zawat*.

Rather worryingly, respondents in the lower lying areas around Jurm and Baharak reported that in the last two to three years opium has become the favoured agricultural good on which to receive an advance payment. Many had already obtained loans on their 2003/4 crop. Interviews with traders confirmed a preference for lending money on the future opium crop. One respondent who had already advanced payments on 9 kilograms of opium indicated that most shops in the district bazaar of Jurm offered loans on the future opium crop. He indicated that this system of advance payments offered higher returns to the lender than other systems of credit as opium could be purchased at a price considerably lower than the harvest price and subsequently sold some time after the harvest once farmgate prices had risen. Indeed, respondents in a number of villages visited during the period of fieldwork indicated that wealthier households were retaining their opium until prices rose once more due to the dramatic fall in farmgate prices.

This recent shift in credit arrangements is problematic. In other parts of Afghanistan, the payment of advances on the future opium crop has served to consolidate opium poppy cultivation within a given area. Opium has become the only source of informal

²² Interestingly those who obtained loans in kind on wheat could not repay it in-kind with wheat even if they offered 100% interest. This was considered haram (forbidden under Islam).

²³ In the south and east of Afghanistan this system is known as salaam. For a more detailed discussion see Strategic Study#3: The Role of Opium as a Source of Informal Credit in Afghanistan. UNODC: Islamabad.

credit for the poor and has been used for the purchase of basic necessities including food, clothes and medicine, as well as agricultural inputs. More vulnerable households have been found to sell their opium poppy crop up to two years in advance. However, whilst loans on the future opium crop have offered a lifeline to the poor, it has done so at a punitive rate, often locking households into exploitative patron-client relationships with local traders that may take years to overcome. And it is worth remembering that those who cannot repay the advances they received due to crop failure are required to purchase opium on the open market, or reschedule their debt, paying twice as much opium the following year, thereby driving them further into a cycle of opium poppy cultivation.²⁴

Fortunately, in Badakhshan, opium has not yet become the sole source of credit for the rural poor. In higher valleys of Wadooj Bala and Khustak, it was only in those areas close to the main bazaar, or in the outlying areas nearer to the district bazaar, that loans were obtained on the future opium crop. Loans in cash and in-kind still dominate in the upper valleys. However, there is clear penetration in these areas and the financial advantages of a credit system based on the distress sale of opium will soon prove too attractive to lenders. This will only serve to consolidate opium poppy cultivation within the area and make its cultivation even more difficult to eliminate.

6.4. Growing indebtedness and asset shedding

In normal years respondents considered their seasonal loans manageable. However, during times of family crisis (illness or death) or natural shocks, respondents found themselves unable to repay their loans. Unfortunately, the drought that hit parts of Badakhshan between 1998-2001 had just such an effect resulting in increasing levels of indebtedness amongst respondents, particularly amongst those in the upper valleys of Jurm and Baharak.

In Wadooj Bala and Khustak, respondents reported that the drought had led to a complete loss of their wheat production on rainfed land and significant reductions in yield on their irrigated land. Yields on irrigated land fell from around 100 Seers per jerib to less than fifty. The effect of this increase in household food deficits was an increased reliance on credit to meet household food deficits. The level of household indebtedness was further exacerbated by a failure to meet existing debt repayments.

Creditors offered little opportunity for default. Typically respondents either obtained further loans to repay existing debts or sold household possessions or long term productive assets in order to meet their loan repayments. The sale of household possessions such as carpets and crockery was widespread, as was the sale of longterm productive assets including livestock and farm equipment.

Although some households managed to retain some of their livestock, the majority of those interviewed sold all of their goats and cows sometimes numbering up to 100 animals. The sale of draught animals highlights the severity of the impact of the drought in these areas. The sale of horses (a possible proxy indicator of wealth in this area) indicates that very few households in the upper valleys escaped the impact of the drought. Typically more vulnerable households sold their livestock and possessions to

²⁴ See UNODC Strategic Study#9: Opium Poppy Cultivation in A Changing Policy Environment – Farmers' Intentions for the 2002/03 Growing Seasons. UNODC: Kabul.

wealthy individuals within the village or visiting traders, whilst wealthier respondents reported selling in the main bazaars within the area, or in Jurm or Baharak, at preferential rates.

