



## Recent Macroeconomic Developments

**Ron van Rooden and Louis Dicks-Mireaux**

**A**fghanistan is a landlocked, mountainous, and arid country, with considerable ethnic diversity. Its population was estimated in 2003 at about 22 million within its borders, and up to 25 million if all refugees were to return. Afghanistan's prewar economy was mainly based on agriculture and animal husbandry; some light industry; and some natural resources, mainly gas and minerals. The country was largely self-sufficient in food and was even an exporter of agricultural products. Agriculture was largely concentrated in narrow river valleys and plains where irrigation water from snowmelt is available. Afghanistan experienced a modest degree of economic development until the late 1970s, when the country was still at peace. Modernization was largely concentrated in major cities, and government services had limited reach in rural areas.

By the end of 2001, however, Afghanistan was a country ravaged by war and natural disasters. More than two decades of conflict, as well as droughts and earthquakes, had resulted in widespread destruction of Afghanistan's social and economic structures, and human suffering. Most of the country's infrastructure had been severely damaged and traditional irrigation systems had greatly suffered from the destruction and lack of maintenance. Agricultural production had collapsed, livestock herds had been depleted, and industries had ceased functioning. Most skilled professionals had fled the country. The breakdown of the state and civil society and the erosion of institutions, both modern and traditional, were similarly dramatic. Government services, including health care and education, had essentially

stopped functioning, which particularly affected women and resulted in a dramatic decline in social indicators (see Box 2.1). In 1996, Afghanistan ranked 169 out of 174 countries in the UN's Human Development Index, and conditions deteriorated further in the following years. The health situation was grim. Infant and under-five mortality was estimated by UN agencies to be among the highest in the world in 2001, and malnutrition affected over 50 percent of children under age five. The average life expectancy was little more than 40 years.

A new opportunity for the peaceful development of Afghanistan emerged with the fall of the Taliban regime in late 2001 and the political agreement reached between the various Afghan factions in Bonn in December 2001. This chapter describes macroeconomic developments since then, as well as the main features of the country's external sector. The chapter opens with an overview of the large amounts of foreign assistance Afghanistan has received so far, and without which the country would not be where it is today. But it also puts this assistance in a broader perspective, comparing it to the levels of assistance received by other recent post-conflict cases.

### **Comparison of Donor Assistance**

Afghanistan's reconstruction would not be possible without strong support, including financial assistance, from the international community. At a donor meeting in November 2001, the World Bank,

**Box 2.1. Social Indicators**

Population (millions; 2002)	21.8
Life expectancy at birth (2001)	42.8
Infant mortality per 1,000 live births (2001)	165
Under-five mortality per 1,000 live births (2001)	257
Children underweight (percent under age five; 1995–2001)	48
Undernourished people (percent of population; 1998–2000)	70
Adult literacy (percent age 15 and above; 2001)	36
Male	51
Female	21
Primary school enrollment ratio, gross (in percent; 1995–99)	
Male	53
Female	5
Population without sustainable access to an improved water source (in percent; 2000)	87

Sources: Central Statistics Office (CSO) of Afghanistan; UNDP, *Human Development Indicators* (2003); UNICEF, *The State of the World's Children* (2003); and World Bank, *World Development Indicators* (2003).

the Asian Development Bank, and the United Nations Development Program were asked to produce a preliminary needs assessment for Afghanistan's reconstruction. These agencies presented their findings at the International Conference on Reconstruction Assistance to Afghanistan held in Tokyo in January 2002. According to this assessment, \$14.6 billion would be needed over a period of 10 years in external assistance to support Afghanistan's economic and social recovery, excluding humanitarian assistance, with requirements for the first year estimated at \$1.7 billion and, for the first two and a half years, at \$4.9 billion. This assessment was well received by donors and the Tokyo conference generated pledges totaling \$4.5 billion for the first five years, but with most of these covering the first two and a half years and \$1.8 billion in pledges for the first year. These amounts also included humanitarian assistance, however. Some additional pledges were made following the Tokyo conference: for the first 15 months (covering 2002 and the first quarter of 2003), the grants totaled \$2.1 billion. During that

period, virtually all of these pledges were committed and over \$1.8 billion in grants were actually disbursed, plus \$0.1 billion was disbursed in loans.

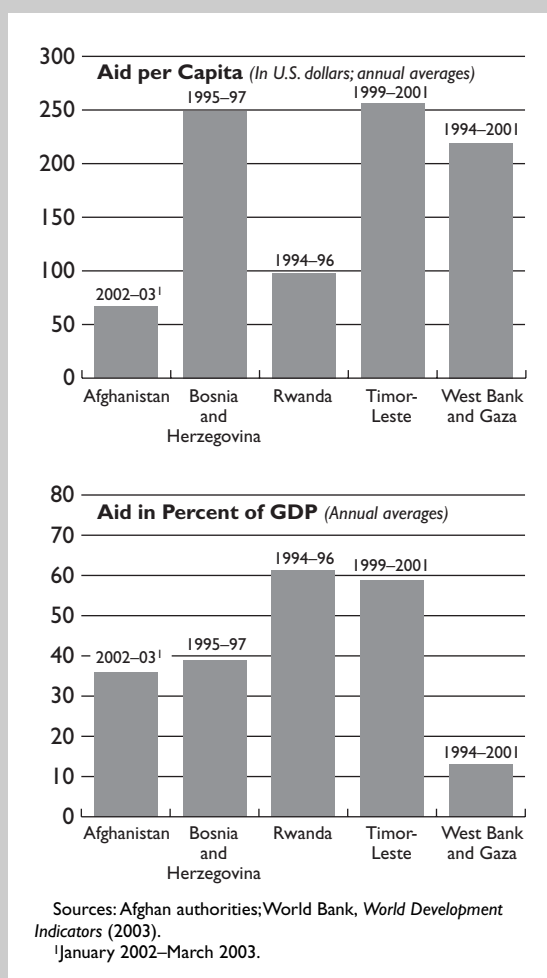
At a first glance, the size of disbursements during this period appears to have been well in line with the pledges made by donors and with the preliminary needs assessment. However, the needs assessment excluded humanitarian assistance, while the bulk of the disbursements went to meet humanitarian needs. Aid flows targeted toward reconstruction were only just beginning to gear up. To some extent, this pattern mirrored other recent postconflict cases and fitted reasonably well with the country's early needs and capacity.<sup>1</sup> In a typical postconflict case, donors first strive to address the immediate humanitarian emergency, providing shelter to displaced people and ensuring minimum levels of consumption to those unable to fend for themselves. This is followed by reconstruction aid, as donors aim to repair or rebuild the destroyed infrastructure and institutions and restore the provision of basic public services, such as security, health care, and education, which were disrupted by the conflict. The reconstruction aid typically takes longer to materialize because it needs more preparation (e.g., feasibility studies, design, more complex procurement procedures, and so on) than humanitarian aid. Experience shows that early attention to critical elements of infrastructure—primary roads and telecommunication—and capacity building within the government is crucial to get the reconstruction process going. Over time, as the reconstruction process gets under way and institutions are restored, a country's capacity to absorb reconstruction aid will quickly increase. Donors and country authorities need to find the right balance between speed and capacity to effectively absorb aid. But a country must also beware of donor fatigue. As has been observed in other postconflict cases, donor interest often declines sharply after a few years, just when a country's capacity to absorb reconstruction aid actually starts to increase significantly.

The level of foreign assistance that Afghanistan received through March 2003 appears to have been on the low side compared with other recent postconflict cases, particularly when looking at the level of aid per capita (Figure 2.1).<sup>2</sup> Using a population

<sup>1</sup>See Demekas, Kosma, and McHugh (2002).

<sup>2</sup>This was first pointed out by CARE International (2002). See also Dobbins and others (2003).

**Figure 2.1. Foreign Assistance to Postconflict Countries**



estimate of 22 million, the total amount of assistance that Afghanistan received over the period January 2002–March 2003 translated into \$67 per capita per year. This is far less than the assistance received by Bosnia and Herzegovina, which was on average \$249 per capita per year in aid during 1995–97; Timor-Leste received \$256 per capita per year during 1999–01; and West Bank and Gaza received \$219 per capita per year during 1994–01.<sup>3</sup> Rwanda, with \$98 per capita per year in aid during

<sup>3</sup>Data from World Bank’s *World Development Indicators* (2003).

1994–96, received much less assistance than these other countries, but still more than Afghanistan did in 2002–03. One could argue that the price level in places such as Bosnia and Herzegovina or West Bank and Gaza is much higher, so that \$1 in assistance “buys” less relief there than in Afghanistan. But this is only partly true, because many items, including foreign staff, are procured internationally. Moreover, the cost of transportation and providing adequate security for relief and reconstruction efforts appear to be at least equally high, if not higher, in Afghanistan compared with other cases.

An alternative approach would be to compare levels of foreign assistance expressed in percent of estimated GDP, although such estimates are highly unreliable. However, according to available information, Afghanistan received close to 40 percent of GDP in aid in 2002–03, which is similar to the percentage of GDP aid received by Bosnia and Herzegovina during 1995–97, and much higher than the 13 percent that West Bank and Gaza received during 1994–2001. On the other hand, aid to Afghanistan expressed in percent of GDP remained below the ratio for Timor-Leste and Rwanda, both of which averaged about 60 percent per year during 1999–2001 and 1994–96, respectively. One could argue that Afghanistan’s GDP may be low, and thus the ratio of aid to GDP high, because the economy has been destroyed to a much greater extent than in the comparator countries. In Afghanistan, the fighting has been going on for over 20 years and has destroyed most of the country’s economic capital, both human and physical. Bringing the country back to a level where it can successfully sustain itself will therefore require high levels of assistance and most likely for a longer period of time.

