

The Economic Superiority of Illicit Drug Production: Myth and Reality

Opium Poppy Cultivation in Afghanistan

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1. Introduction

The popular explanation for drug crop cultivation is the unrivalled profitability of opium poppy and coca. Indeed, reports of the unparalleled income that can be generated through the production of these crops can be found throughout the media coverage on illicit drug control.

However, this explanation offers little rationale for the patterns of opium poppy cultivation in source areas, such as Afghanistan, where opium poppy is rarely mono-cropped, and where, despite suitable agricultural conditions across much of the country, only a fraction of the total cultivated land was planted with opium poppy, even when cultivation was at its height in 1999.

Moreover, in practice, there are crops being cultivated in each of the source regions that can generate higher net returns than opium poppy. The introduction of diversified cropping systems and the development of non-farm income opportunities have also proven that household income can be significantly increased despite the elimination of opium poppy. Yet, despite these successes, the argument regarding the unassailable profitability of opium poppy prevails.

Much of this argument takes a rather simplistic view of opium poppy cultivation, informed by economic rationalist concepts of profit maximising farmers. Those households that produce opium are assumed homogenous, having access to the same physical, financial, social, natural, and human resources and selling their opium crop at the same time and at the same price. As such, on the basis of crude calculations, there are frequent statements that opium poppy cultivators in Afghanistan earn as much as US\$ 2,000 per hectare or more.

Yet in reality there is great diversity in the socio-economic groups involved in opium poppy in Afghanistan and the assets at their disposal. Consequently, there is great disparity in the revenues that they accrue from its cultivation. Some households can earn significant returns on opium poppy by utilising the inequitable land tenure system, providing advance payments on the crop, and selling their opium long after the harvesting season. However, for the majority of households in Afghanistan opium poppy is a means of survival, providing access to land and securing the credit that is so critical for subsistence during the winter months.

This *Paper* seeks to unpack the different motivations and factors that influence opium poppy cultivation in Afghanistan and document how these are prioritised across different socio-economic groups. It highlights how development interventions aimed at creating licit livelihood opportunities need to adopt a more strategic and targeted approach that address the different socio-economic groups involved in opium poppy cultivation and the multi-functional role that opium poppy plays in their livelihood strategies.

The *Paper* draws heavily from in-depth research conducted in Afghanistan from June 1997 until December 1999.¹ Whilst some of the findings from Afghanistan may be considered context specific, many are generic. Where appropriate these generic themes are supported by examples drawn from a wide range of literature on opium poppy cultivation across an array of producer countries, both licit and illicit.

The first section of the paper, documents the diversity in opium poppy cultivation in Afghanistan. It highlights how arguments regarding the unassailable profitability of opium poppy provide little rationale for the scale and nature of opium poppy cultivation at the national, regional, and household level.

The second section documents the role opium plays in the symbiotic relationship between the resource rich and the resource poor. It provides details of how the traditional land tenure arrangements and informal credit systems have been modified in order to co-opt those households without land, or with insufficient land to meet their basic needs, into opium poppy cultivation. Whilst focussing on the most divergent socio-economic groups within the community, this section illustrates the considerable gains that those households with control over land and financial resources can accrue at the cost of the resource poor.

The third section provides details of the gross and net returns on opium poppy and how these are distributed across different socio-economic groups. It reveals the disproportionate gains that those with land and capital can accrue at the cost of those without.

The fourth section documents the myriad of strategies resource poor households have adopted in an attempt to reduce labour costs and increase their returns on their opium crop. It highlights how, without the use of family and reciprocal labour, opium poppy cultivation is generally not a particularly profitable endeavour for the resource poor in Afghanistan.

The *Paper* concludes that, in Afghanistan, the economic superiority of opium poppy is, indeed, both a reality and a myth. However, it is a reality for those whose contribution is least and a myth for those that are most deserving. The *Paper* recommends that interventions aimed at reducing opium poppy cultivation need to recognise the different motivations and factors that influence households in their decision to cultivate illicit drug crops and target their efforts accordingly. In particular, the *Paper* highlights the importance of developing a better understanding of the diverse livelihood strategies of the different socio-economic groups involved in illicit drug crop cultivation, and the efficacy of adopting a pro-poor approach to alternative development interventions.

2. Profit: The Failure to Explain Diversity

Arguments regarding the unassailable profitability of opium poppy do little to explain the diversity in the cultivation of opium in a country like Afghanistan. For instance, at the provincial level, cultivation in the 1999/2000 growing season ranged from less than 50 hectares in the provinces of Badghis, Faryab, Herat and Logar to almost 20,000 hectares in Nangarhar and over 40,000 hectares in Helmand.

Indeed, despite cultivation emerging in provinces where opium poppy had not been grown before, Helmand and Nangarhar still dominate supply, consistently cultivating three quarters of the total amount of land planted with opium poppy from 1993/94

until 1999/2000. And whilst there has been a rapid expansion in the number of districts cultivating opium poppy in the last six years, rising from 55 in 1994 to 123 in 200, it is still grown in only 40% of the districts in Afghanistan.

The intensity of cultivation also differs considerably by district. For instance, in Achin district, in Nangarhar, where the mean household landholdings are less than 0.5 hectare, 65 per cent of the cultivated land was dedicated to opium poppy. This contrasts sharply with the situation in Surkhrud, in the same province, where the farmland is considered rich, where crop yields are high and population density low, and where only 10 per cent of cultivated land was dedicated to opium poppy.²

Similarly, opium poppy cultivation is more concentrated in the northern districts of Helmand, where land holdings are small and access to both irrigation water and markets is more problematic. For example, on average 70 per cent of cultivated land was dedicated to opium poppy in the districts of Musa Qala and Nawzad, compared to only 46 per cent 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.³ Consequently, it would seem that in both Helmand and Nangarhar, a smaller proportion of household land is dedicated to opium poppy in those districts where there is better access to land, water and markets for agricultural products.

