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Afghanistan opium survey 2023

UNODC Research brief

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Afghanistan opium survey 2023

Cultivation and production after the ban:
effects and implications

Contents

Key takeaways	3
Outlook.....	10
Policy implications	12
Introduction	14
Opium and heroin production	17
Poppy fields characteristics	28
Alternatives to opium	31
Poppy cultivation drivers.....	35
Opium and heroin seizures	37
Opium prices	41
Opiate economy value	45
Methodology.....	48
References	49
Annex I	52
Annex II	54

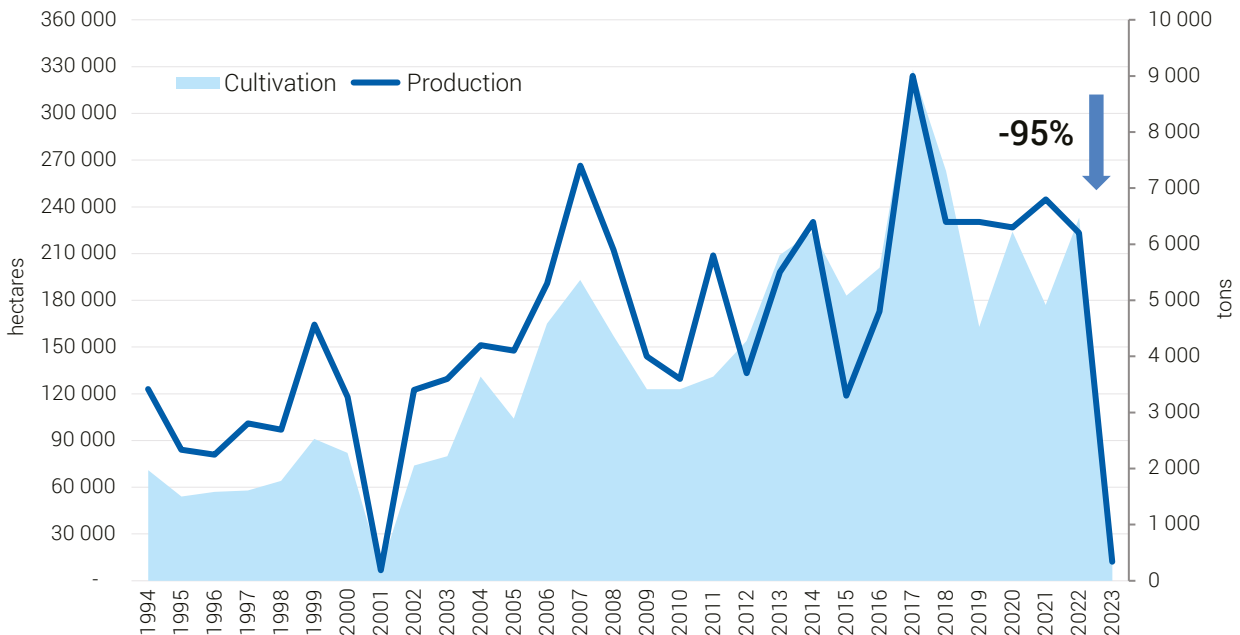
Key takeaways

In 2023 opium poppy cultivation and opium production dramatically declined after the ban prohibiting “Poppy Cultivation and All types of Narcotics” was announced by the de-facto authorities (DfA) in April 2022