All in all, it does appear that, through 2003, aid flows to Afghanistan were relatively low compared with other recent postconflict cases. While disbursements were high compared with pledged amounts, pledges were low by the standards of comparator countries. It was therefore appropriate that the attention of the international community should have been refocused on Afghanistan in the context of the Berlin donors’ conference in March 2004. Against a revised needs assessment of \$27.5 billion over seven years, donors came up with additional pledges of \$8.2 billion to cover the period 2004–07, of which \$4.4 billion was to be available for the fiscal year 2004/05.

## Output and Prices

### On the Road to Recovery

In 2002, the Afghan economy began the process of recovery.<sup>4</sup> This recovery was driven by the international community's assistance as well as by a sharp rebound in agriculture following the end of a three-year drought. A strong rebound was to be expected because the economy started from extremely depressed levels of activity. The Central Statistics Office (CSO) of Afghanistan estimated the country's economic growth in 2002/03 to have reached almost 30 percent, based on indicators of agricultural production (excluding poppy production), construction (import and production of cement), and electricity production (Table 2.1). According to the CSO, GDP rose to about \$4 billion in 2002/03, again excluding opium production. This GDP estimate was derived from the expenditure side, making crude assumptions regarding consumption, investment, and exports and imports. Using a population estimate of almost 22 million, this implied per capita GDP of some \$180–\$190, still one of the lowest in the world.<sup>5</sup>

The impact of international assistance was most visible in the services and construction sectors, which appear to have expanded rapidly (based on observations in cities, especially Kabul). The improvement in security and the large number of returning refugees also helped promote economic growth. Many destroyed buildings were rebuilt. Returning refugees tried to reclaim and rebuild their former homes. Retail trade expanded significantly, as did the number of taxicabs. Traffic jams, unheard of during the Taliban era because of scarcity of motor vehicles, became a commonplace rush hour phenomenon.

Notwithstanding the recovery in trade, services, and construction, Afghanistan remained primarily an agricultural economy. The agricultural sector is estimated to support over 75 percent of the population and to account for over 50 percent of GDP.<sup>6</sup> In

2002/03, agriculture benefited not only from increased rainfall but also from an increased availability and better quality of seeds, fertilizers, and other inputs. The Food and Agriculture Organization (FAO) and the World Food Program (WFP) estimated that total cereal production (mostly wheat) in 2002 was up by over 80 percent, reaching 3.6 million metric tons, compared with 2 million metric tons in the preceding year (Table 2.2). The production of fruits, vegetables, and livestock-related products, such as dairy items, meat, wool, and hides, also increased. However, it will take some time for the production of these items to reach preconflict levels. The total livestock population in Afghanistan was significantly depleted because of the many years of armed conflict and prolonged droughts, and the associated distress selling. Similarly, many orchards were cut down for firewood during harsh winters or destroyed during fighting.

Agriculture is estimated to have expanded again considerably in 2003/04. With continued snow and rainfall, cereal production increased by another 50 percent, reaching 5.4 million tons, the level Afghanistan needs to be self-sufficient.<sup>7</sup> The use of many land plots that had been left unused during the drought contributed to this increase. By putting virtually all of these plots back in use at the same time, cereal production reached an upper limit within the current production capacity. With the continued strong growth in agriculture, as well as in services and construction, overall GDP is estimated to have grown by about 16 percent in 2003/04.

Alleviating poverty in Afghanistan will require strong economic growth for many years to come. Donor inflows will continue to contribute to economic growth in the coming years, but sustained growth will require large amounts of investment. Further increases in agricultural production, for example, will require investment in repairing irrigation facilities. Apart from donor-funded projects such as road reconstruction, investment in Afghanistan during 2002 and 2003 has been mostly on a small scale: for example, rebuilding damaged stores, repairing farms, or importing taxicabs. Large-scale private investment has been limited to telecommunications and the reconstruction of hotels. A significant increase in large-

<sup>4</sup>It should be stressed that the analysis of economic developments in Afghanistan in this early period of recovery is very difficult because reliable data are mostly unavailable. Most data presented here are rough estimates at best and should be interpreted as such.

<sup>5</sup>For comparison: average per capita GDP in 2002 in Iran was \$1,610; Pakistan, \$446; Yemen, \$437; Sudan, \$418; Mauritania, \$355; and Ethiopia, \$89.

<sup>6</sup>This estimate is based on data for the early 1990s. The share of agriculture in Afghanistan's GDP may well be even larger, given the level of destruction of the country's infrastructure and industries.

<sup>7</sup>This does not automatically mean that Afghanistan would no longer require food assistance. While sufficient grains may be available, not every Afghan will have access to it. Many Afghans remain dependent on food aid.

TABLE 2.1

**Gross Domestic Product**

(In millions of U.S. dollars, unless indicated otherwise)

	Estimates		
	2001/02	2002/03	2003/04
Private consumption	...	4,344	4,875
Government consumption <sup>1</sup>	...	318	407
Investment	...	800	1,248
Exports of goods and nonfactor services	...	129	459
Imports of goods and nonfactor services	...	-1,542	-2,404
GDP (excluding opium)	2,463	4,048	4,585
Real GDP growth (in percent, excluding opium)	...	29	16
Per capita GDP (in U.S. dollars, excluding opium)	134	186	199
GDP in billions of (new) Afghans (excluding opium)	134	181	225
Value of opium exports	...	2,540	2,320
GDP (including opium)	...	6,588	6,905
Per capita GDP (in U.S. dollars, including opium)	...	302	300

Sources: Central Statistics Office of Afghanistan; United Nations Office on Drugs and Crime (UNODC); and IMF staff estimates.

<sup>1</sup>Government spending from the operating budget.

TABLE 2.2

**Selected Indicators of Economic Activity**

	1999	2000	2001	2002	2003
Cereal production, total (metric tons)	3,144,000	1,763,000	1,966,000	3,589,000	5,372,000
Percent change	-16.7	-43.9	11.5	82.6	49.7
Wheat	2,500,000	1,469,000	1,597,000	2,686,000	4,361,000
Rice	188,000	105,000	122,000	260,000	291,000
Barley	216,000	74,000	87,000	345,000	410,000
Maize	240,000	115,000	160,000	298,000	310,000
Opium production (metric tons)	4,565	3,276	185	3,400	3,600
Percent change	69.5	-28.2	-94.4	1,737.8	5.9
Electricity production (million kwh)	...	503	490	557	...
Percent change	...	...	-2.6	13.8	...
Transport of goods by road (1,000 tons)	...	1,887	3,688	5,015	...
Percent change	...	...	95.4	36.0	...
Taxicabs	...	16,991	19,209	33,507	...
Percent change	...	...	13.1	74.4	...

Sources: Food and Agriculture Organization (FAO); World Food Program (WFP); United Nations Office on Drugs and Crime (UNODC); and Central Statistics Office of Afghanistan.

scale private investment will require a functioning and fair legal system, and a functioning and efficient banking system. In this context, a new investment law was adopted and the authorities also established an investment agency. The Afghan Investment Support Agency was opened in August 2003. Modern financial sector legislation has been enacted that allows for the emergence of new commercial banks.

Against this background, investment sentiment improved strongly in 2003, as measured by the number of business licenses issued.

**Rebound in Opium Production**

Poppies have again become a major cash crop for Afghanistan. Although Afghanistan was not a tradi-

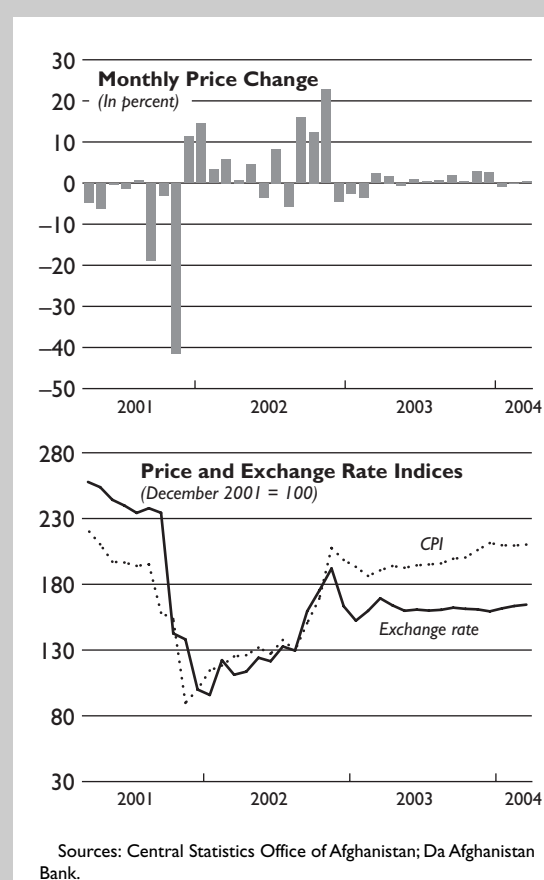
tional poppy-growing country, the increasing lawlessness in large parts of the country during the many years of conflict, the high profitability of opium production, plus the fact that poppies flourish in the Afghan climate resulted in the country becoming the largest producer of illicit opium in the world by the mid-1990s. In July 2000, the Taliban introduced a ban on poppy cultivation, which was brutally enforced. As a result, only very small quantities of opium—185 tons—were produced in 2001, mainly in the northern provinces, compared with over 3,000 tons in 2000. The new government that came to power in late 2001 also banned poppy cultivation, but the authorities' limited control over the provinces and favorable weather conditions, as well as rural poverty and lack of alternative livelihoods, led to a sharp recovery in poppy production in 2002, yielding almost 3,500 tons of opium or 75 percent of the record 1999 harvest. Opium production increased further in 2003.