Arguments concerning the unrivalled profitability of opium poppy are contested further by the fact that, as in other source countries, the proportion of household land dedicated to opium poppy in Afghanistan rarely exceeds 70 per cent and that monocropping is particularly infrequent. Furthermore, even amidst villages where opium poppy is intensively cultivated, there are households that do not grow the crop at all.

In reality, whilst opium poppy has clearly become integral to the livelihood strategies of some, the amount of land dedicated to opium poppy in Afghanistan remains relatively insignificant, despite the fact that the agricultural conditions in much of the country are conducive to its cultivation. Indeed, during the 1998/99 cropping season, when cultivation was at its height, opium poppy occupied only 2.6 per cent of the total cultivated land.⁴ This raises the question that were opium poppy truly so profitable, would it not be more popular?

The sheer diversity in cultivation across Afghanistan tends to suggest that opium poppy cultivation is, in fact, highly dependent on local factors. Social and religious norms, as well as perceptions of morality, inform households in their decision to plant opium poppy. Access to land, water, and in particular, unremunerated and low paid labour, are important determinants in the level of opium poppy cultivation. The role of opium as a source of financial credit is also a particularly important motivation for its cultivation.

This is not to say that opium poppy is not a profitable endeavour; it can be. It does, however, suggest that opium poppy is not necessarily a profitable crop in all circumstances and that, as the next section will discuss, in today's Afghanistan it does not even need to be profitable to all the socio-economic groups involved in its cultivation to make it an attractive crop.

3. Profit: The Zero-Sum-Game

In the current environment in Afghanistan opium poppy cultivation is clearly an appealing option. As a non-perishable, low weight-high value product, it is ideally suited to the war-damaged physical infrastructure. Moreover, as an annual crop, with a relatively guaranteed market, opium has provided a degree of security that many crops, such as fruit and vegetables, cannot offer.

However, ultimately the profitability of opium poppy is determined by the resource endowments of those involved in its cultivation. As opium poppy has become embedded within the socio-economic and political fabric of a particular area, it has become a medium of exchange between the resource rich and the resource poor, creating a symbiotic relationship.

For the resource rich, their control over resources allows them to determine the rules of exchange by which they acquire opium. Consequently, traditional land tenure arrangements and informal credit systems have been modified in order to favour the cultivation of opium poppy. Within this new framework, opium has come to represent a commodity to be exchanged, not only for the purchase of food but as the means for achieving food security, providing the resource poor with access to land for agricultural production and credit during times of food scarcity.

This section focuses on the most diverse socio-economic groups within the Afghan rural community. Whilst there are generally 'shades of grey' between these polar extremes, typically in the form of owner-cultivators, it is the intention of this section to illustrate that opium poppy cultivation does not need to generate a profit for its cultivation to be advantageous.

3.1. Exchanging land for cheap labour

To ensure a minimum level of food security, those households without land, or with insufficient land to meet their basic needs, seek to obtain access to land through either tenancy or sharecropping arrangements. However, as opium poppy cultivation has become more entrenched within local agricultural systems, both these arrangements have altered to favour opium production.

For instance, traditionally, the rentable value of land in Afghanistan is calculated on the basis of the potential productivity of the land were it to be cultivated with wheat. Under this arrangement a tenant had free choice as to the crops to be cultivated on the leased land. However, increasingly in the eastern provinces, including Kunar, Laghman and Nangarhar, there is a growing tendency to calculate rent on the basis of the potential yield of opium that the land could produce. Consequently, to meet the conditions of their rental agreement, tenants in these areas have had little option but to cultivate opium poppy.

Whilst leasing land is the preferred option, typically the poorest sections of the community do not have sufficient resources to purchase the agricultural inputs required to cultivate the land, as is required under tenancy arrangements. Consequently, for the resources poor, which often only have their labour to offer, entering into a sharecropping relationship with a landowner represents the most viable strategy for accessing land.

Indeed, sharecropping is a common practice in the opium poppy producing regions of Afghanistan, particularly in the southern region where access to land is particularly inequitable. Generally, the distribution of returns to the sharecropper and landowner depends on their respective contribution to the five categories of inputs required for agricultural production: labour, seed, farmpower, land and water.

Clearly the landowner will provide the land and consequently the water, as access to these are inextricably linked in Afghanistan. However, typically the landowner will also supply the seed and farmpower, either contributing his own tractor or oxen, or hiring them from within the area. As such, the sharecropper's contribution to agricultural inputs tends to be restricted to providing only labour and for this a one fifth of share of the final crop is received.

For the landowner, sharecropping is an attractive option that both provides a relatively secure and motivated workforce and allows the risk of crop failure to be spread.⁵ For the household without land, or with insufficient land to meet their basic needs, sharecropping offers a degree of security, providing a minimum level of direct entitlement for at least one agricultural season.⁶

Ultimately, whilst there is sometimes some scope for negotiation, it is the landowner that decides what crops are to be cultivated on the land designated for sharecropping. Clearly, for the landowner the cultivation of labour intensive crops under a sharecropping agreement is an attractive option, providing the mechanism for obtaining a share of the final crop that is disproportionate to their contribution of inputs. Indeed, fieldwork in Helmand suggested that on average 50% of the land cultivated under sharecropping arrangements in 1999 was cultivated with opium poppy, compared with only 23% with wheat.⁷

The final share of the opium crop received by the landowner and sharecropper has been found to differ by region. For instance, in the eastern region, where land is more evenly distributed and there is a greater incidence of absentee landlords, the crop is divided equally between the landowner and the sharecropper. In the south where socio-economic differentiation is more acute and there is a higher proportion of landlessness amongst the rural population, the landowner accumulates two thirds of the final crop. Given that in many source areas labour costs can constitute up to 90% of the total cost of opium poppy production,⁸ sharecropping allows the landowner to accrue one half to two thirds of the final crop for a contribution of only 10-20% of the cost of production.

