AFGHANISTAN
Opium Survey 2003
EXECUTIVE SUMMARY

October 2003
Abbreviations

ICMP  UNODC global Illicit Crop Monitoring Programme
UNODC  United Nations Office on Drugs and Crime
GPS  Global Positioning System
CND  Afghanistan’s Counter Narcotics Directorate

Acknowledgements

The following individuals contributed to the implementation of the 2003 opium survey in Afghanistan, and to the preparation of the present report:

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This report, and other ICMP survey reports can be downloaded from:
The United Nations Office on Drugs and Crime has conducted annual opium poppy surveys in Afghanistan since 1994. The present Survey, which is no doubt evidence that things are changing in Afghanistan, is the first one done jointly with the national government.

The Survey shows that in 2003 Afghanistan again produced three-quarters of the world’s illicit opium. While this is disheartening, the preconditions for change are slowly being put in place. The recently adopted National Drug Control Strategy, for example, foresees rural development and law enforcement initiatives. Similarly, the new drug control law aims to counter opium trafficking and money laundering, reduce abuse and enhance international cooperation. Important progress, albeit slow, is also being made in areas of governance with an indirect bearing on the drug issue -- for example, the constitutional process and the related establishment of a modern administration.

The experience of several countries in Asia and Latin America demonstrates that the dismantling of a drug economy can be a long and complex process, lasting a generation, or even longer. A generation is a long time. This prompts the question -- can Afghanistan, with its democratisation threatened by old terrorists and new drug barons; neighbouring countries, affected by drug addiction, an HIV/AIDS pandemic, corruption and violence; and the international community, with its 10 million people addicted to Afghan opiates -- afford to wait that long?

This Survey shows that in 2003 the income of Afghan opium farmers and traffickers was about $2.3 billion, a sum equivalent to half the legitimate GDP of the country. Out of this drug chest, some provincial administrators and military commanders take a considerable share: the more they get used to this, the less likely it becomes that they will respect the law, be loyal to Kabul and support the legal economy. Terrorists take a cut as well: the longer this happens, the greater the threat to security within the country and on its borders.

There is a palpable risk that Afghanistan will again turn into a failed state, this time in the hands of drug cartels and narco-terrorists -- a risk referred to more than once by President Karzai, whom I salute for his courage and dedication. The country is at a crossroads: either (i) energetic interdiction measures are taken now, and supported by the international community; or (ii) the drug cancer in Afghanistan will keep spreading and metastasise into corruption, violence and terrorism -- within and beyond the country’s borders. In these circumstances, I welcome the recent Security Council decision to extend the mandate of ISAF.

The present Survey shows that in the drug business of Afghanistan the risk/reward balance is skewed: enormous sums of money are being made with impunity. This must be redressed, by increasing the risk of illegality. Energetic measures are needed to repress the traffickers, dismantle the heroin labs, and destroy the terrorists’ and warlords’ stake in the opium economy -- thus enabling the legitimate economy and the constitutional process to move forward. Neighbouring countries face the task of supporting these actions with measures of their own.

Yet, law enforcement alone cannot suffice. The United Nations Office on Drugs and Crime calls on the international community for adequate resources to help rebuild the economy of Afghanistan where far too many people still have no food security, no electricity, no running water, no roads, no schools and no health services.

Antonio Maria Costa
Executive Director
United Nations Office on Drugs and Crime
EXECUTIVE SUMMARY

Fact sheet

Opium poppy cultivation

- 80,000 ha in 2003 against 74,000 ha in 2002 (8% increase)
- Cultivation spreading to new areas: 28 provinces affected in 2003 (out of 32)
- Cultivation less intensive in some of the traditional areas (49% decline in Hilmand, 23% decline in Kandahar, but 55% increase in Badakshan from 2002 to 2003)
- Opium poppy covers 1% of total arable land and less than 3% of irrigated arable land

Opium production

- 3,600 mt in 2003 against 3,400 mt in 2002 (6% increase)

Opium farmers

- Number of opium farmers increasing (264,000 opium-growing families in 2003)
- Total of 1.7 million people (7% of Afghanistan population of 24 million)