However, despite the sale of household goods and long term productive assets, accumulated debts of US\$400 to US\$800 were not uncommon in the upper valleys. A few respondents reported debts of US\$1,200-US\$1,600 whilst in the lower areas around Jurm, high levels of indebtedness were restricted to those who did not own land or whose land was predominantly rainfed.

6.5. Concentration of land ownership

According to respondents, the sale of land in the upper valleys was also a common coping strategy during the drought years. Where possible, households would seek to mortgage their land rather than sell it outright. Mortgage arrangements allowed borrowers to retain the use of their land and to receive a lump sum from the creditor (ranging from US\$120 – US\$200) and half the crop each year over the duration of the loan or until the debt is fully paid. In return the lender gained cropping decisions over the land and half of the crop each year (as interest on the loan). If the borrower fails to repay the loan within the time period agreed between the two parties, the land becomes the property of the creditor (typically at considerably less than the market price of the land). In some villages in Wadooj Bala, respondents reported that up to 95% of households had sold or mortgaged some of their land. Similar levels of mortgaging were reported in those villages in Khustak with a greater reliance on rainfed land.

Respondents in Khustak and Wadooj Bala reported that those acquiring land through the mortgage system were typically wealthy individuals from neighbouring villages or from lower lying areas nearer to the district centres of Jurm and Baharak.²⁵ There was uniformity in the view that once mortgaged, it was the creditor that determined what was grown on the land.

It is worth noting that whilst sharecropping arrangements in Badakhshan are generally more preferable than in southern and eastern Afghanistan,²⁶ they still favour the cultivation of labour intensive crops. Given that labour costs constitute 80-90% of the total production costs for opium poppy, a landlord can accrue 50% of the crop for only 10-20% of costs. Those interviewed indicated that there had been a growing preference for cultivating opium poppy amongst both creditors and debtors. Indeed, all those interviewed that sharecropped land were found to cultivate opium poppy. This perhaps highlights the increasing attraction opium poppy cultivation has to both

²⁵ The incidence of households sharecropping their mortgaged land would seem to support this. Key respondents report that where households have mortgaged land to someone from within their own village the creditor will cultivate the land and obtain the whole yield as interest. A 50% share of the final yield is typically accepted when the mortgaged land is some distance from the lenders own agricultural land.

²⁶ Whilst in Nangarhar and Helmand sharecroppers typically receive one fifth of the final yield for licit crops and one third of the final yield for opium, in Badakhshan they receive 50% of the yield for both licit and illicit crops. The downside of the arrangement in Badakhshan is that sharecroppers are expected to pay 50% of the total costs of cultivation and provide all the unremunerated labour compared to the southern and eastern provinces where sharecroppers typically only provide their labour.

landlords wishing to accumulate assets and sharecroppers who seek to regain access to their mortgaged land.

Indeed, respondents reported that the expansion in opium poppy cultivation had allowed some households to regain the land they had mortgaged during the drought years. However, generally these households had only mortgaged some of their land and had maximised poppy cultivation on their own land so as to accrue the maximum return on their land. For instance, a respondent in Jurm reported that he had increased his level of opium poppy cultivation so that he could pay off the outstanding debts on the land he had mortgaged 2 years prior. He claimed that by cultivating all of the land he still owned (3.5 jeribs) and half of the land that he had mortgaged with opium poppy he had managed to repay the original loan he had obtained on his land and regain complete ownership over his land.

In one village in Wadooj Bala respondents indicated that of the 95% of households that had mortgaged their land 30% had regained some of the land. It was suggested that a further 20% of households might repay their mortgage and see their land returned. However, it was argued that those who had mortgaged all their land were unlikely to regain ownership. The fall in opium prices was seen as a major constraint on the repayment of cash debts and would affect households' ability to repay their mortgages.