Clearly, the household contracted as a sharecropper also benefits from opium poppy cultivation otherwise they would not be co-opted into its cultivation. Primarily they gain access to land on which they can cultivate food crops for consumption, such as wheat and vegetables, as well as opium poppy, thereby ensuring a minimum level of food security. Also in recognition of the labour intensive nature of opium poppy cultivation, sharecroppers receive a greater share of the final crop when they cultivate opium than they do for other agricultural products, such as wheat, onion, and maize. Moreover, the cultivation of opium poppy also provides the sharecropper with access to credit, critical to household survival during the winter months when food scarcity is at its most acute.

3.2. Exchanging credit for cheap product

Wherever opium is produced, it has become the primary medium for obtaining credit. In South East Asia, *Haw* traders provide cash, commodities and agricultural inputs to remote highland groups in return for opium. In Pakistan, local shopkeepers, known as *beopari*, provide goods on the understanding that any debts accrued will be repaid in the form of opium. Similarly, in Afghanistan, credit is usually obtained as an advance payment on a fixed amount of opium.⁹

This system, known as *salaam*, provides an advance payment on a fixed amount of agricultural production. Whilst *salaam* sometimes provides advance payments on other agricultural products, such as wheat or black cumin, opium is the crop that is favoured by lenders. Although the majority of households that cultivate opium poppy in Afghanistan utilise this system to some extent, the resource poor typically sell their entire crop prior to the harvest in return for an advance payment.

The price paid as an advance is half the current market price of opium on the day that the agreement is reached. The borrower is expected to submit the amount of opium that the advance has been provided promptly at harvest time. Whilst the lender can sometimes make losses, typically the *salaam* system facilitates 'distress sales', allowing traders to acquire opium at prices significantly less than their harvest price.

Poorer households generally use the advance they obtain on their opium crop to purchase basic necessities including food, clothes and medicine, as well as purchase agricultural inputs and repay existing loans. For many it is their only source of credit during the winter months, when food shortage is at its most acute. As such, the *salaam* system provides the poor with the means of survival; and in many districts opium poppy is the only crop on which an advance can be obtained.

Yet, whilst the *salaam* system offers a lifeline to the poor, it does so at a punitive rate, often locking households into a patron-client relationship with local traders that may take years to overcome. Indeed, it is interesting to note that by 1975, the *salaam* system had been abandoned throughout much of Helmand, except for a few areas in the remote north, due to a preference for the formal credit provided by the agricultural development bank.¹⁰

The exploitative nature of *salaam* is perhaps best shown by example, and the 1997/98 growing season provides the most vivid illustration of the losses incurred by the some of the poorest sections of the community. In the winter months of 1997/98 households typically received an advance on their future opium crop of approximately US\$ 15 per kilogram. Most were expecting a harvest price of around US\$ 30. However, heavy and unseasonal rains during the spring led to disease and significantly reduced yields in the southern region. Indeed, most households in the provinces of Helmand and Qandahar experienced a shortfall in yields of between fifty to seventy per cent.

The impact of this dramatic fall in opium production was not immediate due to the staggered nature of the harvest in Afghanistan. Initially, harvest prices in the lower parts of Helmand and Qandahar were US\$ 40 per kilogramme. However, with the realisation that the upper areas of Helmand and parts of Oruzgan had been affected

prices rose further. By the beginning of August 1998 prices had risen to US\$ 60 per kilogramme.

Output had fallen to such a level that many households in the southern region could not repay the advance they had obtained on their opium crop in-kind. However, the household's future credit worthiness, critical to survival in the forthcoming winter, depended on their reaching an agreement with the lender.

For those households with sufficient financial resources it was simple, opium was purchased on the open market at US\$40 to US\$ 60 per kilogramme and used to repay the debt. However, for those households that did not have the disposable income to purchase opium, the debt had to be rescheduled, or if this was not available, a further loan had to be obtained in order to purchase the opium they owed.

Debts were typically rescheduled over a 12 month period and required the household to repay twice as much opium as they had originally taken an advance against. However, delaying the repayment of the loan was at the sole discretion of the lender and was found to be far easier to obtain for those that owned land. Rescheduling payments on this basis ensures the lender a future supply of opium and co-opts the borrower into further opium poppy cultivation.

For the resource poor, obtaining a further loan was often their only way of meeting their financial obligations. Yet, the high cost of borrowing under these informal systems meant that some of the poorest households found themselves borrowing the equivalent of US\$ 90 to repay an initial loan of US\$ 15. Again, typically the commodity that this loan was obtained against was opium, thereby co-opting the household into opium production for at least another year.

Under the *salaam* system, households are not free to decide which crops to cultivate on an annual basis; many are already committed to opium poppy, sometimes up to two years in advance, due to their outstanding debts.

Moreover, the level of debt incurred by the poorer sections of the community is further exacerbated by the provision of agricultural inputs, such as fertiliser, on credit. For those households with insufficient financial assets to purchase agricultural inputs for cash, credit is available. Under this arrangement the goods are taken and a 40% premium on the cash price is paid at harvest. Of course, repayment is after the opium poppy harvest, because in Afghanistan, as in other source areas, the cultivation of opium poppy acts as an important guarantor for any household.

Indeed, in some areas of Afghanistan the cultivation of opium poppy has become a pre-requisite for agricultural production providing the necessary resources for investing in the productive capacity of the land.¹¹ For instance, in the canal area of Helmand, the poor quality of soils has made fertiliser an essential precondition for agricultural production.¹² Yet, for the poor, to obtain fertiliser, requires credit; and to obtain credit, requires opium. Once again, the cultivation of opium poppy is a *fait accompli*.