Income

- Prices declined by 19% from US$ 350 per kg in 2002 to US$ 283 per kg in 2003
- Average income per opium-growing family US$ 3,900 in 2003
- Total farm-gate income from opium US$ 1.02 billion (US$ 1.2 billion in 2002)
- 2003 farmers’ opium income equivalent to 23% of 2002 GDP (estimated at US$ 4.4 billion)
- Average opium income per capita for opium-growing population: US$ 594 (three times larger than estimated 2002 GDP per capita)
- Estimated opium traffickers income in Afghanistan: at least US$ 1.3 billion in 2003
- Farmers + traffickers opium income in Afghanistan equivalent to more than 50% of estimated GDP
- Estimated annual turn-over of international trade in Afghan opiates: US$ 30 billion (more than half a million people involved)

Survey Methodology

- Sampling approach combining analysis of satellite images and extensive field work
- Data collected on cultivation, production, prices and number of farmers.
A. Background

During the second half of the 1990s Afghanistan became the world’s largest source of illicit opium and its derivative, heroin. In recent years, the country has produced more than 3,000 metric tons of illicit opium annually (over 2/3 of the world’s production). About 10 million people (2/3 of opiate abusers in the world) now consume opiates of Afghan origin. Among the most affected societies are Afghanistan’s neighbouring countries, Russia and Europe. Heroin injecting is also fuelling the HIV/AIDS epidemic in Central Asia, Russia and Eastern Europe. Along the trafficking chain from Afghanistan to Europe, it is estimated that more than half a million people are involved in the international trade of illicit Afghan opiates, which generates a total turn-over of about US$ 30 billion annually.

In 2001, following the ban imposed by the former Taliban regime, an abrupt decline of illicit opium poppy cultivation interrupted a two-decade increase. It also stimulated a subsequent 10-fold increase in opium prices. After the fall of that regime, cultivation resumed at a high level in 2002 and started to spread outside the traditional areas. Although a new ban was issued in January 2002, poor compliance with the law has so far hindered efforts by the new government to curb opium cultivation – an activity further stimulated by its high revenue.

The United Nations Office on Drugs and Crime has conducted the Afghanistan Opium Survey annually since 1994. This year, the Survey was done jointly with the Government of Afghanistan with financial contributions from the United Kingdom, Finland and Italy.

AFGHANISTAN: OPIUM POPPY CULTIVATION FROM 1986 TO 2003

![Graph showing opium poppy cultivation from 1986 to 2003](image-url)
B. Findings

(1) Opium poppy cultivation (hectares) is spreading

In 2003 the total area under opium poppy cultivation in Afghanistan increased by 8%, from 74,000 hectares in 2002 to 80,000 hectares this year. The 2003 harvest area is comparable with the one recorded in 2000 (82,000 ha), prior to the steep decline of 2001. The current level ranks third in the country's recent history.

Afghanistan Opium Poppy Cultivation from 1994 to 2003 (ha, rounded)

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</thead>
<tbody>
<tr>
<td></td>
<td>71,000</td>
<td>54,000</td>
<td>57,000</td>
<td>58,000</td>
<td>64,000</td>
<td>91,000</td>
<td>82,000</td>
<td>8,000</td>
<td>74,000</td>
<td>80,000</td>
</tr>
</tbody>
</table>

It is estimated that the area under opium poppy cultivation covered about 1% of the total arable land and slightly less than 3% of the irrigated arable land in Afghanistan in 2003. Those percentages are of course significantly higher in the opium growing areas (on average 10% of the arable land in opium growing districts, and up to more than 50% in particular cases).

(2) Opium production (metric tons) is also increasing

Potential opium production amounted to 3,600 tons in 2003, an increase of 6% compared to last year’s 3,400 tons. The 2003 harvest is the second highest recorded so far in Afghanistan.

Afghanistan opium production from 1994 to 2003 (in metric tons)

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,416</td>
<td>2,335</td>
<td>2,248</td>
<td>2,804</td>
<td>2,693</td>
<td>4,565</td>
<td>3,276</td>
<td>185</td>
<td>3,400</td>
<td>3,600</td>
</tr>
</tbody>
</table>

(3) Geographical spread has reached 28 provinces (out of 32)

There has been a clear and accelerating extension of opium cultivation to previously unaffected, or marginally affected areas. The number of provinces where opium poppy cultivation was reported has steadily increased: from 18 provinces in 1999, to 23 in 2000, up to 24 in 2002 and to a staggering 28 provinces in 2003 (out of a total of 32). Almost 90% of the provinces are now affected, with an increase of over 50% in 4 years. In those 28 provinces, opium poppy was cultivated for the first time this year in 31 districts. Taken together, these newly cultivated districts accounted for about 8,000 ha, or 10% of the country’s total harvest area in 2003.