The impact of the poppy and opium sector on the Afghan economy is large. The value of Afghanistan's opium exports, including derivatives like morphine and heroin, in 2002 was estimated by the United Nations Office on Drugs and Crime (UNODC) to have been about \$2.5 billion. This would make opium Afghanistan's largest source of export earnings. Accounting for opium exports in GDP estimates is complicated because estimates for private consumption and imports are likely to already reflect, to some extent, the proceeds from opium exports. Depending on these considerations, the share of opium in the Afghan economy could be up to about half. Estimates for GDP including opium could reach as high as \$6.5 billion. This high-end estimate would translate into a per capita GDP of \$300, but obviously this would not be spread evenly across the population. Appendix 2.1 contains a more detailed description of Afghanistan's poppy and opium production and trade.

### Toward Low Inflation

Consumer prices in Afghanistan are strongly influenced by exchange rate movements (Figure 2.2). Price data are limited, but the CSO has maintained a consumer price index covering 50 main items, mostly food, for Kabul. This index was expanded to cover over 200 items in 2003, and it is intended to expand the collection of price data beyond Kabul to include major provincial cities by late 2004. Domestic prices—and the exchange rate—fluctuated

**Figure 2.2. Price and Exchange Rate Developments**



widely in late 2001 and the first few months of 2002, reflecting the rapidly changing political and economic conditions and large uncertainties. But as the new government started to steadily implement its economic policies and more goods became available, inflation came down quickly. Monthly inflation averaged 3.5 percent in the first eight months of 2002. Uncertainty regarding the introduction of a new currency, however, caused the exchange rate to depreciate in the fall of 2002.<sup>8</sup> This resulted in a sharp spike in prices. Consumer prices rose by a cumulative 60 percent during September–November 2002 and the 12-month inflation rate reached almost 100 percent by end-2002. When the exchange

<sup>8</sup>A new currency was introduced on October 7, 2002, with 1 new Afghani replacing 1,000 old ones. The conversion process ended on January 2, 2003. For more details, see Chapter 5.



rate strengthened in late 2002, prices came down as well. With the successful completion of the currency conversion process in early January 2003 and a relatively tight monetary policy, as well as an increased supply of major food staples, prices remained broadly stable in the first eight months of 2003, with the average monthly inflation rate close to zero. Inflation picked up in late 2003, mainly driven by rising food prices because of Ramadan and unusually cold weather. Prices fell modestly in early 2004, with year-on-year inflation reaching 10 percent by the end of 2003/04.

### External Sector

#### Balance of Payments

Estimation of the balance of payments for Afghanistan has been hampered by lack of data. Estimates presented here are based on available customs data, partner country trade data, information supplied by international donors, and a trade survey conducted in 2000 by the UNDP and the World Bank.<sup>9</sup> Customs data are believed to cover only two-thirds of total imports and only a fraction of exports because of smuggling. As such, while the broad structure and trends of the estimates are likely to be correct, the magnitude of the flows is subject to greater uncertainty than usual for a low-income country. Moreover, the figures do not include an estimate of opium exports, which in 2002/03 were very large—in the order of \$2.5 billion (as discussed above and in Appendix 2.1) and equivalent to around half of GDP and roughly twice the value of estimated nonopium exports. When compared with Afghanistan's nonopium exports—that is, excluding re-exports—opium exports are the overwhelming source of export revenues generated with domestic resources. The balance of payments figures also exclude external flows related to the U.S. military operations and most of those related to the International Security Assistance Force (ISAF) activities for which there is no available information.

Overall, the balance of payments for 2002/03 is estimated to have shown a small surplus, after grants and donor assistance were taken into consideration (Table 2.3). The composition of the balance of payments and its evolution reflect in large part the donor-financed reconstruction effort and the revival

of private sector activity. A large current account deficit before grants is funded mainly by official transfers; official loan disbursements were small.

Exports are expected to grow rapidly over the medium term, although mostly in the form of re-exports. Afghanistan's own exports are a small fraction of its total exports; these include primarily agricultural products and have been boosted by the return of rains after several years of drought. Re-exports comprise transit trade and "unofficial" (smuggling) exports. Transit trade is expected to increase steadily with the reopening of normal trade relations with transiting countries and the signing of new transit and trade agreements. The bulk of re-exports are unofficial and are mainly to Pakistan; these exports are largely imported, officially and unofficially, via Iran. The demand in Pakistan for smuggled imports from Afghanistan exists because of the opportunity to avoid relatively high import tariffs and domestic sales taxes. Future growth in these unofficial re-exports is expected to slow as the reform of customs administration becomes effective. The rapid growth of imports reflects both the revival of private sector activity and the more liberal environment—areas of particularly rapid growth have been cars, televisions, and refrigerators. Unrecorded imports comprise duty-exempt donor imports, transit trade, and smuggled goods.

Service receipts and payments in 2002/03 and 2003/04 mostly reflected donor activities. Receipts comprised donor payments of local staff salaries as well as expatriate accommodation and restaurant expenses. In addition, tourist travel and the local staff cost of ISAF and local expenditures of ISAF personnel were included. Payments comprised expatriate salaries, travel abroad, and the cost of embassies abroad. Interest payments on AsDB and the International Development Association (IDA) loans resumed in 2003/04. Current transfers were mainly official donor grants to fund the budget and national development plan. Private transfers included remittances from Afghans living abroad, net of the remittance of expatriate salaries not spent domestically. Net errors and omissions were small and positive. While by its very nature the combination of flows captured in this term is unknown, it could reflect transactions related to military operations for which information is not available and changes in the holdings of foreign currency by residents, which may have been significant given the large amounts of U.S. dollars and Pakistani rupees, in particular, that circulate in Afghanistan.

<sup>9</sup>See World Bank (2001).

TABLE 2.3  
**Balance of Payments**  
*(In millions of U.S. dollars)*

	Estimates		
	2001/02	2002/03	2003/04
Trade balance	-936	-1,159	-1,595
Exports of goods <sup>1</sup>	709	1,248	1,820
Own exports	85	277	377
Re-exports	624	972	1,443
Imports of goods	1,645	2,408	3,415
Services	...	-146	-346
Receipts	...	51	87
Donor-related	...	46	71
Other	...	5	16
Payments	...	197	433
Donor-related	...	196	429
Wages of expatriates	...	131	355
Other	...	65	74
Interest paid	...	1	4
Current transfers	...	1,222	1,864
Public	...	1,170	1,809
Commodity food aid	71	94	41
Other	...	1,076	1,768
Private	...	52	55
Other	...	0	0
Current account balance (before grants)	...	-84	-81
	...	-1,306	-1,945
Capital financial account	...	144	154
Public loans	...	94	96
Disbursements	...	100	96
Amortization paid	...	0	0
Direct investment	...	50	58
Net errors and omissions	...	101	312
Overall balance	...	155	389
Financing	...	-155	-389
Change in net foreign assets of DAB	...	-101	-389
Arrears	...	-54	0

Source: IMF staff estimates.

<sup>1</sup>Excludes exports related to opium and opium derivatives, which would imply a large trade surplus in 2002/03 and 2003/04. These would be offset by opium-related imports and other external payments, as well as the banking abroad of illicit earnings. The data also do not include flows associated with U.S. Army and most International Security Assistance Force (ISAF) activities. Interest and amortization reflect amounts actually paid.

If exports related to opium and opium derivatives were to be included, the balance of payments would have shown a large surplus broadly equal in size to the additional opium exports. This surplus would have been offset by an equally large additional errors and omissions outflow. The latter would be consistent with the banking abroad, increase in foreign currency holdings within and outside Afghanistan of illicit earnings related to opium, and likewise related unrecorded imports,

which have not been included in the estimates reported in Table 2.3.

### Pattern and Composition of Trade

Based on data from partner countries, Afghanistan's direction of export trade appears to have been relatively stable over the past five years. The pattern of imports has changed in recent years with the effects of reconstruction since 2001 felt in 2002.