4. Profit: What Profit?

In its simplest form, the annual gross returns on opium poppy, assuming an average yield of 46 kg per hectare and an average harvest price of \$37 per kg, would be the equivalent of \$1,702 per hectare at harvest time.¹³ However, a household contracted to provide labour under a sharecropping agreement in the southern region, would receive one third of the final crop, but only after deductions have been for the agricultural tithe, known as *ushr*, and any labourers employed during the harvest.

Ushr represents a 10% agricultural tax levied against all agricultural commodities, including opium. Traditionally, this tax was paid to the village mullah for his services to the community, however, in some areas it is paid directly to the local authorities. It can be paid in-kind or in the cash equivalent.

To spread the risk of crop failure, itinerant harvesters are also paid a share of the final crop. The size of the share they receive will depend on the prevailing labour market.¹⁴ So whilst, one sixth or one fifth of the opium crop is the typical payment, in some years, itinerant harvesters can receive as much as one quarter of the total yield produced.

Clearly, the cost of itinerant labour can have a significant impact on the returns on opium poppy for both the landowner and the sharecropper. For instance, based on a payment of one sixth of the final crop to itinerant harvesters, the sharecropper would receive a return of the equivalent of US\$ 425.5 per hectare at harvest prices. Were the labour shortages to result in itinerants accruing a quarter share of the final crop, as occurred in 1999, the sharecropper and itinerant harvesters would both receive the equivalent of just US\$ 382 per hectare at harvest prices.

However, it is worth remembering that the actual net return received by the sharecropper is substantially lower than the figures cited. Typically, the great majority of sharecroppers sell their entire crop in advance at rates that are often around half the harvest price. Consequently, of the third share of the opium crop worth US\$ 425.5, the sharecropper might receive only \$212.75 per hectare if it were all sold in advance.

For the landowner, their share of the final crop, worth the equivalent of US \$851 per hectare at harvest time, can be retained and sold later during the winter months when prices tend to increase by as much as 100%. Were the landowner to have sufficient financial assets to have provided an advance payment to the sharecropper, a further \$212.75 worth of opium, at harvest prices, would have been obtained. Again, if this was retained and sold later in the year, the landowner could increase his returns by US\$ 425.5 per hectare. On this basis the landowner could receive a gross return of the equivalent of US\$ 2,127.5 per hectare.

As the capital costs incurred by the landowner, for fertiliser and farmpower are marginal, consisting of the equivalent of approximately US\$170 per hectare,¹⁵ the landowner can receive a net return on opium poppy of the equivalent of US\$ 1,957.5 compared to just US\$ 212.75 per hectare for the sharecropper. Clearly, the difference in returns is startling, and given that opium constitutes approximately 95% of the income of sharecropping households,¹⁶ even if the harvest price of opium were to

double to \$74 per kilogramme, the net returns would still not prove sufficient to meet the basic needs of an averaged sized household of 13 members.¹⁷ Moreover, were the cost of family labour to be factored in, the sharecropping household could actually make a loss from opium poppy cultivation.¹⁸

Yet, this is one of the major reasons for the concentration of opium poppy cultivation in countries like Afghanistan.¹⁹ Agricultural underemployment and the paucity of non- farm income opportunities have reduced the opportunity cost of labour. Consequently, within today's Afghanistan, family labour is perceived to be free and, as such, opium poppy is perceived to be profitable.

Indeed, by maximising the use of family labour, so as to avoid the need to hire wage labour, the net returns from opium poppy can be increased from the equivalent of US\$ 425.5 per hectare at harvest prices, to US\$ 510.60 per hectare. Even if this entire crop were sold in advance, it would still represent a 20% increase in the net returns to the sharecropper. Judging by the range of strategies the resource poor have adopted in an attempt to reduce labour costs, it is an increase that few households can do without.

5. Profit: The Need to Minimise Labour Costs

Estimates suggest that one hectare of opium requires as much as 350 person days of work compared with only 41 days for wheat.²⁰ To minimise the cost of labour households have adopted a myriad of strategies, including staggered planting, the cultivation of a combination of both short and long maturing varieties of opium poppy, and maximising the use of family and reciprocal labour.

5.1. Reducing risk and spreading the demands on labour

The primary strategy of resource poor households in source areas has been to cultivate a level of opium poppy that is commensurate with the family labour supply. Both staggered planting and the cultivation of different varieties of opium poppy serve to increase the amount of land that can be cultivated using family labour.

Staggered planting is a common phenomenon in opium poppy producing areas.²¹ It allows households to spread the demand for family labour and reduce the risk of crop failure. In Afghanistan, households have typically staggered planting through October and November thereby, monitoring the shift in the relative prices of opium and other agricultural products, assessing the family's evolving credit needs, and establishing the availability of unpaid labour, prior to committing their land to opium poppy cultivation.

A more context specific phenomenon has been the high incidence of households cultivating different varieties of opium poppy in Afghanistan.²² Indeed, in-depth fieldwork in both the southern and eastern regions of Afghanistan has indicated that a combination of long and short maturing varieties of opium poppy are commonly grown by households who cultivate opium poppy extensively, allowing both weeding and harvesting to be phased according to the stage of development of the different cultivars.

Moreover, the availability of different varieties of opium poppy in Afghanistan has also allowed households to select cultivars that best suit their resource endowments, as well as the degree of risk households are willing or able to take. The resource poor have been found to consciously cultivate varieties of opium poppy that can be cultivated on poor soils, that do not require as much water and fertiliser as other varieties, and are relatively disease resistant.