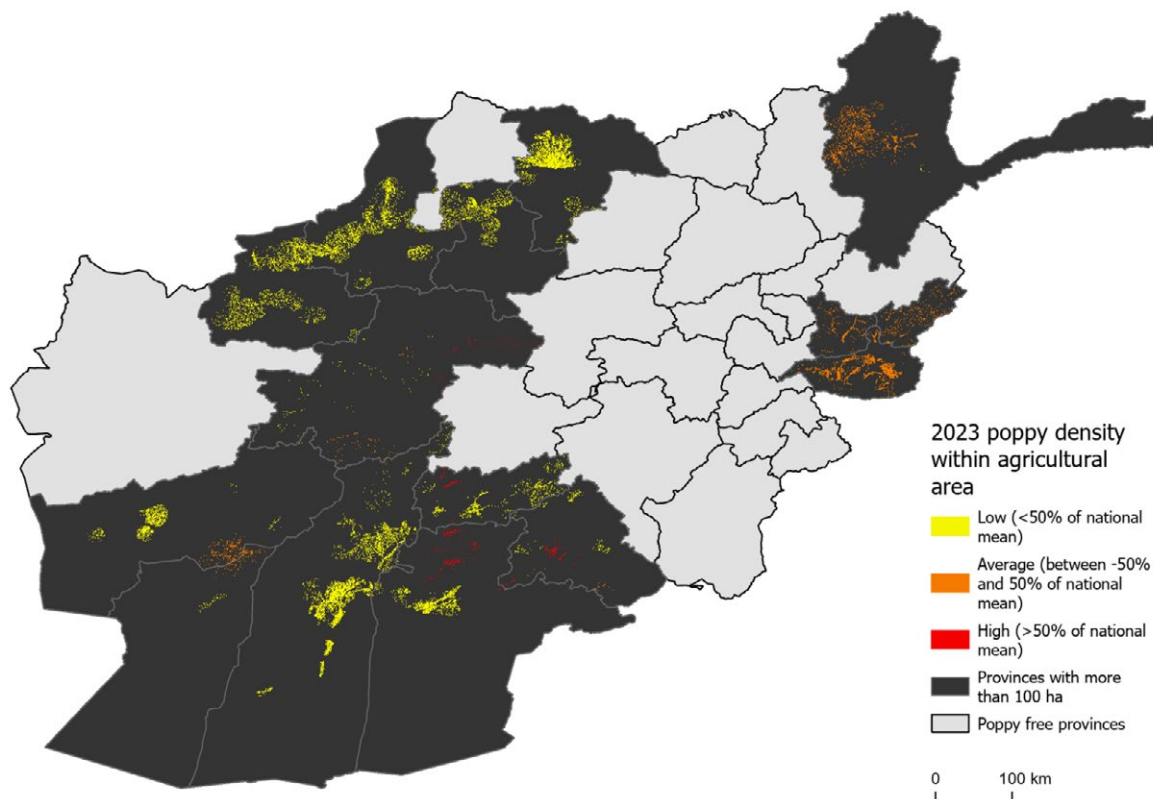
Opium poppy cultivation dramatically declined across all parts of the country and almost entirely in some provinces where opium poppy was illicitly cultivated for many years. Nationally, area under cultivation declined by 95% to a total of just 10,800 ha, indicating that farmers were adhering to the ban that was announced in April 2022.

Consequently, this has reduced the supply of opium and export quality heroin coming out of the 2023 harvest. Opium production saw a similar 95% decline from 6,200 tons produced in 2022 to 333 tons in 2023. The total 2023 opium harvest could be converted into 24-38 tons heroin of export quality (50 – 70% purity). In 2022 that amount was 350-580 tons.

Opium cultivation and production in Afghanistan, 1994-2023



Density distribution of the 10,800 ha of opium cultivation across provinces in Afghanistan, 2023



Red areas indicate 'pockets' of opium poppy cultivation, with – in comparison to the remainder of the country – higher densities of opium poppy cultivation. In comparison to earlier years, density is very low. Grey provinces are estimated to have less than 100 ha of cultivation and are considered poppy-free. Opium poppy density is calculated by its preponderance within the area's agricultural land.

The loss of opium income from the sharp reduction in production puts many rural households at greater economic risk

For decades, opium poppy has provided an important source of income for rural populations. In 2022, the income from opium poppy cultivation was equivalent to 29% of the value of the country's entire agricultural sector. At the household level, past UNODC research consistently found that the income from opium poppy represented up to half of the average income of opium poppy farming households.

The farm-gate price of opium dramatically increased from late 2022 into 2023. As of August 2023, the monthly farm-gate price of a kilogram of dried opium came to an average of US\$408, nearly five times more than the 24-month pre-Taliban takeover when prices remained consistently low.