TABLE 2.4  
Direction of Trade I

	In Millions of U.S. Dollars						In Percent of Total Value					
	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03 (estimate)	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03 (estimate)
<b>Exports</b>												
Total (official recorded only)	144.4	150.3	166.0	137.0	68.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Belgium	13.3	7.6	7.7	16.9	4.4	3.3	9.2	5.1	4.6	12.3	6.5	3.3
Finland	4.4	5.4	24.0	1.0	6.3	9.0	3.0	3.6	14.5	0.7	9.3	9.0
France	10.5	24.7	1.3	0.3	0.4	0.2	7.3	16.5	0.8	0.2	0.6	0.2
Germany	9.4	6.8	5.7	5.1	6.6	5.5	6.5	4.5	3.4	3.7	9.6	5.5
India	3.2	21.6	13.0	8.0	10.0	27.4	2.2	14.4	7.8	5.8	14.7	27.4
Pakistan	29.8	25.4	71.0	52.0	26.0	26.0	20.6	16.9	42.8	38.0	38.2	26.0
Russia	7.5	6.5	5.8	4.9	2.5	3.5	5.2	4.3	3.5	3.6	3.7	3.5
United Arab Emirates	2.7	3.6	3.6	4.5	4.8	4.6	1.9	2.4	2.2	3.3	7.1	4.6
United Kingdom	4.4	3.8	2.6	11.6	0.8	0.4	3.1	2.5	1.6	8.5	1.1	0.4
United States	10.2	16.0	8.4	2.6	0.6	4.3	7.0	10.6	5.0	1.9	0.9	4.3
Unclassified	49.2	28.9	23.0	30.1	5.6	15.9	34.0	19.2	13.8	21.9	8.2	15.9
<b>Imports</b>												
Total (official recorded only; includes re-exports)	604.3	462.5	1,012.0	1,176.0	1,696.0	2,322.0	100.0	100.0	100.0	100.0	100.0	100.0
China, People's Rep. of	35.7	26.8	18.4	21.9	35.0	20.3	5.9	5.8	1.8	1.9	2.1	0.9
Germany	17.2	15.7	13.6	16.1	15.9	48.5	2.8	3.4	1.3	1.4	0.9	2.1
India	25.5	16.4	30.9	30.5	25.0	36.5	4.2	3.5	3.1	2.6	1.5	1.6
Japan	96.7	67.1	292.0	491.0	594.0	999.0	16.0	14.5	28.9	41.8	35.0	43.0
Kazakhstan, Rep. of	9.5	8.4	12.5	64.4	19.9	21.6	1.6	1.8	1.2	5.5	1.2	0.9
Kenya	38.3	38.8	41.0	47.2	52.1	56.5	6.3	8.4	4.1	4.0	3.1	2.4
Korea, Rep. of	46.2	43.6	33.0	92.5	104.5	113.4	7.6	9.4	3.3	7.9	6.2	4.9
Pakistan	20.8	41.5	89.8	135.4	157.0	206.7	3.4	9.0	8.9	11.5	9.3	8.9
Singapore	100.9	13.6	13.8	6.6	2.8	1.5	16.7	2.9	1.4	0.6	0.2	0.1
Turkmenistan	23.0	22.4	45.0	41.8	46.2	50.1	3.8	4.9	4.4	3.6	2.7	2.2
Unclassified	190.6	168.3	422.0	228.7	643.6	767.8	31.5	36.4	41.7	19.4	37.9	33.1

Source: Central Statistics Office of Afghanistan.

Further changes in this respect are very likely. Partner country trade data and data from the CSO show similar patterns of exports but differ for imports (Tables 2.4 and 2.5).<sup>10</sup> Export data cover official trade only and exclude a large amount of smuggled unofficial exports, primarily to Pakistan, which are imported officially and unofficially, largely across the Afghanistan-Iran border. The UNDP/World Bank survey of trade in 2000 estimated that of total exports of about \$1.2 billion, about \$1 billion worth were unofficially exported. Exports to Iran and Pakistan account for about one-half of total exports, with Iran's share rising during 2001–02. Other export destinations that each account for 5 percent or more of exports are Belgium, Germany, Russia, the United Arab Emirates, and the United States. The source of one-third of imports is unclassified. In 2002, imports from Japan and the United States increased sharply, reflecting the reconstruction and rejuvenation of the economy. Much of the increase is accounted for by cars, televisions, refrigerators, and other electrical appliances. The main origins of imports are Japan, Korea, and Pakistan, together accounting for about 40 percent of imports, of which most in 2002 came from Japan. Other significant sources of imports, which in total account for about 15 percent of imports, are Germany, India, Iran, Kenya, Turkmenistan, and the United States. The major import categories of goods are machinery and equipment, household items, fabrics and footwear, and food. Most of Afghanistan's own exports are agricultural goods and carpets (Table 2.6).

### Transit Trade: A Corridor for Growth

Afghanistan is dependent on other countries for access to the sea and to other markets. But it is also a potentially important country for transit trade, higher volumes of which could generate considerable revenues. Afghanistan could provide access to the Indian Ocean via Pakistan for the Central Asian countries on Afghanistan's northern borders, and could also be an important transit country for West-East trade. In 2003, most of Afghanistan's transit trade was with Iran and Pakistan. Transit

<sup>10</sup>The customs data, as reported by CSO, differ from the Direction of Trade (DOT) data beginning in 1999. For exports, CSO data show a slightly higher amount destined for Pakistan and India, which is reflected in a slightly higher value of total exports. For imports, the CSO data show much larger imports from Japan, with the discrepancy rising.

trade with its northern neighbors was very limited during the Taliban period, and continued to be small in 2003. The poor quality of transport infrastructure, poor security, and cumbersome border administration are important obstacles to realizing Afghanistan's potential as a transit route, especially for its northern neighbors. For example, imports destined for Kabul and other eastern provinces from Iran are often routed through Uzbekistan, rather than directly across the Iran-Afghanistan border, in order to bypass a long stretch of travel in Afghanistan. This is motivated by the poor road conditions and by the frequent unofficial "tolls" that are charged by various factions in Afghanistan. To help overcome these obstacles to trade, several infrastructure improvements are under way, such as the Kandahar-Kabul road, and more are being planned. To improve conditions for transit trade, the Afghan authorities are renewing and improving existing transit trade agreements and establishing new ones with neighboring countries (see Box 2.2). These initiatives would also be consistent with a number of regional ones, including improving regional trade among members of the Economic Cooperation Organization (ECO) under the existing ECO transit trade agreement.<sup>11</sup>

### Exchange and Trade System

During the late 1980s and early 1990s, Afghanistan had many official controls in the exchange system. Da Afghanistan Bank (DAB) maintained an official exchange rate—largely for government debt-service payments—and a commercial rate that was linked to the free rate in the money changers' market on which the authorities did not impose any controls. This implied a multiple currency practice. Reflecting the orientation of trade, Afghanistan had bilateral payments agreements with Bulgaria, China, and the former Soviet Union, with settlements made in bilateral accounting U.S. dollars at rates set under the agreements. Outside of the payments agreements, foreign exchange proceeds from the main agricultural exports had to be surrendered immediately at the commercial rate. The bilateral payment agreements have now lapsed. There were some restrictions on invisible payments, primarily

<sup>11</sup>The ECO members are Afghanistan, Azerbaijan, Iran, Kazakhstan, Pakistan, Tajikistan, Turkey, Turkmenistan, and Uzbekistan.

TABLE 2.5  
Direction of Trade 2

	In Millions of U.S. Dollars						In Percent of Total Value					
	1997	1998	1999	2000	2001	2002	1997	1998	1999	2000	2001	2002
<b>Total imports</b>	604.3	462.5	490.3	635.5	599.8	880.1	100.0	100.0	100.0	100.0	100.0	100.0
China, People's Rep. of	35.7	26.8	18.3	21.9	19.0	20.3	5.9	5.8	3.7	3.4	3.2	2.3
France	20.0	14.0	7.0	6.2	5.2	10.2	3.3	3.0	1.4	1.0	0.9	1.2
Germany	17.2	15.7	13.6	16.1	15.9	48.5	2.8	3.4	2.8	2.5	2.7	5.5
India	25.4	16.4	30.9	30.5	33.7	36.5	4.2	3.5	6.3	4.8	5.6	4.2
Iran, I. R. of <sup>1</sup>	14.5	3.8	11.8	39.7	36.5	...	2.4	0.8	2.4	6.3	6.1	...
Japan	96.7	67.1	72.7	56.9	49.4	84.9	16.0	14.5	14.8	8.9	8.2	9.7
Kazakhstan, Rep. of	9.5	8.4	12.5	64.4	19.9	21.6	1.6	1.8	2.6	10.1	3.3	2.5
Kenya	38.3	38.8	41.0	47.2	52.1	56.5	6.3	8.4	8.4	7.4	8.7	6.4
Korea, Rep. of	46.2	43.6	33.0	92.5	104.5	113.4	7.6	9.4	6.7	14.6	17.4	12.9
Netherlands	4.5	2.9	4.3	4.2	3.9	19.8	0.7	0.6	0.9	0.7	0.6	2.2
Pakistan	20.7	41.5	89.8	135.4	157.0	206.7	3.4	9.0	18.3	21.3	26.2	23.5
Russia	20.6	14.9	14.6	12.3	8.5	26.0	3.4	3.2	3.0	1.9	1.4	3.0
Turkmenistan	23.0	22.4	45.0	41.8	46.1	50.1	3.8	4.9	9.2	6.6	7.7	5.7
United States	12.5	7.6	19.8	12.2	6.6	87.9	2.1	1.6	4.0	1.9	1.1	10.0
Rest of world	12.4	16.8	14.1	-12.2	-8.5	44.5	2.0	3.6	2.9	-1.9	-1.4	5.1
<b>Total exports</b>	144.4	150.3	122.0	145.8	94.3	96.9	100.0	100.0	100.0	100.0	100.0	100.0
Finland	4.4	5.3	5.4	8.8	6.3	6.3	3.0	3.6	4.4	6.0	6.7	6.5
Germany	9.4	6.8	5.7	5.1	6.6	5.5	6.5	4.5	4.7	3.5	7.0	5.7
India	3.1	21.6	20.8	22.9	25.2	27.4	2.2	14.4	17.0	15.7	26.8	28.3
Iran, I. R. of <sup>1</sup>	3.3	0.1	0.4	1.1	0.7	...	2.3	0.1	0.4	0.7	0.8	...
Pakistan	29.8	25.4	36.0	36.0	23.7	22.7	20.6	16.9	29.5	24.7	25.1	23.4
Russia	7.5	6.5	5.8	4.9	2.5	3.5	5.2	4.3	4.8	3.4	2.7	3.6
United Arab Emirates	2.7	3.6	3.6	4.5	4.8	4.6	1.9	2.4	3.0	3.1	5.1	4.7
United States	10.2	16.0	8.4	2.6	0.6	4.3	7.1	10.6	6.9	1.8	0.7	4.4
Rest of world	4.9	6.8	4.7	4.0	5.4	5.2	3.4	4.5	3.9	2.8	5.7	5.4

Sources: IMF, *Direction of Trade Statistics*; and UN Statistics Division.