These varieties produce lower quality latex that requires fewer incisions. As such, the household is able to complete the harvest on their own crop and then seek employment as itinerant opium poppy harvesters in neighbouring areas. Moreover, typically, the poor quality opium is used to repay the advance payments that the household received earlier in the season.

5.2. Women and children first

Maximising the use of household labour has become a common strategy in opium poppy producing regions. In Turkey,²³ India,²⁴ Laos and Burma it is women and children that constitute at least half of the work force harvesting opium poppy, and in many areas considerably more.

This also applies in parts of rural Afghanistan, despite the tradition of female seclusion, known as *purdah*.²⁵ In fact, women play a significant role in opium poppy cultivation, including planting; weeding; thinning; lancing the capsules; collecting the gum; clearing the fields; breaking the capsules and removing the seed; cleaning the seed; and processing by-products such as oil and soap. Moreover, as opium poppy tends to be cultivated on irrigated land in Afghanistan that is situated nearer the household, it is in fact easier for women to combine their productive and reproductive responsibilities with its cultivation, as well as comply with the strictures of seclusion, than it is for rainfed crops, such as wheat, that may be located some distance from the home.

The important role that female family labour plays in minimising labour costs is perhaps best highlighted by the fact that the participation of women in the opium poppy harvest, a period in which women are on public view, tends to be restricted to those households with a limited supply of male or child labour, or insufficient financial resources to employ itinerant labourers.²⁶

It is important to note that currently there is little opportunity cost associated with female labour. Indeed, within the context of seclusion, the economic value that the household attributes to women's labour is diminished by the absence of alternative income opportunities that are both culturally appropriate and, in the current economic climate in Afghanistan, have higher returns. Moreover, the low opportunity cost attributed to women's labour tends to make labour intensive crops, such as opium poppy, a more attractive option for the household.

Children have also been found to play an active role in opium poppy cultivation in Afghanistan. Poor facilities, inadequate staff, a narrowly defined curriculum and, most importantly, the sheer lack of subsequent employment opportunities, have raised the opportunity cost of education. Clearly, within the context of Afghanistan, the immediate needs of the household take precedent over any possible longer-term economic benefits that may be gained from education. For instance, the attendance of

boys at the religious schools, known as *madrassas*, drops considerably during the weeding and harvest season due to the demands that opium poppy cultivation imposes on family labour.²⁷ Indeed, it is a common sight to see boys as young as ten working in the opium poppy fields from February until May. Girls are also drafted into working in the fields at an early age. There are even cases of girls harvesting opium poppy in the southern region where female mobility is more restricted.²⁸

5.3. Family and friends next

Reciprocal labour arrangements allow households to balance periods of peak demand on their own family labour with periods of underemployment amongst the family members of their friends and relatives. As reciprocal labour receives only food and no other payment in either cash or kind, it is cheaper than hiring labour, particularly during the opium poppy harvest when daily wages can increase substantially.

In Afghanistan, the prevalence of staggered planting and the cultivation of different varieties of opium poppy with different maturation rates allows households, even in a small area, to utilise reciprocal labour arrangements, known as *ashar*. Furthermore, the varying climatic zones within each of the opium poppy cultivating regions of Afghanistan, staggers the opium poppy season over a period of six to eight weeks, allowing *ashar* be practised across a wider geographic area. For instance, in eastern Afghanistan, households in the neighbouring districts of Azro and Hesarak and Marawara and Sheegal were found to exchange labour with members of their extended families.²⁹

Whilst it is often assumed that the burden of reciprocal labour falls directly on the men, women and children are also actively involved in *ashar*. Many women find their workloads increased, working on their own land, the land of their relatives, and preparing food for the *ashar* labour. Indeed, in the eastern region, women expressed a preference for the use of hired labour over that of *ashar* due to the fact that hired labour did not require food.³⁰ The public role of women in reciprocal labour arrangements for opium poppy cultivation clearly highlights the importance of unpaid labour in the production of opium.

5. Conclusion

Experience has shown that there are crops that are more profitable than opium poppy. For instance, in Thailand, the substitution of flowers for opium poppy has led to profits per square metre being increased by over 50 times.³¹ In Pakistan, onion has proven to be a more profitable crop than opium poppy,³² whilst in Lebanon, garlic has been the more profitable alternative.³³ In Laos, the income from kissina exceeds that of opium.³⁴ The list goes on.

Even in Afghanistan, there are a range of crops including, apricots, apples, black cumin grapes, pomegranates, and melons that can generate higher returns than opium poppy.³⁵ In some years, where the farmgate price of opium has fallen and hired labour costs have increased, wheat has also succeeded in generating higher profits than opium poppy.³⁶

Moreover, household incomes have increased in source areas at a time when opium poppy cultivation has fallen dramatically. In the highland areas of northern Thailand annual family cash incomes were found to have increased three fold by diversifying agricultural production and livestock.³⁷ In Buner, in Pakistan, household incomes have doubled between 1983 and 1991 despite the elimination of opium poppy from the area in 1983.³⁸

However, as this *Paper* has illustrated opium poppy cultivation is not purely a function of the income that it generates. Perhaps if it were, alternative development initiatives might have proven more successful given the plethora of more profitable crops.

The reality is opium plays a multi-functional role in the livelihood strategies of the poor, providing access to land, credit and an important source of off-farm income for those households with insufficient land to satisfy their basic needs.³⁹ Even the by-products of opium poppy have been found to have a high use-value.⁴⁰ For the resource poor, the income that households accrue for their work on opium poppy is only one motivation for its cultivation.⁴¹

However, for the resource rich, opium poppy can generate a relatively high income. Access to cheap labour through the inequitable land tenure system has ensured that landowners have accrued a disproportionate share of the final opium crop. Those with sufficient financial assets have further increased their profit margins on opium poppy by purchasing opium as a 'distress sale', through the provision of advance payments on the crop prior to its harvest. Finally, by retaining their opium crop and selling it some months after the harvest when prices have risen, those households who are least dependent on opium poppy as their sole source of income are most able to benefit.