However, important decreases also took place in selected provinces where the severity of the earlier opium problem was reduced, especially in the southern part of the country. A large decline was recorded in the provinces of Hilmand (-49%) and Kandahar (-23%), caused by government prohibition/eradication measures. These declines were only partly offset by a 40% increase in Uruzgan, which is also in the South. In the East, Nangharar, now the first ranking province, remained relatively stable (-4%). In the North East, close to the border with Tajikistan, Badakhshan recorded yet another major increase (+55%).

As a result, while the first five ranking provinces accounted for 95% of opium poppy cultivation in 2002, their share was reduced to 72% in 2003. The province of Ghor (central

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1 The results had a margin of error of +/- 7% in 2002, and +/- 10% in 2003 (the margin of error may vary from year to year, depending on sample size, classification accuracy, etc...).
Afghanistan, where no cultivation was reported prior to 2002, has now displaced Kandahar as the fifth largest cultivating province.

### Largest opium poppy cultivating provinces in 2003

<table>
<thead>
<tr>
<th>Provinces</th>
<th>2002</th>
<th>2003</th>
<th>one year change</th>
<th>% of total in 2003</th>
<th>Cumulative % in 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nangarhar</td>
<td>19,780</td>
<td>18,904</td>
<td>-4%</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>Hilmand</td>
<td>29,950</td>
<td>15,371</td>
<td>-49%</td>
<td>19%</td>
<td>43%</td>
</tr>
<tr>
<td>Badakhshan</td>
<td>8,250</td>
<td>12,756</td>
<td>+55%</td>
<td>16%</td>
<td>58%</td>
</tr>
<tr>
<td>Uruzgan</td>
<td>5,100</td>
<td>7,143</td>
<td>+40%</td>
<td>9%</td>
<td>67%</td>
</tr>
<tr>
<td>Ghor</td>
<td>2,200</td>
<td>3,782</td>
<td>+72%</td>
<td>5%</td>
<td>72%</td>
</tr>
<tr>
<td>Kandahar</td>
<td>3,970</td>
<td>3,055</td>
<td>-23%</td>
<td>4%</td>
<td>76%</td>
</tr>
<tr>
<td>Rest of the country</td>
<td>4,850</td>
<td>19,471</td>
<td>+301%</td>
<td>24%</td>
<td>100%</td>
</tr>
<tr>
<td>Rounded Total</td>
<td>74,000</td>
<td>80,000</td>
<td>+8%</td>
<td></td>
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</tr>
</tbody>
</table>

(3) **Opium prices are declining, though still high**

Although about ten times higher than during the 1990s, when it was around US$ 30 per kg, the average price of fresh opium recorded in 2003 (US$ 283 per kg) decreased by 19% from last year’s price of US$ 350. The decline of 2003 opium prices in Afghanistan, larger than the production increase, has resulted in a reduction in the related income to farmers (-15%, as shown below).

(4) **264,000 families now grow opium poppy**

In line with the extension of opium poppy cultivation to new areas, the number of opium farmers appears to be growing. For the first time the United Nations Office on Drugs and Crime has collected data to estimate the number of families producing opium in Afghanistan. The result amounts to 264,000 families, cultivating an average of 0.3 hectare of opium poppy per family (this is slightly more than one *jerib*, the local unit of land measurement). Considering that the average family consists of 6-7 people (about 5 children per family), it can thus be estimated that opium poppy cultivation plays a direct role in the livelihood of about 1.7 million rural people, or about 7% of the total population of Afghanistan (about 24 million in 2003).

The people engaged in trading opium at bazaars, or in refining it into heroin in clandestine laboratories, and running the trafficking up to the country’s external borders are not included in this estimate.