<sup>1</sup>The UN provided data for Iran.

TABLE 2.6

**Commodity Composition of Trade**

	In Thousands of U.S. Dollars					In Percent of Total Exports				
	1997/98	1998/99	1999/2000	2000/01	2002/03	1997/98	1998/99	1999/2000	2000/01	2002/03
<b>Total exports</b>	159,235	166,241	137,312	68,541	100,143	100.0	100.0	100.0	100.0	100.0
Fresh fruits	9	5,797	8,403	4,269	5,587	0.0	3.5	6.1	6.2	5.6
Dried fruit	2,919	9,282	16,381	23,328	40,582	1.8	5.6	11.9	34.0	40.5
Medicinal plants	57	195	669	1,935	2,620	0.0	0.1	0.5	2.8	2.6
Spices	176	64	170	518	1,050	0.1	0.0	0.1	0.8	1.0
Seeds	0	385	88	198	1,006	0.0	0.2	0.1	0.3	1.0
Animal skins	539	2,116	10,841	13,678	1,172	0.3	1.3	7.9	20.0	1.2
Wool	700	1,266	904	2,967	651	0.4	0.8	0.7	4.3	0.7
Sausage	53	100	285	144	1	0.0	0.1	0.2	0.2	0.0
Carpets	154,782	147,036	99,571	21,503	47,474	97.2	88.4	72.5	31.4	47.4
<b>Total imports</b>	462,077	1,012,262	1,175,896	1,696,525	2,322,609	100.0	100.0	100.0	100.0	100.0
Machinery and equipment	6,029	993,307	71,870	512,382	854,842	1.3	98.1	6.1	30.2	36.8
Petroleum and oil	805	2,875	3,112	12,328	14,444	0.2	0.3	0.3	0.7	0.6
Metals	446	648	5,077	3,557	6,751	0.1	0.1	0.4	0.2	0.3
Chemical materials	12	396	3,865	39,728	172,679	0.0	0.0	0.3	2.3	7.4
Construction materials	96	1,303	536	4,276	48,420	0.0	0.1	0.0	0.3	2.1
Paper	0	40	45	48	59	0.0	0.0	0.0	0.0	0.0
Clothing materials	28	0	1,358	21,793	9,024	0.0	0.0	0.1	1.3	0.4
Food	997	2,293	250,675	214,433	201,339	0.2	0.2	21.3	12.6	8.7
Cigarettes and drinks	110	335	3,727	23,111	46,636	0.0	0.0	0.3	1.4	2.0
Fabrics, clothing, and footwear	1,747	905	478,521	472,638	345,934	0.4	0.1	40.7	27.9	14.9
Household needs and medicine	451,807	10,160	357,110	392,231	622,481	97.8	1.0	30.4	23.1	26.8

Source: Central Statistics Office of Afghanistan.

**Box 2.2. Trade, Transit, and Transport Agreements**

As of 2003, the main transit trade agreement was with Pakistan so that Afghanistan's imports and exports largely go to and from the southern ports of Karachi and Port Quasim in Pakistan. This agreement was established in 1965, but during 1994–96 the Pakistan authorities had unilaterally banned several items from the eligible list (since 1996, 18 items have been banned). The ban was imposed because of concerns that a large part of these imports were being smuggled back into Pakistan. Following a series of meetings since 1991 between the two countries, the issues of disagreement were expected to have been resolved by end-2003. Six of the banned items were restored to the list and the time taken for processing and clearing procedures of transit goods was reduced from 20 to 5 days. At the same time, it was agreed that some categories of imports for which Afghanistan has little need and which were clearly intended to be smuggled back into Pakistan would be eliminated from the eligible list. To reinforce this measure, it was expected that Afghanistan would levy punitive import tariffs on these goods. Both countries were committed to making substantial progress on lifting the ban on the remaining 12 restricted items. In addition, agreement was reached, with the support of aid from Pakistan, that the Torkham (the railhead in Pakistan) to Jalalabad (in Afghanistan) road would be repaired and a new road, parallel to the existing one, would be constructed by early 2005.

A number of trade, transit, and transport agreements with Iran dating from 1973 have been revised. A new transport agreement was signed in January 2003, and final approval of the trade and transit agreements were expected in mid-2003. Under these new agreements, changes included lifting previous restrictions on the routes that could be used by Afghanistan trucks between the border and destination cities, and Afghan truckers were allowed to buy Iranian fuel at the same subsidized price as Iranian truckers.<sup>1</sup> Discussions on trade and transit agreements were initiated with Kyrgyzstan, Tajikistan, and Uzbekistan. By August 2003, a Memorandum of Understanding had been signed by the Uzbekistan and Afghanistan authorities, while a draft agreement with Tajikistan was

<sup>1</sup>Previously, Afghan truckers had to pay the unsubsidized fuel price; the subsidy element is about 20 percent.

under discussion toward establishing mutually beneficial trade, transit, and railway development treaties.

In March 2003, Afghanistan and India signed a new preferential trade agreement, which replaced an earlier one that was little used because of the Taliban presence and strained relations between India and Pakistan. Under the new agreement India granted 50–100 percent tariff reductions on 38 export items from Afghanistan and duty-free access was given to India for eight tariff lines. In June 2002, preferential access to European markets was obtained under the Everything But Arms agreement, and, in January 2003, the United States granted Afghanistan general system of preferences (GSP) access to its domestic market. On April 10, 2003, Afghanistan applied for membership in the World Trade Organization.

In January 2003, Iran, India, and Afghanistan signed a Memorandum of Understanding to improve access to the Iranian port of Chabahar on the Indian Ocean, along the Chabahar-Malik-Zaranj-Delaram route into Afghanistan. Under this understanding, Iran will build a new transit route to connect Malik in the southeast of Iran to Zaranj inside Afghanistan, including the Malik bridge over Helmand river.<sup>2</sup> For its part, India will build a new road connecting Zaranj to Delaram, which is on the main Herat-Kandahar road. These improvements will shorten the transit distance between Chabahar and Delaram by some 600–700 kilometers. Also, India and Iran will build a railroad from Chabahar to the Iranian central railway station on the railroad between Karachi and Tehran (and further west), and Iran will extend its railway to the port of Islam Qaleh. This would provide cheaper access to Chabahar and open up markets along the railroad and to Europe. In addition, Afghanistan was granted full access to the duty-free zone at the port of Chabahar. The Iranian authorities are also providing storage facilities and have permitted Afghan inspectors and trade representatives to be present on-site. Port fees have been cut by 90 percent and warehousing and other charges by 50 percent; smaller cuts were granted for oil tankers.

<sup>2</sup>At present, a main highway connects Chabahar and Malik (in Iran, south of Zaranj) with only a secondary road connecting to Zaranj. The bridge will significantly shorten the time taken to travel between Malik and Zaranj.

limits on foreign exchange cash to be taken abroad for personal travel, and foreign employees had to convert 60 percent of their foreign currency salaries into Afghani at the official exchange rate. Foreign

direct investment required prior approval and ownership could not exceed 49 percent. Capital could be repatriated only after five years and at an annual rate of 20 percent of total registered capital.

In recent years, the exchange and trade system has radically changed and in effect is now liberal and open (see Box 2.3). Many of the rules and regulations that applied during the Taliban and pre-Taliban eras are formally still in place, but in practice a liberal exchange and trade system has been applied by the ATA. Given the disrupted financial system, the erosion of capacity in customs and trade administration, and a relatively sophisticated hawala system, controls would have been difficult to enforce. The authorities are committed to formalizing the de facto liberal regime with revised rules and regulations consistent with liberal and open exchange, payments, and trade systems.

In early 2004, the government enacted a sweeping reform of trade taxes, including the use of market exchange rates for import valuation, a streamlined tariff structure (moving from 25 tariff rates to 4), a reduction in tariff dispersion (the old system had rates ranging from 0 percent to 150 percent, while the new system ranges from 0 percent to 20 percent), and the establishment of new, more effective broker processes (see Chapter 4).

In principle, the Chamber of Commerce was supposed to carry out the valuation of imports, which is to be used as the basis for customs tariff charges, charging a fee of 2.5 percent for nonmembers and 2 percent for members. The fee was assessed on the c.i.f. value calculated using the customs exchange rate, which is much more depreciated than the market exchange rate, and as a result the effective fees are currently much lower.<sup>12</sup> But, in practice, only a small part of imports have been valued by the Chamber of Commerce and the majority of valuations are carried out by the customs houses, for which no fee is charged.

In the absence of functioning commercial banks, most trade financing is done by cash or through the hawala system. The central bank did not open letters of credit in its own name before 2003. In 2003, pending the arrival of new commercial banks, DAB opened several letters of credit for government agencies under the World Bank Donor Flow Management Program.<sup>13</sup> Earlier limits on the amounts that can be taken out of the country for tourist and

<sup>12</sup>Following the customs policy reform (see Chapter 4), customs valuation will use the market exchange rate.