7. Saturation Point? The Constraints on Poppy Cultivation in 2003/4

There has been a significant fall in the farmgate price for opium in 2003. During the period of fieldwork respondents reported farmgate prices ranged from the equivalent of US\$112 to US\$ 128 per kilogram depending on proximity to the main bazaars in Baharak and Jurm. This represents a 70% fall in opium prices in just over a year. Most respondents blamed over-production in 2003. When seen in conjunction with the increase in wage labour rates (particularly during the harvest season) it is clear that the profitability of opium has, for some, fallen below a level that is financially beneficial for all the socio-economic groups involved in its cultivation.

When cropping decisions are also considered within the wider framework of household livelihood strategies in the region, it is clear that the factors that have stimulated the rapid increases in opium poppy cultivation over the last few years have largely run out of steam. This is not necessarily to say that we shall see a fall in opium poppy cultivation in the coming years. The longer-term impact of the drought and the Taliban ban on opium has conspired against that. But cultivation will not grow at such a dramatic rate. Indeed, of those interviewed that cultivate opium poppy, 50% reported that they would maintain current levels of opium poppy cultivation, the other 50% were divided equally amongst those that would increase cultivation over the next year and those that would reduce their level of planting.

7.1 Diminishing returns: for some more than others

Based on the yields obtained by respondents of between 2 to 4 kilograms per jerib and a median price of US\$120, gross returns per jerib range from only US\$240 to

US\$480. Given the particularly high rates of wage labour paid during the harvest,²⁷ net returns would actually be in deficit on more marginal land producing minus US\$16 per jerib compared to US\$224 on land producing the higher yield of 4 kilograms per jerib. The use of family (or unpaid) labour for the majority of tasks except for 50% of the harvest would allow households to regain a profit, producing actual net returns of between US\$136 to US\$376 per jerib.

An analysis of the distribution of net returns between sharecropper and landlord reveals net returns of between minus US\$94 and US\$36 accrued by the sharecropper compared to between US\$68 and US\$188 to the landlord. Actual net returns to both groups were only between US\$68 and US\$188. Even in the more productive land where yields of 7.5 kilograms of opium were possible, net returns were only US\$424 per jerib whilst actual returns were US\$696. Divided between landlord and sharecropper, this would equate to net returns of US\$236 to the sharecropper and US\$398 to the landlord – the equivalent of actual returns to both.

As in the previous example for the 2002 growing season, the time of sale and the distribution of land would further increase the disparity between the returns received by the different socio-economic groups involved in the cultivation of opium poppy. For instance a respondent sharecropper who sold his entire crop in advance would receive actual net returns of between US\$34 and US\$94 per jerib compared to an actual net return of between US\$238 and US\$658 for a landlord who provides an advance on the sharecropper's opium and cultivates a further jerib of opium using his family labour. At these rates of return, opium poppy remains an important source of income to the landlord (particularly given the current paucity of alternatives) and he will continue to cultivate. However, for the sharecropper, the economic benefits are less obvious and its real attraction lies in the role opium plays in obtaining land and credit from those who have control over these assets – the landlords.

7.2 Rising labour costs

The most commonly cited constraint on opium poppy cultivation was labour. The labour intensive nature of opium poppy cultivation (estimated to require approximately 350 person days per hectare) means that access to cheap or unremunerated labour is critical if households are to obtain a profit from opium poppy cultivation.²⁸

Respondents indicated that there had been a recovery in off and non-farm income opportunities over the last twelve months. Whilst economic growth, attributed to improved security and the recovery of agricultural (in particular wheat) production had raised agricultural wages, most respondents reported the large increase in opium poppy cultivation in 2003 had created labour shortages, particularly during the opium

²⁷ This calculation is based on an increase in wage labour rates to US\$4 per day for the harvest period, which was the rate of pay most frequently cited by respondents. Whilst rates of US\$9 per day were reported they were with regard to Khash in Jurm. Rates for land preparation, sowing weeding and the clearing of fields are maintained at US\$2 per day. It is worth noting that wage rates of the equivalent of US\$3 per day for land preparation and weeding were not uncommon.