(5) **Country’s opium income is down 15%**

Despite the higher output, the aggregate value of this year’s Afghan opium harvest (at farm-gate prices) declined to US$ 1.02 billion, compared to US$ 1.2 billion in 2002 (-15%). Almost 80% of this farmers’ income was generated in the traditional opium producing areas of the Eastern and Southern regions.

Afghanistan’s GDP in 2002 was estimated at US$ 4.4 billion by the Asian Development Bank. Despite the increase in production, lower opium prices have translated into a lower income from opium than last year, which is now equivalent to 23 % of the 2002 GDP (against 27 % for last year’s production\(^2\)).

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\(^2\) In UNODC study *The Opium Economy in Afghanistan*, last year’s production was cited as 19% of the 2002 GDP estimate. Updated GDP estimates have since become available and were used in this report. The previous GDP estimate would have resulted in the following percentages: 19% for 2002, and 16% for 2003.
These estimates do not include the profits subsequently made by traffickers who collect the fresh opium from farms and local bazaars, partly process it into heroin (a growing trend), and then transfer the lot to border areas for export. In the UNODC study *The Opium Economy in Afghanistan*, the yearly income accruing to traffickers in Afghanistan was estimated at US$ 1.3 billion. Opium and heroin prices in the neighbouring countries have not declined in 2003. The income accruing to traffickers in Afghanistan this year should thus be at least as high as in 2002. If this amount was added to the farmers’ income, the total potential income produced by opium-related activities (farming + trafficking) in Afghanistan this year would be equivalent to more than half of the country’s GDP in 2002. Obviously these estimates do not take into account any possible multiplier effect of the narco-income.

(6) **Per capita income from opium is several times GDP per capita**

The 2003 harvest represents, on average, a potential income of about US$ 3,900 per opium-growing family. This average masks regional disparities, ranging from US$ 1,700 in the North to US$ 6,800 in the South. The potential opium income per capita for the 1.7 million people composing those farmers’ families ranges from US$ 259 in the North to more than US$ 1,000 in the South, with an average of US$ 594. In comparison, on the basis of a population estimated at 24 million and a GDP estimated at US$ 4.4 billion, Afghanistan had a GDP per capita of about US$ 184 in 2002. This number is less than one-third the average income per capita earned by farmers’ families from opium in 2003.

C. **Methodology**

This Survey’s methodology was based on a sampling approach, which combined the analysis of satellite images and extensive field visits. The Rapid Assessment Survey conducted in February, prior to the launch of the main annual Opium Survey, helped to identify target districts reported to be growing opium poppy for the first time in 2003. These districts were then included in the 2003 Opium Survey.

Satellite images, in combination with ground information, offer a reliable and objective way of estimating opium poppy cultivation, independent of field security conditions. Medium-resolution Landsat 7 images were used to derive the extent of agricultural land in those areas in 2003. More than 80 high-resolution IKONOS satellite images were used, together with hundreds of field coordinates collected with GPS on the ground, over a sample of 89,200 ha of agricultural land (or 15% of the total agricultural land in these areas) to identify opium poppy fields.

At the same time, a sample of 1,800 villages was also surveyed throughout the country to collect opium yield and socio-economic data. In 973 villages of this sample, data were also collected on the extent of opium poppy cultivation for districts not covered by satellite images. In total, 61 UNODC field surveyors visited 179 districts of 28 provinces. Their work was verified by international supervisors who visited the fields and participated in data collection and validation.

Data on yield were collected for both irrigated and rain-fed poppy cultivation through interviews with 3,714 farmers. Between April and August 2003, the surveyors obtained data on the price of fresh opium from 2,769 farmers and data on the price of dry opium from 3,612 farmers. In addition, since November 2002, prices for fresh and dry opium have been collected every other week in the provinces of Nangarhar, Hilmand and Kandahar. The sample of persons interviewed was much smaller than during the April-August survey, but provided a more continuous monitoring of opium market conditions in Afghanistan.

Eradication activities were conducted by the Afghan authorities in a number of provinces. The impact was particularly noticeable in the provinces of Hilmand and Kandahar.
The Afghan authorities reported a total of 21,430 ha eradicated. The present survey neither monitored, nor assessed the effectiveness of the eradication campaign, but the timing of the survey and the methodology employed ensure that the results presented in this report are post-eradication and reflect the net amount of opium poppy which was harvestable.