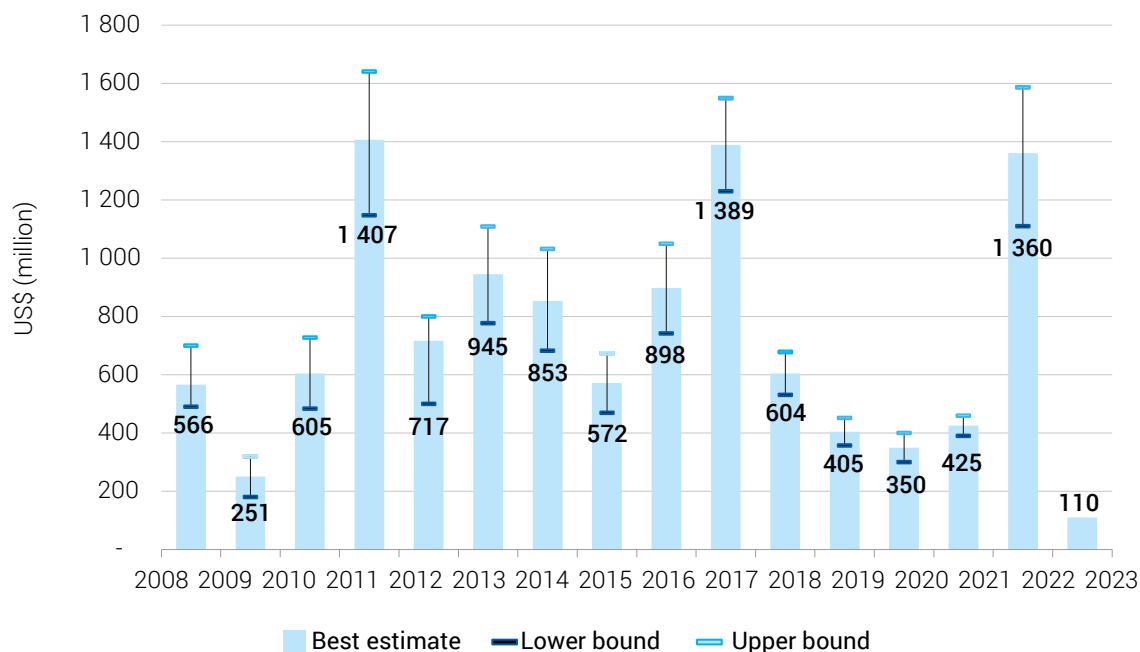
With cultivation plummeting even as opium prices increased sharply, total farmers' income from selling the 2023 opium harvest to traders declined by more than 92% from an estimated US\$1,360 million for the 2022 harvest to US\$110 million in 2023.

Although some farmers sold opium from previous harvests at higher farm-gate prices, it is unlikely that this benefited most households. Previous research from UNODC village surveys has estimated that some 80% of the opium harvest is sold by farmers within the same year, indicating that many farmers do not hold substantial stocks.¹ Farmers typically sell harvested opium quickly to meet immediate and basic needs, such as food, medical expenses or debt repayment. The drastic decline in opium income could exacerbate the already dire situation of farmers in rural Afghanistan, especially if no licit alternatives are available.

National monthly dried opium prices at farm-gate August 2004 to August 2023, adjusted for inflation



Estimated farmers' income from selling the opium harvest to traders, 2008-2023



Farmers' income is calculated based on an average sales price of opium during harvest time.

Farmers cultivated wheat and other licit crops in 2023, but the loss of cash income from opium poppy is a formidable challenge

The decline in opium poppy cultivation was met by an increase in cultivation of wheat, as farmers sought out alternatives. Wheat shares a similar crop cycle with opium poppy; both are sown around the same times. Consequently, farmers that previously cultivated opium poppy opted at the beginning of the season to cultivate wheat.