<sup>13</sup>The World Bank provides a special commitment letter to the correspondent bank in which it commits to guarantee payments made under the letter of credit; this obviates the need for the usual advance collateral deposit.

### Box 2.3. Exchange and Trade Arrangements

Under the authority of the ATA, Afghanistan has operated a de facto unified exchange rate system. DAB quotes on a daily basis an official Afghani-U.S. dollar exchange rate based on the early morning rate in the free market of the money changers.<sup>1</sup> This rate is used for all transactions, including with the government. DAB exchange rates for other currencies are based on cross-rates with the U.S. dollar. DAB uses the buy and sell rate from the free market rather than applying a fixed spread around a central rate. During the first half of 2003, the spread between the two rates for cash transactions rarely exceeded 0.6 percent while, during the latter half of 2002, spreads were usually larger than in 2003 and on two occasions exceeded 2 percent.<sup>2</sup> In addition, a small commission is charged on traveler's checks and on international transfers. For transfers, fees are 0.25 percent of the amount, with a small minimum fee, and for letters of credit, fees are 0.25–0.5 percent of the amount.

In practice, virtually no controls are enforced or are in place on imports and exports, payments, invisibles, and capital transactions. Traders, who for the most part carry out other domestic commercial activities and are thus classified and licensed as commercial businesses, are required to hold a commercial license, which is also required for all businesses; under this license exporting and importing is permitted, and no further export or import license is required. However, a few imports are subject to licenses and quotas. These comprise certain pharmaceutical products, mining items, and petroleum products for which a special license is required. The import of certain drugs, liquor, and arms and ammunition is prohibited on grounds of public policy or for security reasons; special permission is required for these imports. Exports of opium and museum pieces are prohibited. Imports and exports should be registered with the Ministry of Commerce for recording and statistical purposes, and to establish their eligibility for export incentives.

<sup>1</sup>Each morning, DAB calculates a simple average of the buy rate and the sell rate of 10 reputable and large licensed money changers and quotes them as the official buy and sell rates. DAB quotes rates for cash and transfer transactions.

<sup>2</sup>The IMF considers a spread greater than 2 percent in official transactions to be a multiple-currency practice.

business travel have been eased, and the requirement that foreign employees convert 60 percent of their foreign currency salaries into Afghani and



limits on payments for medical treatment abroad are no longer enforced.

Foreign investment is required to conform to the new Domestic and Foreign Private Investment Law of 2002. Foreign and domestic investment require prior approval, and investments in construction of pipelines, telecommunications, infrastructure, oil and gas, mines, and minerals are regulated under separate legislation. Full foreign participation is allowed and there are no limits on the transfer of capital and profits out of Afghanistan. The law provides tax holidays of up to seven years and a four-year exemption on export tariffs and duties. However, the law is being reviewed with consideration being given to eliminating the tax holidays.

### Appendix 2.1. Poppy Dimension in the Afghan Economy

Afghanistan is by far the largest producer of opium in the world, accounting for more than 70 percent of world supplies on average over the last decade, according to the United Nations Office on Drugs and Crime (UNODC).<sup>14</sup> About 10 million people consumed opiates of Afghan origin in 2003 even though Afghanistan has not been a traditional opium-exporting country. The cultivation of the poppy on a large scale is a relatively recent phenomenon, dating back to the early 1980s when strict bans on opium production in Turkey, Iran, and Pakistan pushed up the world price of opium. At the same time, governments in Afghanistan were progressively losing control over rural areas. Faced with strong international demand and virtually no legal or social impediments, poppy cultivation flourished. It did not take long for Afghanistan to replace the so-called Golden Triangle (Thailand, Lao P.D.R., and Myanmar) as the main supplier of opiates to Europe and the Middle East.

The almost complete collapse of any form of central government after the Soviet withdrawal, the warring parties' needs for alternative sources of financing, and the fact that opium was a crop well adapted to the prevailing circumstances greatly added momentum to this trend. Opium became firmly entrenched in the economy. While the annual rate of growth of opium production had been, on average, 14 percent per year between 1979 and 1989, it

accelerated to 19 percent per year between 1989 and 1994. Afghanistan's share in world production grew accordingly from about 20 percent in 1980 to 50 percent in 1995, just prior to the Taliban takeover, and to 79 percent in 1999.<sup>15</sup> Opium became the country's largest cash crop and its only significant source of illicit export earnings. Two decades of expanding Afghan production have contributed to the dramatic decline in the street price of heroin in real terms in Western Europe, which fell from the equivalent of about \$300 per gram after adjusting for inflation in 1987 to \$60 per gram in 2001.<sup>16</sup>

In spite of the illicit nature of the opium economy, a wealth of information is available. This is mainly thanks to the dedicated work of the UNODC that, as part of its global Illicit Crop Monitoring Program (ICMP), operates a poppy crop monitoring system in Afghanistan, now in close cooperation with the country's new transitional government. As part of this monitoring, regular opium surveys are conducted that combine satellite imagery with cross-checking on the ground to produce a detailed mapping of poppy cultivation. The surveys are complemented by in-depth interviews with farmers and traders, the collection of comprehensive price data, and studies of seizure data in neighboring countries. The results are published annually, normally a few months after the end of the April–June harvest season, and supplemented by interim reports. Most of the analysis presented in this appendix is based on information from the 2002 and 2003 surveys.

#### Growing Production

From 1994 to 2000, annual opium production is estimated to have averaged around 3,000 tons per year (Table A2.1). During this period, the acreage under cultivation fluctuated between about 53,800 hectares and 91,000 hectares. On average, this represented less than 1 percent of the country's arable land. But yields per hectare in Afghanistan in the areas cultivated with poppy are, on average, more than three times higher than in Myanmar, the world's second largest producer.<sup>17</sup> With virtually no restrictions on poppy growing at the time, year-on-year fluctuations reflected the normal pattern of an annual agricultural crop affected by changes in climatic conditions, and the supply response to price

<sup>14</sup>Appendix prepared by Bruno de Schaetzen. For a detailed discussion of world's illicit opiate markets, see United Nations Office on Drugs and Crime (UNODC, 2003e).

<sup>15</sup>UNODCCP (2002b) and UNODC (2003e).

<sup>16</sup>UNODC (2003d).

<sup>17</sup>UNODCCP (2001 and 2002b).

TABLE A2.1  
Indicators of Opium Cultivation

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Production (in metric tons)	3,416	2,335	2,248	2,804	2,693	4,565	3,276	185	3,422	3,600
Cultivated area (in ha after eradication)	71,416	53,759	56,827	58,417	63,672	90,909	82,033	7,606	74,045	80,482
Yield per ha (in kg)	48	43	40	48	42	50	40	24	46	45
Average farm gate price at harvest time (\$ per kg, fresh)	30	23	24	34	33	40	28	301	351	283
Main bazaar prices (in \$ per kg)	69	65	50	71	65	55	39	301	351	283
Gross income per ha (in \$)	3,300	2,823	1,978	3,408	2,749	2,762	1,557	7,321	16,208	12,659
Direct farm employment (in person years)	77,147	58,073	61,387	63,105	68,781	98,204	88,616	8,216	79,987	86,940
Persons needed at harvest time	793,511	597,322	631,411	649,078	707,467	1,010,100	911,478	84,511	822,722	894,244

Source: United Nations Office on Drugs and Crime (UNODC).

changes typically lagged one year. Production was mainly concentrated in two provinces, Helmand (40 percent of total production in 2002) and Nangarhar (27 percent of total production in 2002), but has been rising more rapidly in the north, particularly in Badagshan.<sup>18</sup> These provinces have some of the most productive agricultural land in the country.

Excess rain in 1998 caused crop damage during the harvest, and production sagged. In 1999, exceptionally favorable climatic conditions together with a rise of acreage under cultivation led to a record harvest of 4,565 tons. In September of that year, the Taliban, in an effort to stave off looming international sanctions, ordered poppy growers to reduce their planting by one-third. This decree had little effect because it was weakly enforced, although production was, in the event, reduced to 3,276 tons in 2000 because of a drought. In July 2000, now faced with the prospect of severe international repercussions, the Taliban issued a total ban on poppy cultivation that was soon resolutely enforced. Virtually no poppies were planted in the region under their control. Production fell by 95 percent and only small quantities of opium were harvested in 2001, mainly in the northern provinces. The 2001 sowing season coincided with the collapse of the Taliban regime. The resulting power vacuum incited widespread replanting, and acreage under cultivation soon returned to the record levels of the late 1990s.

One of the first acts of the new Afghan Interim Administration (AIA) was to issue, on January 17,

2002, a decree forbidding all poppy cultivation and trading, although this was too late to prevent the sowing of poppies, which had already taken place. An ambitious eradication campaign soon followed this decree together with efforts to provide alternative livelihoods to farmers. But the government's still weak authority over the provinces, and delays in donor assistance for alternative crops and farmer support, made progress difficult. With favorable climatic conditions, the 2002 harvest produced 3,422 tons, similar to the 2000 harvest.