²⁸ See 'The Economic Superiority of Illicit Drug Production: Myth and Reality - Opium Poppy Cultivation in Afghanistan' and . Paper prepared for the International Conference on Alternative Development in drug control and cooperation, Feldafing, January 7-12, 2001 by David Mansfield.

harvest season. So much so that the cost of hired labour during the harvest period was seen as one of the major impediments to cultivation in the coming season.

Wages fluctuated between the equivalent of US\$3 and US\$9 per day depending on the location and time of harvest. Khash in Jurm attracted the highest rates of pay and consequently itinerants from a range of districts in Badakhshan, Takhar and Kunduz. The high density of cultivation and problems of access were cited as the reasons for these preferential rates. Khustak was reported to offer the lowest daily wages. Respondents indicated that the vast majority of the labour hired in Khustak during the harvest period came from within the valley (travelling up the valley with the onset of the harvest season).

Whilst observers might consider that the final returns on opium poppy would make this a worthy investment, both respondents and key informants reported that itinerant harvesters required paying at the end of each day of the harvest. Consequently, for many respondents, hiring labour involved considerable financial outlay prior to the sale of the final crop. Many indicated that they could not cover these costs without taking further loans, as we have seen, often at 100% interest.

Respondents also reported that other investments that could potentially increase the returns on opium poppy were neglected due to the high labour costs involved. For instance, in the upper valleys of Khustak and Wadooj Bala, some households were found to bund their land into square terraces. Reports suggested that this protected opium poppy against frost and helped maximise the returns on water.²⁹ Yields were reported to increase by 20%. However, the cost of bunding was significant requiring 20 person days at approximately US\$ 2-3 per day, compared to only two person days for preparing in the usual level way. The more vulnerable respondents that were interviewed were aware of the benefits from bunding but considered the labour costs beyond their financial means (and they were not considered to go into further debt to pay for it). As such, respondents considered the bunding of opium poppy fields a proxy indicator of wealth.

The high cost of wage labour is further exacerbated by payments in kind. As in other parts of Afghanistan, respondents indicated that itinerant harvesters were also given three 'good' meals a day during the harvest period.³⁰ Respondents considered this a significant cost to the household.³¹ There were even anecdotal reports that some itinerants demanded access to satellite television and videos each evening. However, given the limited number of households that had access to these facilities, particularly in the upper valleys of Wadooj Bala and Khustak, it is likely that this report has gained greater currency than it deserves.

The most common strategy adopted by households to minimise the need to hire itinerant harvesters was to keep the level of opium poppy cultivation commensurate

²⁹ Fieldwork by Adam Pain, on behalf of Gtz, also revealed that bunding reduced the labour demands during the weeding stage. However, this would depend on the crop not being broadcast during sowing. Reports differed on this.

³⁰ See Afghanistan Strategic Study 4: Access to Labour: The Role of Opium in the livelihood Strategies of Itinerant harvesters Working in Helmand Province, Afghanistan. UNODC: Islamabad. Page 22

³¹ See UNODC Strategic Study#6: The Role of Women in Opium Poppy Cultivation in Afghanistan. UNODC: Islamabad. Page 26-27.

with family labour supply hiring only a few itinerants at times of peak labour demand (typically during the weeding and harvesting period). However, in those areas where respondents could obtain both a winter and spring crop³² on their irrigated land, staggered planting allowed households to increase the level of cultivation whilst maintaining a balance between household labour supply and the majority of the tasks associated with opium poppy cultivation.

Amongst these households, the irrigated land was typically divided equally between the winter and spring seasons. Of the land they cultivated in winter, they would cultivate 50% with wheat and 50% with opium poppy. Subsequently, in spring they would cultivate the other half of their land, again cultivating 50% with wheat and 50% with opium poppy. This distribution of poppy and wheat not only allowed households to spread the demands on their household labour but also meet crop rotation requirements.³³

Of particular interest and perhaps indicative of the level of over-production in Badakhshan in 2003 were reports from respondents in the lower areas of Jurm and Baharak (close to the district bazaars) that they had begun to pay the women and children of the family for working on the opium poppy harvest. It was argued that this was a strategy for minimising the need for expensive hired labour. In Jurm this practice had begun in 2002, whilst in Baharak paying family members during the harvest had only arisen due to the rapid expansion in poppy cultivation in 2003.³⁴ In both areas family members were paid in opium, typically one to two tulis ³⁵per day.