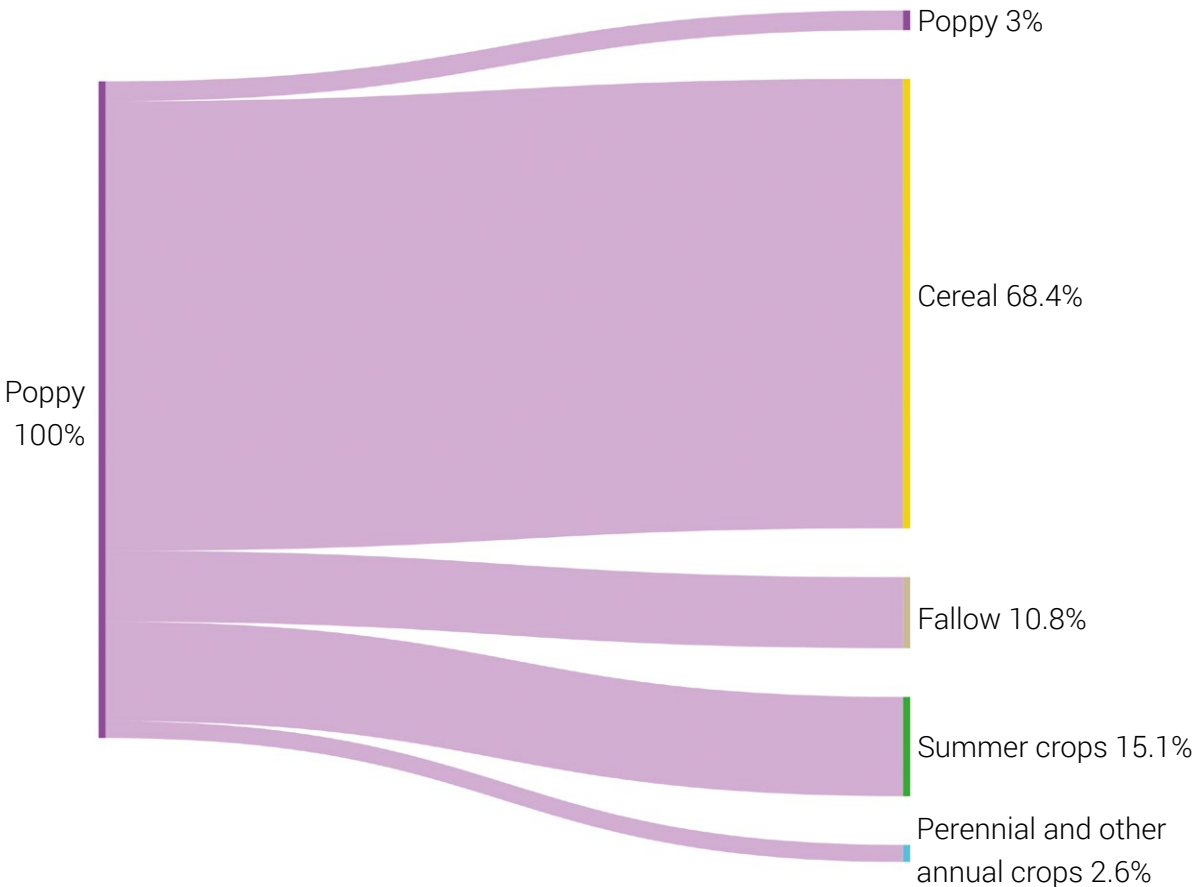
A focused remote sensing analysis for Farah, Helmand, Kandahar and Nangahar, which together represented 74% of opium poppy cultivation in 2022, indicated that approximately 68% of the 2022 opium poppy fields had been replanted with wheat including other cereal crops. In 2023, there was an overall increase of 160,000 ha in cereal cultivation across the four provinces, a large part due to replacing opium poppy with wheat.

Wheat generates much less income than opium. In 2023, the per-hectare income from wheat was US\$770 while opium yielded some US\$10,000. In 2022, this per-hectare income from opium was US\$6,800 before opium prices increased dramatically. A farmer cultivating wheat instead of opium in 2023 earned therefore only a fraction of what they could have earned in 2023 and what they had earned in 2022. Overall, in the four provinces covered, farmers who replaced opium poppy with wheat forewent about US\$ 1 billion of potential cash income between 2022 and 2023.

Some farmers reported that the sudden implementation of the ban prevented them from transitioning to high-value pomegranate, almond, pistachio and hing (*asafoetida*), which can take years to fully mature. The availability of wheat seeds has been reported as a reason to choose wheat over other annual crops such as okra or peas.

Wheat is the most important licit crop in Afghanistan (with 2,350,000 ha harvested in 2022).² However, recent production does not meet the needs of Afghans, as each year millions of tons need to be imported (3.4 million tons in 2023, 8% less than in 2022).³ Increased wheat production, in the immediate period, may therefore alleviate food insecurity to a certain extent (the additional amount harvested in the four provinces adds up to some 360,000 tons) but cannot replace the cash income from the opium poppy crops.