During the 2002–03 season the government further expanded its interdiction activities. The target was set as part of the National Drug Control Strategy to reduce opium production by 75 percent in five years and to completely eliminate all commercial production in Afghanistan within 10 years. Some 21,430 hectares were eradicated during that season, mainly in the traditional opium-growing provinces of Helmand and Kandahar where production fell by 49 percent and 29 percent, respectively. These efforts nonetheless were insufficient to stem continued growth in production, which rose overall by 6 percent to 3,600 tons. But while there was progress in reducing planted acreage in the south, the proliferation to other areas accelerated. The UNDCP reported that, in 2003, opium production could be found in 28 of Afghanistan's 32 provinces, up from 18 provinces in 1999. Even more striking was the fact that nearly one-tenth of the cultivation occurred in districts where opium had previously not grown.<sup>19</sup>

<sup>18</sup>UNODCCP (2002a).

<sup>19</sup>UNODC (2003a and 2003b).

### Development of Prices

During each year the fluctuation in opium prices tends to follow a typical annual agricultural cycle, reaching a low during the harvest period and then gradually rising until a few weeks before the next harvest period. Opium can easily be conserved for long periods; therefore, all market participants, including farmers, traders, and processing laboratories, have relied on stock building and depletion to help limit price fluctuations and stabilize incomes.<sup>20</sup> In the absence of a working financial system, opium also played a significant role in rural areas as a store of value. In remote locations it was often considered more liquid than any other asset, including foreign currency. There were strong incentives, therefore, even for individuals otherwise not involved in the trade, to hold opium.

Until recently local opium markets were fragmented, with large price disparities persisting between producing regions. These price disparities reflected a combination of regional differences in the quality of opium and difficulties in arbitraging between regions during the civil war. Regional opium centers therefore tended to be oriented toward specific export routes with the local price level reflecting a specific route's costs and risks. Opium centers in the south turned to Iran and southern Pakistan (Baluchistan), those in the east to northern Pakistan (North West Frontier Province), and those in the north to Tajikistan and Central Asia. Prices generally were the lowest in areas with the tightest controls at the border. But since the fall of the Taliban, there has been a pronounced integration of regional markets as the reduction in factional fighting has made it easier for traders to exploit the best trading routes.

From 1994 to 2000, average farm gate prices, as monitored by UNODC at harvest time, fluctuated between a low of \$23 per kilogram and a high of \$40 per kilogram (Table A2.1). With international demand for opium growing relatively steadily, price fluctuations have reflected mainly domestic supply factors. Downward pressures also occurred when trafficking networks or laboratories in the region were dismantled, creating temporary gluts on the Afghan markets. By contrast, large-scale purchases by traders occasionally caused temporary spikes. Market expectations have also played an important role in price formation.

<sup>20</sup>UNDCP (1998).

The Taliban ban started a sharp increase in opium bazaar prices, which by April 2001 had risen almost tenfold to \$380 per kilogram, before peaking at \$700 per kilogram just prior to September 11, 2001. In the following weeks prices crashed to \$90 per kilogram, as stocks were quickly liquidated in anticipation of military operations. Prices recovered over the next few months and soon exceeded \$400 per kilogram in reaction to the transitional government's January 2002 prohibition decree and expectations of substantial donor assistance to help enforce it. With the start of the eradication campaign in April 2002, prices rose further to a high of nearly \$600 and after a period of erratic fluctuations settled back after the 2002 harvest to around \$400 per kilogram. On average, the price received by farmers in 2002 rose by 17 percent to \$350 per kilogram. Higher production in 2003, however, pushed down the average price to \$283 per kilogram (Table A2.1) and gross income of farmers from opium consequently fell by 15 percent.

### Incentives for Poppy Farming

The UNODC estimates that about 264,000 households were involved in growing poppies during the 2002–03 season, up from about 200,000 at the end of the past decade. These households tend to be representative of the general farming population in their region with landholdings of 1–1.5 hectares, of which one-third is usually devoted to poppy growing. Cash earnings are the main reason why farmers plant poppies. But surveys have revealed that, until the recent tenfold increase in prices took place, returns were not irresistibly high compared with other cash crops and often fluctuated widely. With few restrictions on cultivation during the civil war period, markets were fairly competitive. Other crops can sometimes turn out to be more attractive. A UNODC study shows that, for example, in the 1998–99 season opium was by far the most profitable crop because of a combination of high prices, a bumper harvest, and poor yields and prices for competing crops. But this situation reversed in 1999–2000, when the return per hectare on several alternative crops, including grapes, onions, black cumin, and other fruits, comfortably exceeded that of opium.<sup>21</sup>

<sup>21</sup>UNODC (2003c and 2003e).

TABLE A2.2  
**Estimate of Farmers' Net Income from Opium**  
*(In millions of U. S. dollars)*

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Gross revenue to farmers from										
opium production	235.7	151.8	112.4	199.1	175.0	251.1	127.8	55.7	1,200.1	1,018.8
Seed, fertilizers, tools, and other inputs	2.9	2.2	2.3	2.3	2.5	3.6	3.3	0.3	3.0	3.2
Wage bill (itinerant laborers)	47.1	30.4	22.5	39.8	35.0	50.2	25.6	11.1	240.0	203.8
Taxes and other payments (30 percent of gross revenue)	70.7	45.5	33.7	59.7	52.5	75.3	38.3	16.7	360.0	305.6
Bazaar traders' margins (8 percent)	18.9	12.1	9.0	15.9	14.0	20.1	10.2	4.5	96.0	81.5
Net income	96.1	61.6	44.9	81.3	71.0	101.8	50.4	23.1	501.1	424.7

Sources: United Nations Office on Drugs and Crime (UNODC, 2003); and IMF staff estimates.

A number of other factors also made opium well suited to the needs of farmers during the difficult years of the civil war, and at times provided stronger incentives to produce opium than mere cash returns. First, as discussed in more detail below, opium production is extremely labor intensive. The UNODC surveys reported that this was an important consideration for farmers supporting a large household in relation to the size of their land holdings. Second, a poppy crop presents a number of technical advantages. It does not require as much attention to irrigation as, say, wheat. It is relatively weather resistant with a short growing season, giving it an advantage over a crop such as black cumin, which needs three years to come to maturity. The early harvest frees resources to harvest other crops later, and even makes it possible in semitropical areas to plant a second crop. Third, opium is easy to store, transport, and sell. The destruction of the transportation infrastructure in many areas has often made it virtually impossible for farmers to grow other cash crops in remote districts. Fourth, opium is currently the only crop against which farmers in Afghanistan can easily obtain credit, albeit at usurious rates. A 1999 UNDCP study reports that over 60 percent of traders interviewed made advance purchases of opium well before the harvest.<sup>22</sup>

As there is no reliable information on the actual price at which farmers sell their opium crop, it is difficult to accurately estimate the gross income they derive from it, but broad estimates can be constructed. Table A2.2 shows the value of production at the prices monitored by the UNODC a few weeks

before each harvest. However, the accuracy of this measure of farmers' income is compromised by two problems, each pulling in the opposite direction. On the one hand, many farmers sell their crop forward at a discount usually exceeding 50 percent of the harvest price. On the other hand, prices tend to be the highest just before harvest time. Better-off farmers generally hold on to their production with the intention to gradually sell it in subsequent months in the expectation of higher prices.

### Poppy Farming: Employment and Know-How

Opium is by far the most labor-intensive cash crop in Afghanistan. To cultivate and harvest one hectare of poppy requires, on average, about 350 person-days. This compares with 41 person-days for wheat and 135 person-days for black cumin, the second most labor-intensive crop in the country. Even more significant, most of this labor is needed at harvest, which requires about 250 person-days per hectare. The majority of growers therefore have to rely on hired help, usually six to seven itinerant harvesters per hectare. They are normally paid in-kind a share of the harvest that has varied between one-fifth and one-sixth. Because of this high labor requirement, UNODC estimates that about one million persons are involved in the opium harvest every year. Since production is concentrated in two provinces, this has a very pronounced effect on local labor markets. Acute labor shortages have been reported at harvest time in poppy-growing areas, with schools and colleges emptying and public works programs coming to a standstill due to lack of manpower.

<sup>22</sup>UNDCP (1999a).

Two further considerations are important to understanding the role of labor in the development of the opium industry—skilled labor and itinerant workers. In the earlier years, availability of qualified labor was a limiting factor in poppy cultivation. Lancing of poppies is a delicate task that requires experience and knowledge because it can greatly affect the final yield. As experience was acquired, this constraint was progressively lifted and a vast pool of competent workers emerged. This human capital stock now undoubtedly gives Afghanistan a large comparative advantage relative to other potential producers. But it only makes eradication efforts more difficult. The itinerant workforce has contributed, in turn, to the rapid propagation of poppy growing. Having acquired know-how to cultivate poppies and having established the necessary contacts to sell the opium that they usually receive as a payment, itinerant laborers, once back in their home village, started to experiment with opium production. As a result, from the mid-1990s onward, cultivation gradually expanded from the core areas of Helmand, Nangarhar, and Badakshan to neighboring districts and provinces. Consequently, according to UNODC, the number of poppy-growing villages in Afghanistan rose from 2,008 to 6,645 villages over the 1994–2000 period.<sup>23</sup>

### Trading and Commodity Markets

Traders are the essential link between opium produced in remote, nearly inaccessible Afghan villages and heroin sold on the streets of Europe. The UNODC estimates that approximately 15,000 persons participate in the concentric trafficking circles that funnel opiates out of Afghanistan. It is much more difficult and dangerous to obtain information on this segment of the opium economy, but UNDCP and UNODC studies suggest the following:<sup>24</sup>

- On the outer rim are the itinerant farmgate buyers. They buy from farmers and push them to produce by providing advice and incentives such as credit. These traffickers are the largest in number and have a relatively small average turnover. Surveys have found that they have generally received a longer formal education than the population average and it is not uncommon to find teachers and government

workers among them. Indeed, respondents who had received an intermediate level of formal education often cited the lack of alternative employment opportunities as an important consideration for going into opium trafficking. They especially bemoaned the lack of government jobs that pay living wages. Until recently profits from small-scale trading were not substantial in absolute terms but were attractive in relation to alternative sources of income. This suggests that trading was competitive and that there was no significant risk premium.