Most respondents suggested that this was a positive move as it had led to more money in hands of women and children (which in the case of the women was being spent on consumer goods for both personal and family use). Respondents were confident that this trend in paying family members for their work on opium poppy would not lead to payments for labouring on other crops in due course. They indicated the phenomenon was peculiar to opium poppy due to the labour intensive nature of the task and the particularly high rates of cultivation in the last two years.

Another group that had benefited from the increase in daily wages during the opium poppy harvest in 2003 were itinerant harvesters themselves. One respondent reported that he had worked in a range of different locations within Badakhshan this harvest season, including, Jurm centre, Baharak, Khash and Khustak. This had allowed him to earn around US\$260 over a 50-day period and repay some of the debts he had accrued during the drought. However, this particular respondent did not anticipate that these levels daily wages would continue, believing that cultivation would be educed in the face of such high labour costs.

³² In Badakhshan these seasons overlap eliminating the possibility of cultivating the same piece of land with both a winter and spring crop of opium poppy.

³³ It is important to note that the winter crop was considered to produce higher yields therefore by staggering the planting of opium respondents elected to reach a balance between total productivity and labour costs. This balance will be particularly important during periods of high labour rates.

³⁴ Respondents indicated that the payment of family members in opium was a recent phenomenon and was not the same as the practice of allowing family members to gather any residual opium left over after collection.

³⁵ One tuli is the equivalent of 18 grams.

7.3. Maintaining the productivity of the land

Many respondents reported that crops had to be rotated to maintain the productivity of the land. This included land cultivated with opium poppy. The most common rotation was between opium poppy (in Year 1) and wheat (in Year 2), however a number of households also included potatoes (Year 3) in their crop rotation. It was reported that a failure to comply with patterns of rotation would not only result in dwindling yields for opium poppy but for other crops. For instance, a number of respondents reported that if opium poppy were to be cultivated on the same piece of land for two years in succession, the reduction in poppy yields (20-30%) would be followed by a fall in wheat yields (30-50%) in the third. Whilst respondents reported that fertiliser could be used to offset some of the reductions caused by failing to rotate crops, the soil would soon become 'diseased'.

This need to rotate crops imposes a constraint on the level of poppy cultivation that can be maintained over time. Indeed, despite the reports in the media of the unassailable profitability of opium poppy, none of those interviewed in the districts of Jurm and Baharak were found to monocrop opium poppy. In fact, of those that did cultivate opium poppy, the average amount of land dedicated to poppy was only 30%.

Moreover, even in those areas where there was a longer tradition of more intensive opium poppy cultivation (such as the lower areas of Jurm and Baharak), only one household was found to have dedicated more than 50% of household land with opium poppy this growing season. This particular respondent suggested that he had increased his level of opium poppy cultivation so that he could pay off the outstanding debts on the land he had mortgaged 2 years prior. He indicated that he would be reducing the level of opium poppy cultivation this season, primarily due to the need to return to a more productive crop rotation and increase wheat straw production for the cattle that he had recently begun to restock.

7.4. The farman and other restrictions

The Agha Khan declared a farman³⁶ on opium poppy cultivation and consumption in 2002. There are various reports that the Ismaeli community in Badakhshan is complying with the restrictions of the edict. However, interviews with respondents from the Ismaeli community revealed a reluctance to discuss their involvement in opium poppy cultivation. Whilst some villages had clearly complied with the ban, they considered it to the detriment of their socio-economic position, particularly in the light of continued cultivation in neighbouring villages.