Crops cultivated on 2022 opium poppy fields in 2023 in Farah, Helmand, Kandahar, and Nangahar



The graph shows what was cultivated on opium poppy fields of 2022 in 2023. Some fields cultivated with other crops were cultivated with opium poppy in 2023, a change diagram of all categories is presented in the main body of the text. The analysis is based on the evaluation of 9,700 agricultural locations in the provinces of Farah, Helmand, Kandahar, and Nangahar, which together represented 74% of poppy cultivation in 2022.

The value of the opiate market in Afghanistan shrank by 90%, prompting traders to rely on their potential opium inventories to make up for the income they lost during the 2023 harvest.

The estimated value of opiate exports from the 2023 harvest was calculated at US\$190-260 million, down from US\$1.4-2.7 billion in 2021⁴ (when it accounted for 9-14 % of national GDP), or a reduction of some 90%.⁵

The production of opiates (opium, morphine, and heroin) has arguably been Afghanistan's largest and most reliable illegal economic activity. Until last year, the income from the manufacture and trafficking of heroin exceeded the income of farmers who cultivated opium by far, and the value of heroin exports alone has frequently exceeded the value of Afghanistan's licit exports of goods and services.

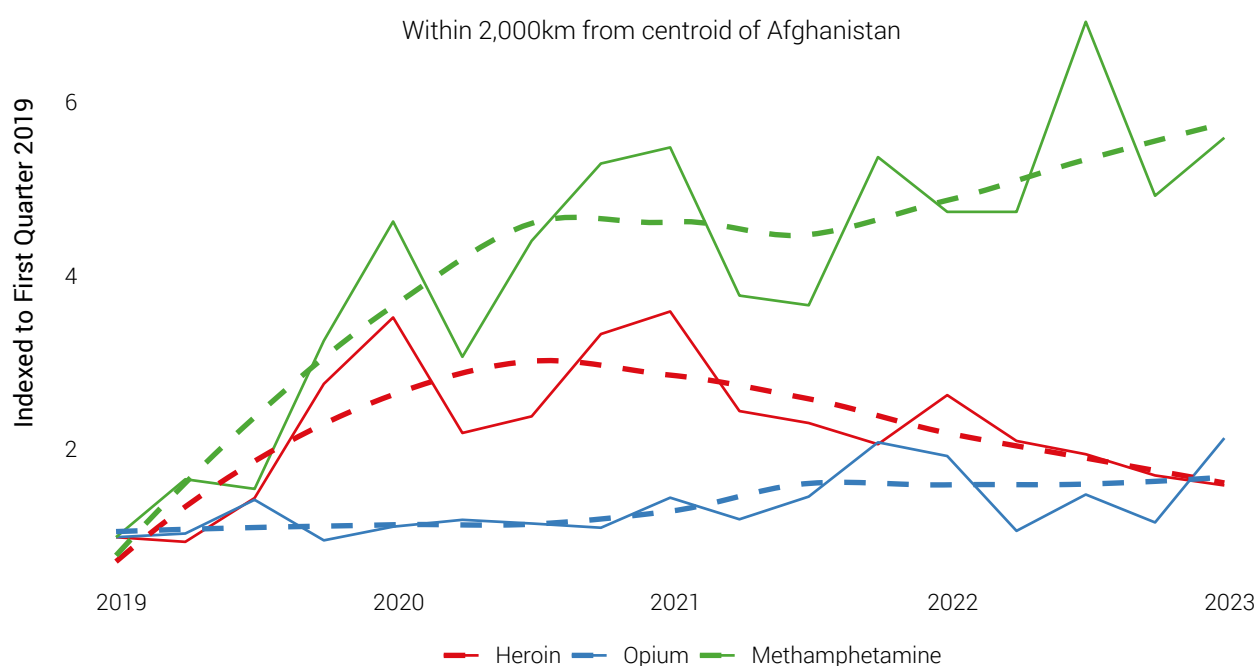
The strong contraction of the opiate economy in 2023 is likely to affect Afghanistan's economy at a larger scale. Opium has often served as an informal credit system, allowing farmers to invest in agricultural activities such as buying seeds and fertilizers. Lower income from opiate exports may lead to a contraction of domestic demand for goods and services and a further contraction of the economy.