Yet, the income that the resource rich derive from opium poppy is at the cost of the resource poor. After all, it is the poor that provide the low paid labour; it is the poor that are compelled to sell their opium at low prices prior to the harvest; and it is the poor that are most dependent on opium poppy due to limited on-farm, off farm and non-farm income opportunities.

Attempting to replace the income derived from opium poppy is a necessary but insufficient condition for reducing levels of cultivation. Such a strategy will satisfy only wealthier households that produce opium poppy for extra income.⁴² Indeed, experience highlights that it has typically been the wealthier members of communities that have benefited disproportionately from alternative development projects.⁴³ Alternative development interventions need to recognise that the socio-economic and political structures that create and maintain poverty in Afghanistan have also encouraged the cultivation of opium poppy. A more pro-poor approach to alternative development is needed if both conventional development objectives and drug control objectives are to be achieved.

¹ During this period the author was employed as the Drug Monitoring & Evaluation Specialist under UNDCP's Afghanistan Programme and produced the UNDCP Afghanistan Strategic Studies Series (Numbers 1-6), as well as the Annual Opium Poppy Survey.

² Ann E. Hurd and Stephen J. Masty, 'Opium poppy cultivation in Nangarhar Province Afghanistan', prepared for the United Nations Fund for Drug Abuse Control, 1991.

³ Figures derived from Agency Body for Afghan Relief, Helmand Initiative Socio-Economic Survey, April 2000.

⁴ See Food and Agricultural Office, Afghanistan Agricultural Strategy, (Rome, Food and Agricultural Office, 1997).

⁵ Frank Ellis, Rural livelihoods and Diversity in Developing Countries, (London, Oxford University Press, 2000), p. 69.

⁶ Fieldwork has revealed that whilst some households may reside and work on the same land over a number of years, sharecropping arrangements are typically negotiated on a seasonal or annual basis in Afghanistan. Although sharecropping is the preferred mechanism for accessing labour for the landlord, for those who require land, tenancy is the preferred arrangement.

⁷ Agency Body for Afghan Relief, Helmand Initiative Socio-Economic Survey, April 2000, p. 26.

⁸ Kusvie, V. '*Cultivation of the opium poppy and opium poppy production in Yugoslavia*' in the United Nations Bulletin on Narcotics, Vol. 1, 1960, No. 1, p. 5-13; Rensselaer Lee and Patrick Clawson, *Crop Substitution in the Andes*, (Washington, D.C., Agency for International Development, Centre for Development Information and Evaluation, 1993).

⁹ See Strategic Study#3: The Role of Opium as a Source of Informal Credit. (Islamabad, UNDCP, 1999).

¹⁰ Frydoon Shairzai, Ghulam Farouq and Richard Scott, Farm Economic Survey of the Helmand Valley, 1975. USAID/DP, Kabul, p.61.

¹¹ Moreover, experience has shown that in areas such as Helmand and Nangarhar, opium poppy is typically rotated on a given piece of land on a two to three year basis. In the first year opium poppy is cultivated during the winter months. The land is weeded intensively and fertilised, often paid for with the credit obtained on the future opium crop. In the summer, maize is cultivated on that land. The following winter wheat is cultivated. The wheat is given a cursory weeding and less fertiliser is applied. The land is then left fallow during the summer. The following year, the land is either left fallow during the winter, if the household has sufficient land, or opium poppy is once again cultivated. As such, within this cropping system, opium poppy cultivation should not be appraised simply on its economic return on an annual basis but its role in accessing resources for investing in the land over a longer-term basis.

¹² Frydoon Shairzai, Ghulam Farouq and Richard Scott, Farm Economic Survey of the Helmand Valley, 1975. USAID/DP, Kabul, p. 108

¹³ The average national yield in Afghanistan based on 1994 to 2000 data is 46 kg per hectare. In the southern region, the average price of opium at harvest time between 1998 and 2000 was the equivalent of US\$ 36.6 per kilogramme, compared to US\$ 66 per kilogramme in Shinwar district, in the eastern region. Given the highly centralised nature of the opium trade in the eastern region, located in Ghani Khel, Shinwar, the farmgate prices can differ significantly from one district to another.

¹⁴ For more details see UNDCP, Strategic Study #4: The Role of Opium in the Livelihood Strategies of Itinerant Harvesters Working in Helmand Province, Afghanistan, (Islamabad, UNDCP, June 1999).

¹⁵ Fieldwork for the socio-economic baseline survey for C28 conducted in 1998 indicated that the landowner incurred costs of US\$150 per hectare for fertiliser and US\$20 per hectare for farmpower.

¹⁶ Peter Sloane, Project Impact Socio-Economic Survey Report - Impact Assessment of Project C28-Alternative Development Pilot Project, November 2000, p.32.

¹⁷ Peter Sloane, Project Impact Socio-Economic Survey Report - Impact Assessment of Project C28-Alternative Development Pilot Project, November 2000, p.8; and Agency Body for Afghan Relief, Helmand Initiative Socio-Economic Survey, p. 8.

¹⁸ For instance, assuming that the sharecropping household only provided labour during the growing season and not during the harvest, a total of 150 person days, then shadow wage rate of more than US\$ 1.41 per day, a wage rate that is often exceeded even during the weeding season, would result in the sharecropping household making a loss from opium poppy cultivation.

¹⁹ *‘Though successful growing of opium poppy has been reported in such diverse areas as Europe, North and East Africa, Australia, Japan and South and North America, but the problem is of economics and not of successful cultivation alone since opium collection is a cumbrous, time consuming and labour intensive job. Therefore its cultivation shifted with time to thickly populated regions of near-east asia’.* Akhtar Hussain and J.R. Sharma, The Opium Poppy, (Lucknow, Central Institute of Medicinal and Aromatic Plants, 1983, p. 4). Also See David Wishart ‘The Opium Poppy: The Forbidden Crop’ in The Journal of Geography, January 1974, p. 14.