Other villages had clearly decided that the stricture of the ban might impose too harsh a penalty. One respondent reported that he did not cultivate opium poppy but the remains of poppy stalks could be seen in the land he was ploughing. A further respondent initially reported that he did not cultivate opium poppy but indicated that opium poppy had been grown by a number of other members of the village. He later admitted that he had cultivated 5 jeribs of opium poppy but his brother (a local powerbroker in the area) had destroyed the crop in response to the Agha Khan's farman on opium poppy. The respondent reported that his brother's actions had led to him replanting the land with barley. As the respondent was cultivating this land under a sharecropping arrangement on behalf of a landlord from Baharak district centre he

 $^{^{36}}$ A farman is a religious edict issued by the Agha Khan .

did not believe that he would be given access to this land during the next planting season. In Jurm one respondent reported that the 11 members of the village who were from the Ismaeli community were also growing opium poppy.

Despite uneven implementation, the farman has clearly constrained opium poppy cultivation in particular areas in Badakhshan.³⁷ Other statements by the authorities have had considerably less impact. For instance, all of those interviewed were aware of the ATA's ban on opium poppy cultivation. A number even reported that they had heard statements on the radio from the President outlining the punishment for opium poppy cultivation. None of those interviewed reported that this would influence their decision to cultivate opium poppy in the coming year. Many respondents cited the involvement of provincial and district powerbrokers in the cultivation, production and trade in opiates as evidence of the implicit support for opium poppy cultivation in the area.

8. Conclusion

The rapid expansion in opium poppy cultivation in Badakhshan since 2001 is clearly of considerable concern. It will not only exacerbate the problems of governance within the province but may deter government and donor investment in the area. Continued cultivation will exacerbate the patterns of socio-economic differentiation shaped by the drought and challenge the ATA and development community's pursuit of equitable economic growth.

To address the problem of opium poppy cultivation in the province it is first necessary to understand the different motivations and factors that have influenced its cultivation and how these are prioritised across different socio-economic groups. To perceive this growth as determined purely by price is misleading and will lead to distorted policy responses. It is important to recognise that the economic returns on opium are unevenly distributed and that opium poppy cultivation is increasingly acting as a means of accessing both land and credit for the poor.

Moreover, experience in Afghanistan and other source countries have suggested that drug crop cultivation is rarely purely a function of price. Illicit drug crops are only one part of a more complex livelihood systems. They require a range of different inputs, including land, water, and cheap or unremunerated (and during certain parts of the agricultural cycle relatively skilled) labour. Increasing the cultivation of illicit drug crops imposes opportunity costs on other aspects of the household livelihood strategy. For instance, land will need to be reallocated from food crops or other potential cash crops. Labour may need to be redirected from non-farm income opportunities and may need to be hired during periods of peak demand (such as weeding and harvest). In Afghanistan (and particular Badakhshan) the reduction in wheat cultivation will reduce the availability of straw for livestock that has traditionally acted as a guarantee against food insecurity.

³⁷ However, the longer term impact of widening socio-economic differentiation between poppy growing villages and non poppy growing Ismaeli villages remains unclear

Consequently, whilst significant increases in illicit drug crop cultivation may generate higher economic returns, it can also upset the Risks that a resource poor household can ill afford to take. Moreover, the capacity of the household to respond to fluctuations in illicit drug prices will also be determined by the availability of agricultural inputs and in most source countries access to inputs such as land, water and labour are governed by traditional systems rather than the free market.

For those most guided by statistics, perhaps, the best example of the absence of a simple relationship between price and opium cultivation is in Afghanistan itself, where according to the UNODC, despite a ten fold increase in the farmgate price between 1999 and 2002, total cultivation fell from 91,000 hectares to around 74,000 hectares. Over the same period, the USG estimates that opium poppy cultivation had fallen from 51,000 hectares to 31,000 hectares

In Badakhshan, the rapid expansion in opium poppy cultivation would seem to have been facilitated by the combined effect of the shift in the regional market for opium, the end of the civil war, and the impact of the drought on rural livelihood strategies. To those households that were worst hit by the drought, opium poppy cultivation seems to have been a coping strategy, allowing them to reacquire some of the assets they sold during the drought to repay debts and maintain food security. Whilst the majority of those interviewed would seem to have purchased household items, such as carpets and crockery, few have regained their long-term productive assets, despite unprecedented high prices for opium in the area. The sale of livestock (a traditional source of credit) and the mortgaging (and sale) of land, continues to leave them dependent on opium poppy as a means of survival.