Presently, the sale of opiate inventories at elevated prices may have mitigated some negative economic effects as it continues to bring foreign currency into the country. However, inventories will deplete, and the effects of a contracted opiate economy will be felt disproportionately across various segments of society. Higher opiate prices benefit those with larger opium inventories – and such actors are already in a better economic position as most small-scale farmers are, as the latter may not be able to afford to hold inventory beyond a single season.

Data on seizures in and around Afghanistan indicate that following the ban, opium inventories from past record harvests are being sold off, while heroin processing has decreased. Meanwhile, methamphetamine trafficking continues to surge in the region.

Individual heroin seizures recorded in and around Afghanistan continued to decline throughout 2022 into the first quarter of 2023, while opium seizures reached recent peaks in the beginning of 2023.

Trend in quarterly counts of seizure events relative to Q1 2019



Source: UNODC Drugs Monitoring Platform

The increase in opium seizures into 2023 suggests that inventories from prior harvests are clearing. Presently, total opium inventory is unknown but could be substantial after six straight highly productive years.

The ban on importation of necessary precursors for heroin production announced by the authorities in January 2023 and media reports of a 10-month waiver of tax on exported opium beginning in March 2023⁶ suggests that traders may have preferred to export opium rather than heroin. Under these conditions, the trend of declining heroin seizures may continue. It takes 1-2 years before opiates produced in Afghanistan reach their destination, and it is too early to assess the full impact of the 2022 drug ban.

The ban imposed by the De-facto Authorities in April 2022 applied to all activities related to narcotics and other drugs. The lack of robust methamphetamine production estimates makes it difficult to assess the impact of the ban on this market. However, in contrast to opiates, the steady increase in methamphetamine seizures around Afghanistan do not point to serious disruption of supply.

Outlook

Drastic reductions in opium poppy cultivation bring risks and opportunities.

As the drug ban continues to be in effect, farmers will need to decide whether to sow poppy for the 2024 harvest as early as the end of October or the beginning of November 2023. A sharp and continued increase in opium prices and the absence of viable alternative sources of income may encourage some farmers to return to poppy cultivation despite the drug ban.

Lack of licit economic opportunities and lack of access to markets have been identified in past research as some of the main drivers of illicit crop cultivation. Given reduced international aid, coupled with sanctions and restricted access to international payments systems, a limited number of opportunities for sustained economic recovery in the legal sphere remain in Afghanistan.⁷

Many farmers have cultivated cereals such as wheat instead of poppy, which can improve food security, but it will not completely replace the income lost from poppy cultivation and opium harvesting. The opium harvest creates, on average, the equivalent of more than 100,000 full-time jobs per year in about a third of Afghan villages, supporting not only farmers, but many others in the communities.

The contraction of the opiate economy to US\$190-260 million coincides with sharp declines in the country's GDP since 2020. Although UNDP has projected that real GDP will slightly increase by 1.3% in 2023, per capita GDP is estimated to decline by 4% due to population growth.⁸ In short, the overall economic situation is tenuous and many rural households are acutely vulnerable.

That said, the sharp reduction in opium cultivation in Afghanistan opens a window of opportunity to support rural communities and bring the country towards a licit trajectory of development with far-reaching implications. It may pave the way for diversifying Afghanistan's economy to legal sectors such as agriculture, manufacturing and services, and bolster economic stability.

A sustainable reduction in opium poppy cultivation, while improving or even maintaining the livelihoods of those engaged in it, will depend on whether farmers find suitable, economically viable alternatives that can offset their loss from opium income or at least meet their basic and immediate needs. This will require greater cooperation with international partners and a willingness on the part of authorities to promote sustainable and equitable programmes.

Beyond Afghanistan, less heroin may lead to reduced trafficking and use. It could also spur the emergence of more harmful alternatives.