Conclusion

The results of the 2003 survey confirm that opium poppy cultivation and production continued to increase, though moderately, in Afghanistan. Their extension to previously unaffected, or marginally affected, areas is worrying. It can partly be explained by the persistence of high opium prices, which stimulate an activity now involving 264,000 rural families (representing 1.7 million people, or 7% of Afghanistan’s population). These families derive a potential income from opium that amounts to about US$ 1.02 billion in 2003. Although it is down 15% from last year, that income is still equivalent to almost one fifth of the country’s legitimate GDP. Taking into account the additional profits made by traffickers, the Afghan authorities must grapple, in their efforts to rebuild the country, with an illicit opium economy that generates revenues about half the size of the legitimate GDP. Even if forecasts of rapid growth of the legal economy materialize, the huge revenues generated by the illicit opium economy will continue to compromise governance of the country.

The Afghan Government has developed a drug control strategy to tackle the formidable task of dismantling the drug economy. Achieving that objective requires the implementation, under adverse conditions, of a complex and well balanced set of measures. They must increase the risk of illegality, unknot the intricate web of warlords and traffickers’ relations and remove the pressure they exert on local communities, while creating a socioeconomic environment that offers a way of life to rural households that reconciles the need to secure bare necessities with a sense of civic responsibility. Reaching these goals demands an effort on the part of Afghan society that is unlikely to be sustained unless the international community demonstrates an equal determination to support it.
Afghanistan Opium Poppy Cultivation by province 2002-2003

Source: CND - UNODC Afghanistan Opium Survey 2003

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The administrative boundaries have been downloaded from Afghanistan Information Management Service, United Nations (www.aims.org.af).
Afghanistan Opium Poppy Cultivation Change (%) since 2002

- Main cities
- International boundaries
- Province boundaries
- District boundaries

District Cultivation Change (%):
- Very strong increase (above 100%)
- Strong increase (51%-100%)
- Increase (1%-50%)
- No change
- Decrease (-1% - 50%)
- Strong decrease (-51% - -100%)
- No comparable data

Source: CND - UNODC Afghanistan Opium Survey 2003
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The administrative boundaries have been downloaded from Afghanistan Information Management Service, United Nations (www.aims.org.af).
Density of opium poppy cultivation in the Southern Region in 2003
(Hilmand, Kandahar and Zabul)

Source: CND - UNODC Afghanistan Opium Survey 2003
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The administrative boundaries have been downloaded from Afghanistan Information Management Service, United Nations (www.aims.org.af).
Density of opium poppy cultivation in the Eastern Region in 2003
(Nangarhar, Laghman and Kunar)

Source: CND - UNODC Afghanistan Opium Survey 2003
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The administrative boundaries have been downloaded from Afghanistan Information Management Service, United Nations (www.aims.org.af).
Density of opium poppy cultivation in Badakshan (North Eastern Region) in 2003

Source: CND - UNODC Afghanistan Opium Survey 2003
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The administrative boundaries have been downloaded from Afghanistan Information Management Service, United Nations (www.aims.org.af).
Afghanistan Opium Production by province 2002 - 2003

Source: CND - UNODC Afghanistan Opium Survey 2003
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The administrative boundaries have been downloaded from Afghanistan Information Management Service, United Nations (www.aims.org.af).
Afghanistan: Number of families growing opium poppy by region in 2003

- Southern Region: 72,500 families
- Central Region: 34,400 families
- North Western Region: 21,400 families
- North Eastern Region: 56,000 families
- Eastern Region: 79,700 families

Legend:
- Main Cities
- 5,000 families (32,500 people)
- International boundaries
- (NS) Not Surveyed

Source: CND - UNODC Afghanistan Opium Survey 2003
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The administrative boundaries have been downloaded from Afghanistan Information Management Service, United Nations (www.aims.org.af).
Average prices of fresh and dry opium in Afghanistan
(based on prices collected in Nangarhar and Kandahar provinces, March 1997 - September 2003)

Average dry (traders)  Average fresh (farmers)
Estimated farmgate value of opium production in Afghanistan 1994-2003

Afghan income from the opium economy in 2003:
US$ 2.3 billion
(equivalent to 52% of 2002 GDP)

Afghan traffickers: $1.3 bn 56%
Afghan farmers: $1.02 bn 44%