²⁰ Estimates for Yugoslavia, suggest ‘30 days of teamwork and 260 manpower days’ are required per hectare of opium poppy, remembering that in Yugoslavia capsules were only lanced once. As such, labour costs were found to constitute from 80 to 90% of the total production costs of opium poppy Kusvie, V. ‘Cultivation of the opium poppy and opium poppy production in Yugoslavia’ in the United Nations Bulletin on Narcotics, Vol. 1, 1960, No. 1, p. 5-13. In Turkey, research conducted in 1948 indicated that a ‘good labourer’ required 72 hours to harvest 1kg of opium whilst ‘women and children need two to three times as long to do the same amount of work’. As such, a yield of 30 kg per hectare would require the equivalent of between 180 to 540 person days, depending on the composition of the workforce. Recognising that in Turkey as in most source countries, opium poppy is predominantly grown using family labour, and particularly women, an estimate of 360 person days per hectare would not seem implausible. United Nations Technical Section ‘The cultivation of the opium poppy in Turkey’ in the United Nations Bulletin on Narcotics, Vol. 1, 1950, No. 1, p.13-25. In Afghanistan, opium poppy is reported to require 350 person days per hectare. Cited in Strategic Study#4: Access to Labour: The Role of Opium in the Livelihood Strategies of Itinerant Harvesters Working in Helmand Province, Afghanistan, (Islamabad, UNDCP, June 1999); Estimates with regard to the total amount of labour required per hectare of opium poppy in the highland areas of Laos and Thailand vary between 300 and 486 person days. Anthony Walker, ‘Opium: its production and use in Lahu Nyi (Red Lahu) village community; in The Highland Heritage: Collected Essays on Upland Northern Thailand. A. Walker ed (Singapore, Double Press, 1992); Douglas Miles, ‘The finger knife and Ockham’s razor: a problem in Asian culture, history and economic anthropology, American Ethnologist, vol. 6. 1979 p.223; and Joseph Westermeyer, Poppies Pipes and People: Opium and Its Use in Laos (Berkeley, University of California Press, 1982).

²¹ Staggered planting has proven to be a common phenomenon in Turkey, the Former Soviet Union and India. Staggered planting not only serves to spread the demand on labour but it also reduces the impact of crop damage. See G. Shuljgin, ‘Cultivation of the opium poppy and the oil poppy in the Soviet Union’ in the United Nations Bulletin on Narcotics, Vol. 1, 1969, No. 1, p. 1-8; United Nations Technical Section, ‘The cultivation of the opium poppy in Turkey’ in the United Nations Bulletin on Narcotics Vol. 1, 1950, No. 1, p. 13-25. ‘The planting of poppies is often staggered in several phases: Households in some villages split the planting of their crop in up to three phases, in order to distribute and thus minimise the risk of a bad harvest due to unfortunate weather during the short harvest time and to disperse the labour intensive work of weeding the fields and harvesting the opium.’ Michael Eprecht, ‘Opium Production and Consumption and its Place in the Socio-Economic Setting of the Akha People of North Western Laos: The Tears of the Poppy as a Burden for the Community?’ February 1998, p. 63.

²² UNDCP, ‘The varieties of opium poppy cultivated in selected districts in Afghanistan’ in the Afghanistan Annual opium Poppy Survey 1999, (Islamabad, UNDCP, 1999, p. 32- 49).

²³ ‘Women are actively involved in harvesting opium. Since there is no one at home to take care of the children, all of them even the newly born babies are carried to the poppy fields’. See A. Akcasu, ‘A survey of the factors preventing opium use by poppy growing peasants in Turkey’ in the United Nations Bulletin on Narcotics Vol. 1, 1976, No. 1, p. 13-17.

²⁴ ‘In India [opium poppy cultivation] is a family affair – every member of the family is involved.’ Akhtar Hussain and J.R. Sharma, The Opium Poppy, (Lucknow, Central Institute of Medicinal and Aromatic Plants, 1983, p. 6).