In stark contrast there are those households with good quality land, low levels of household debt, sufficient livestock, and sources of non-farm and off farm income who not only escaped the rigours of the drought but have benefited disproportionately from opium cultivation. Their increasing control over land and access to credit is consolidating high levels of opium poppy cultivation within the province, despite reductions in the farmgate price.

A policy response (be it development and/or law enforcement) that treats these groups in a uniform manner is based on unfounded premises. Interventions need to address the different factors that influence opium poppy cultivation across the range of different groups involved in its cultivation if they are to lead to a sustainable elimination in opium poppy cultivation. Improving access to credit, land and off-farm and non-farm income opportunities are critical for the poor. For those who are not economically reliant on opium poppy cultivation, greater emphasis could be given to applying social and legal pressure. Whilst more complex, such a targeted approach is more likely to deliver on both drug control and development objectives within the province.

The Large Landowner

A respondent in Wadooj Bala reported that he had 31 jeribs of land, of which 15 jeribs were irrigated, and 16 were rainfed. He indicated that he had begun to cultivate opium poppy in 2001, planting 2 jeribs on his irrigated land. This year he had cultivated 6 jeribs of opium poppy on his irrigated land. He reported that opium poppy had allowed him to repay all the debts he had accrued due to the drought and regain the 2 jeribs of land he had mortgaged in 2001. He had also replaced the carpets and household items that he had sold and begun to replace the livestock that he had sold during the drought. He reported that he had met the family's wheat requirements in 2003 cultivating 9 jeribs of irrigated land with wheat and 3 jeribs of his rainfed land. The rest of his land he had cultivated with barley and fodder crops for his 13 cattle. He reported that most households in the village now had family residing in other provinces and countries (Iran and Pakistan) on a seasonal and permanent basis. His brother (who was visiting him during Ramazan) provided remittances from Pakistan where he was a teacher in Islamic studies.

The Small Landowner

A respondent in Wadooj Bala reported that he owned 1 jerib of irrigated land and 2 jeribs of rainfed land. However, due to accumulated debts accrued due to the drought his irrigated land was now mortgaged to someone in the neighbouring village. The creditor had instructed that this land should be cultivated with opium (as it had been last year). The respondent reported that last year he had obtained only 3 kilograms of opium from this land (of which he took 50% as his share) and this had been used to service his outstanding debt of the equivalent of US\$800. He reported that despite selling his livestock and household possessions (and cultivating opium) he would need to take a further loan of the equivalent of US\$200 during the coming winter season. He reported that their rainfed land only produced enough wheat to feed his household of 9 for three months. He reported that 3 members of his household labour outside the area working in Taloqan, Kunduz and Ishkeshem. The respondent also worked as an itinerant harvester on opium poppy within the Wadooj Valley.

The Sharecropper

A respondent in Khustak reported that he had no land. He did however sharecrop one jerib of land for a landowner in the neighbouring village. He reported that he had cultivated this land with wheat on the instruction of the landowner, they would share the costs and final yield of the crop equally. He was expecting his share to be around 50 seers of wheat. The respondent reported that the previous year the same piece of land had been cultivated with opium poppy. It had not produced a good yield and the landlord wished to rotate the crops to improve the fertility of the land. The respondents had taken a loan in of the equivalent of US\$600 due to the drought and more recently his wife's illness. He had sold his household possessions and farming equipment to service this debt. Fortunately this year he had managed to repay the equivalent of US\$260 by working as an itinerant harvester. He reported that he had initially worked in Jurm for a period of 10 days for the equivalent of US\$6 per day, followed by Baharak for ten days (US\$5 per day), Khash for twenty days (US\$9 per day) and then returned to Khustak to work for a final ten days (US\$4 per day). He was looking to obtain a further jerib of land on a sharecropping basis in the spring and cultivate opium poppy.