- Further toward the center of trafficking circles are the shop owners in the regional opium bazaars. They buy directly from farmers, itinerant traders, or other shopkeepers. They sell to local consumers, clandestine laboratories, wholesale traders, other shop owners, foreign traders, or anyone interested in opium trade. They may pool resources and put together large shipments when there is demand. Therefore, opium bazaars, which in some areas had as many as 200 shops, effectively operated as thriving regional commodity exchanges where opium was openly and actively traded. Recent intervention by the authorities has greatly curbed these activities.
- Finally, at the center of the opium trade are the bulk buyers or large-scale specialist traders who buy opium throughout the year and organize shipping to border areas or directly abroad, sometimes amounting to several tons. This is the backbone of the narcotics industry, which consists of a relatively small number of traders who are often linked by family ties and willing to commit substantial capital. They can reap phenomenally large rewards, but also face substantially higher risks. Until recently, these included shipments being stolen, ransomed, lost to interdiction or deception, and the sometimes rapidly fluctuating price of opium. Not surprisingly, one way to reduce these risks was to collude with or pay protection money to those in power.

The biggest risks (and therefore rewards) are for moving opium across the borders. Large-scale trafficking by Afghan nationals has usually been limited to trade within Afghanistan and the country's immediate neighbors. Afghans do not generally participate in lucrative international trafficking. Special-

<sup>23</sup>UNDCP (1999b, 1999c, 2000a, and 2000b).

<sup>24</sup>UNDCP (1998) and UNODC (2003e).



ized traders, who are members of tribes living on both sides of the border, often undertake the actual border crossings. The deeper those traders are able to get into the neighboring country, the higher is the profit. Prices are highest in Iran, but the penalty associated with being intercepted with drugs in Iran is also far higher than in other countries neighboring Afghanistan.

### Clandestine Laboratories

Data from border seizures in neighboring countries suggest that in recent years only about 30 percent of Afghan opium is exported raw, and that the remainder is transformed into either morphine base or heroin. The UNODC estimates that, in 2000, out of a 3,276-ton total production, 1,081 tons were exported as raw opium; 1,146 tons were transformed into base morphine; and 1,048 tons into heroin.<sup>25</sup> This is a relatively new development indicative of the maturing of the opium industry in Afghanistan.

Processing within Afghanistan began in the mid-1990s when laboratories moved from Pakistan into eastern Afghanistan and progressively multiplied in other border locations. This development appears to have been prompted by a more supportive environment for trafficking in Afghanistan, the desire to lessen cost and risk by transporting less bulky and more easily concealed heroin, and the higher profit margins associated with heroin trade. It is difficult to obtain precise information on these activities but refining seems to take place typically in small- to medium-scale laboratories producing about 10 kilograms a day of brown heroin. There are reports of a relatively small number of large-scale laboratories, located in heavily defended strongholds, becoming dominant in the industry and producing top-quality heroin. This suggests a move toward vertical integration and growing capacity. One indication of rising processing capacity is that the domestic spread between opium prices and high-quality heroin has fallen significantly from 1997 to 1999.

The recent large increase in the price of raw opium is likely to have been a strong incentive for laboratories to improve the efficiency of their processes. While it used to take 10 kilograms of raw opium to produce 1 kilogram of heroin, efficiency gains have reportedly lowered the required input to as little as 6 kilograms. Aside from raw opium, the

largest cost for producing heroin is that of the precursor chemical acetic anhydride. Since the mid-1990s a thriving market has developed in acetic anhydride, with imports reportedly coming from Europe and Russia, often via Turkmenistan. Its average cost has fallen by two-thirds in Afghanistan since then, and has fluctuated in recent years between \$15–\$36 per liter. Approximately 4 liters are needed to produce 1 kilogram of heroin. One of the first steps that the new authorities took at the start of their interdiction campaign was to close several bazaars where precursor chemicals were traded.

### Taxes and Other Levies on Opium

The legal or de facto rulers of the areas in which opium was cultivated or through which it transited have also likely benefited from the opiate industry. These may have included, at various times and places, warlords, local commanders, provincial administrators, tribal leaders, and even the central government until the fall of the Taliban regime. Opium is believed to have played an important role in financing the war against the Soviet occupation, and thereafter the civil war, either indirectly through levies on producers and traders or directly through the active and personal involvement of those in power. Taxes levied on opium by local authorities have also helped to strengthen the power of the regions vis-à-vis the center. Surveys report that most farmers continued to dutifully pay the traditional agricultural taxes. Acceptance of this payment by the local authorities was often interpreted by the farmers and itinerant workers as implicit support for the cultivation of opium. Small-scale and bazaar traders have also indicated that they regularly paid taxes on their income.

### Exports of Opium and Its Derivatives

At the time of writing this report, UNODC estimates for export volume and prices of raw opium, morphine, and heroin were available only for 2000 and there was no breakdown between heroin and morphine for 2002. In Table A2.3, it is assumed that the same amount of heroin and morphine were exported in 2002 as in 2000. No figures are available at all for 2001 because the Taliban ban, the disarray resulting from the collapse of their regime, and the unsettled security situation made it impossible to obtain meaningful estimates for that year. It is likely, however, that exports were substantially

<sup>25</sup>UNDCP (2001) and UNODC (2003e).



TABLE A2.3

**Revenues from Opiates***(In millions of U.S. dollars, unless otherwise indicated)*

	2000	2001	2002	2003
<b>Farmers</b>				
Gross revenue to farmers from opium production	128	56	1,200	1,019
Volume (in tons)	3,276	185	3,422	3,600
Price (\$ per kg, bazaar price)	39	301	351	283
Seed, fertilizers, tools, and other inputs	3	0	3	3
Wage bill (itinerant laborers)	26	11	240	204
Taxes and other payments (30 percent of gross revenue)	38	17	360	306
Bazaar trading (8 percent of gross revenue)	10	4	96	82
Surplus to farmers	50	23	501	425
<b>Traders</b>				
Gross revenue from exporting raw opium	425	...	1,359	...
Volume (in tons)	1,081	...	890	...
Prices (\$ per kg)	393	...	1,527	...
Gross revenue from exporting morphine	175	...	651	...
Volume (in tons)	115	...	164	...
Prices (\$ per kg)	1,522	...	3,970	...
Revenue from exporting heroin	245	...	530	...
Volume (in tons)	105	...	89	...
Prices (\$ per kg)	2,333	...	5,955	...
Total exports	845	...	2,540	2,320
Volume (in tons)	1,301	...	1,143	...
Prices (\$ per kg)	649	...	2,222	...

Sources: United Nations Office on Drugs and Crime (UNODC, 2003); and IMF staff estimates.

higher than the small quantities produced because stocks accumulated in earlier years were likely to have been liquidated.

These estimates suggest that the value of opium exports and opium derivatives increased substantially in 2002, in comparison with 2000, to a total of \$2.5 billion, mainly on account of higher prices. There was a slight drop in 2003 to \$2.3 billion mainly because the decline in price more than offset a higher volume. Of these values, approximately half relates to exports of raw opium and the remainder relates to exports of morphine and heroin, in roughly equal amounts. These estimates suggest that opium production could be up to about half of Afghanistan's GDP, depending on the measure of non-opium GDP (itself subject to uncertainty) and is roughly equal in value to Afghanistan's legitimate, mostly transit, trade (see discussion in this chapter).

The estimates also indicate that about half the income from opium exports accrues to farmers. This income is also likely to be mostly either spent or saved domestically. The other half of the gross export earnings of opiates then accrues to refiners and

traders after payment to farmers. These agents are probably better connected and bank some of their profits abroad. While these estimates provide an indication of the probable magnitude of revenue accruing to Afghanistan, they do not represent the value that exports of Afghan opiates fetch on the world market. The latter is probably substantially more than 10 times the value that Afghan exports of opiates fetch at the border.<sup>26</sup> International dealers and traffickers therefore earn most of the money made from trading Afghan opiates.

### Conclusion

As the foregoing analysis makes clear, the rise of the opium economy is a relatively recent phenomenon that has occurred only over the last 20 years. The long-term failure of the Afghan state and its institutions, the breakdown of law and order, the

<sup>26</sup>UNODC estimates that, in 2003, about \$30 billion will be spent worldwide on Afghan opiates by some 10 million users, for an average of \$3,000 per person per year.

degradation of agriculture, the absence of commerce or any alternative economic opportunity, and the destruction of infrastructure made poppy cultivation one of the few viable economic activities in many areas of Afghanistan. This foundation was progressively built upon by raising productivity, developing a qualified labor force, expanding trade routes, and investing in laboratories. A large number of stakeholders now have vested interests in the survival of this industry.

Reversing this process will require a substantial and prolonged commitment by the authorities and the international community. This commitment will have to go beyond efforts at eradication and law enforcement. It will also demand a comprehensive strategy for building a stable and unified Afghan state and developing a growing economy that provides alternative livelihoods throughout the country. If early and visible progress is not made in these areas, a dangerous potential exists for Afghanistan to progressively slide into a narco-state where all legitimate institutions become penetrated by the power and wealth of traffickers.

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