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- ²⁵ Women's role in opium poppy cultivation in Afghanistan is highly regionalised. In the northern and eastern regions women are actively involved in all stages of opium poppy cultivation. However, in the southern region where the more conservative Durrani Pashtoons reside and land ownership is more concentrated, women's participation in opium poppy cultivation tends to be restricted to the arduous task of preparing food and drink for itinerant opium poppy harvesters. For more details see UNDCP, Strategic Study#6: The Role of Women in Opium Poppy Cultivation in Afghanistan, (UNDCP, Islamabad, June 2000).
- ²⁶ UNDCP, Strategic Study #6: The Role of Women in Opium Poppy Cultivation in Afghanistan, (UNDCP, Islamabad, June 2000, p. 31).
- ²⁷ UNDCP, Strategic Study 5: An Analysis of the Process of Expansion of Opium Poppy to New Districts in Afghanistan, (Islamabad, UNDCP, November 1999, p. 21).
- ²⁸ *'During the three weeks fieldwork in five districts, only one female was seen working on the opium poppy harvest. This female was only eleven and was a member of a landless household that was sharecropping in Kajaki. According to her father she was assisting in the harvest of opium poppy so that the household could avoid hiring labour and, subsequently, increase the profit that they accrued from their crop.'* UNDCP, Strategic Study #4: Access to Labour: The Role of Opium in the Livelihood Strategies of Itinerant Harvesters Working in Helmand Province, Afghanistan, (Islamabad, UNDCP, June 1999, p.13).
- ²⁹ UNDCP, UNDCP, Strategic Study 5: An Analysis of the Process of Expansion of Opium Poppy to New Districts in Afghanistan, (Islamabad, UNDCP, November 1999, p. 19).
- ³⁰ UNDCP, UNDCP, Strategic Study 5: An Analysis of the Process of Expansion of Opium Poppy to New Districts in Afghanistan, (Islamabad, UNDCP, November 1999, p. 25).
- ³¹ See Michael Smith et al, Why People Grow Drugs: Narcotics and Development in the Third World, (London, Panos, 1989).
- ³² *'Irrigation offers an opening up for alternative crops in the winter season which offer higher income than poppy'. See UNDCP, Mid Term Evaluation DDDP Project AD/PAK/94/840, 1997, p.144. 'Poppy provides a lot of employment with a labour requirement of 270 person days per hectare at a return of 308 Rupees per person day, whereas onion requires 200 with a return of 440 Rupees per person day.'* See DFID, Aide Memoire: Fact Finding Mission- Sustainable Livelihoods Programme, Dir District, NWFP Pakistan, November 2000. Unpublished Paper -Economic Appraisal, p.2.
- ³³ *'However, when grown on irrigated land, garlic provides more than comparable revenues, substituting satisfactorily for both opium poppy and cannabis, whilst onions outperform cannabis and wheat provides about the same income.'* See UNDCP, Evaluation of the UNDP/UNDCP Programme in Baalbeck-EI Hermel in Lebanon, May 2000, p. 41.
- ³⁴ See Kanok Rerkasem, Consultation Report on Baseline Socio-economic Survey for UNDCP. Highland Integrated Rural Development Project LAO/89/550, 1991, p. 17.
- ³⁵ See Mumtaz, Alternative Cropping Systems for the Development of Agriculture in Qandahar. Report for UNDCP Afghanistan Programme, Islamabad, 1997; and K. Dawlaty and Omar Anwarzay, 'War a Booster of Poppy Cultivation in Afghanistan: Background and Areas for Research'. An Unpublished Report prepared for The Swedish Committee for Afghanistan, Peshawar, Pakistan, 1993; Nicole Potulski, Alternative Crops for Drug Growing Areas in Asia (Pakistan, Afghanistan, Nepal, Thailand). A literature review commissioned by the ODA from the International Centre for Underutilised Crops, Wye College, University of London, 1991.
- ³⁶ For instance, in 1994, 1997 and 1999, wheat generated higher returns than opium poppy in a number of districts in the southern region of Afghanistan. See UNDCP, Afghanistan: Assessment Strategy and Programming Mission to Afghanistan, May-July 1995; and UNDCP, Afghanistan Annual Opium Poppy Survey 1997, (Islamabad, UNDCP, p. 11).
- ³⁷ *'Many farmers could double or triple their income from crop and/or cattle sales over a short period of time (3 – 6 years)..... The impact of newly introduced cash crops such as green beans, taro,*

carrots and ginger has in several cases raised annual family cash income from as low as US\$ 120 in 1990 to more than US\$ 1,000 in 1998. Hagan Dirksen, 'Considerations and Lesson from Implementing the Thai-German Highland Development Program (TG-HDP) in Northern Thailand.' Unpublished Paper presented at the Regional Seminar on Alternative Development for Illicit Crop Eradication: Policies, Strategies and Action, 16-19 July 2001, Taunggyi, Myanmar, p. 9.

³⁸ UNDP World Development: Special Report, Vol. 4, No. 3 (1991)

³⁹ *'Off-farm income typically refers to wage or exchange labour on other farms (i.e. within agriculture) ... whilst non-farm income refers to non-agricultural income sources'* See Ellis 'Livelihood Diversification and Sustainable Livelihoods' in Sustainable Rural Livelihoods: What Contribution can we make?, (London, DFID, 1989).

⁴⁰ 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. UNDCP, Afghanistan Annual Opium Poppy Survey 1998, (Islamabad, UNDCP, 1998, p. 32).

⁴¹ 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.'* Michael Eprecht, 'Opium Production and Consumption and its Place in the Socio-Economic Setting of the Akha People of North Western Laos: The Tears of the Poppy as a Burden for the Community?' February 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.'* Hagan Dirksen, 'Considerations and Lesson from Implementing the Thai-German Highland Development Program (TG-HDP) in Northern Thailand.' Unpublished Paper presented at the Regional Seminar on Alternative Development for Illicit Crop Eradication: Policies, Strategies and Action, 16-19 July 2001, Taunggyi, Myanmar, p. 6.

⁴² Resolutions Adopted by the United Nations General Assembly Special Session on the World Drug Problem, New York 8-10 June 1998. Measures to Enhance International Cooperation to Counter the World Drug Problem, (E) Action Plan on International Cooperation on the Eradication of Illicit Drug Crops and Alternative Development, para. 31.

⁴³ For instance, a fact finding mission to Dir District Development Project, Pakistan in December 2000 reported that *'...despite the important role that opium poppy plays in providing access to credit and off-farm income opportunities to the poor, the priorities of both phases of DDDP have been with improving on-farm income opportunities. Indeed, there is no provision for credit in the DDDP project and less than 1% of the total budget was allocated to vocational training for the poor. As such, it would seem that as with the cultivation of opium poppy, poorer households have derived fewer benefits from the interventions of DDDP and have in fact been further marginalised by the elimination of opium poppy.'* See DFID, Aide Memoire: Fact Finding Mission- Sustainable Livelihoods Programme, Dir District, NWFP Pakistan, November 2000. Unpublished Paper. Also see Rita Gebert, An Assessment of Social Impact and Community Development, October 2000, p. 5; and Peter Sloane, Project Impact Socio-Economic Survey Report - Impact Assessment of Project C28- Alternative Development Pilot Project, November 2000, p.17.