Global heroin markets supplied by opium poppy cultivated in Afghanistan may face severe supply shortages in the coming years. The last nationwide ban enforced by the Taliban, in 2000 and 2001, did not cause major disruptions because there were sufficient opium inventories along the supply chain. But the ban had a significant impact only on the 2001 harvest and opium poppy cultivation quickly resumed. In the current situation, it is unknown how much opium or opiates are stockpiled or stored as inventories after several highly productive years.

A sustained reduction in opium production in the country may lead to a series of consequences: a displacement of opium production to other countries, overall decreases in opiate use, a reduction in purity or replacement of heroin or opium by other substances in retail markets, some of which may be even more harmful (such as fentanyl or other synthetic opioids). Distributors in retail markets may adapt to shortages by substituting other synthetic opioids, which are cheap, potent and can be readily accessible online. The experience in North America with fentanyl overtaking heroin in major drug markets is illustrative of how a cheaper and readily available synthetic opioid can easily displace heroin.

Policy implications

Meeting basic needs

The ban has immediate humanitarian consequences, especially for the most vulnerable rural communities, that need to be urgently addressed. Many Afghan households have relied on opium poppy cultivation for their livelihoods. The drastic reduction of income for farming households will put pressure on rural Afghans to meet basic needs in the short term, particularly if farmers continue to abstain from opium poppy cultivation.

Economic development and alternative livelihoods

In the long run, sustainable alternative livelihoods for farmers are needed. Viable and long-term alternatives are often not easily accessible to farmers because they require upfront investment and income for few years while cash crops (e.g., pomegranate, almond and hing) reach profitability. Infrastructure development, agricultural diversification and vocational training programmes can create viable, licit alternatives and sustained economic growth.

It is important to generate evidence for programmes that provide sustainable alternative livelihoods to rural communities. Development interventions should include a robust monitoring and evaluation framework to assess its impact and consider the long-term needs of rural communities, such as healthcare, education, and basic infrastructure.

The reality on the ground must also be considered. Afghanistan is confronted with severe water scarcity challenges, and the climate crisis is expected to worsen this situation in the future. Therefore, any intervention needs to be designed thoughtfully to fit with the unique context of Afghanistan and the environmental challenges it faces. Sustainable alternative livelihoods should not be highly water dependent but resilient to the effects of climate change (e.g., drought-resistant agricultural activity). Establishing rain water harvesting structures, supporting watershed management and installation of drip irrigation systems, actively contributes to environmental protection and recovery.

Lastly, research has shown that rural development efforts are more successful and transformative when they incorporate the participation and leadership of women in affected communities.⁹ It therefore is critical that women be part of ongoing and future rural development projects. Restrictions at the national or local level on the social and economic activity of women in Afghanistan will hamper successful transitions to licit alternatives.

Transnational organized crime

Reduced incomes along the Afghan opiate supply chain could stimulate alternative illicit activities, potentially leading to increased trafficking in other substances such as synthetic drugs like methamphetamine, or expansion of other organized criminal activities in the broader region. These could include expansion of illicit arms trafficking, human trafficking and smuggling of migrants, illegal mining or trafficking in cultural property. Opiate production could emerge in countries other than Afghanistan.

To effectively address the growth or emergence of new organized crime threats, international cooperation in combatting trafficking (including of precursors) and related illicit financial flows, including with joint operations, controlled deliveries, and research and analysis to identify and monitor trends will be needed to investigate and address shifting activities.

Drug demand reduction and public health

A sustained reduction in drug supply should be complemented by robust public health measures to reduce demand for opiates and to prevent the substitution of opiates with potentially even more harmful substances. The emergence of fentanyl and other potent synthetic opioids has shown that markets can transform; heroin shortages could lead to increased infiltration of established heroin markets with synthetic opioids, possibly increasing potency and bringing a heightened risk of overdoses. Authorities must continue to monitor developments in retail markets, examining purity-adjusted prices, availability of heroin and other substances and respond with appropriate treatment responses.

Afghanistan has been found to have high levels of opiate use in the population.¹⁰ Within Afghanistan, a severe shortage of opiates could force many individuals into withdrawal. Limited availability of evidence-based treatment puts many opiate users at risk. Methamphetamine is not an opioid, but absent proper treatment, some individuals who use opiates may resort to what is readily available during shortages, as has been the case elsewhere.¹¹ Drug use disorders are complex health conditions with biological, environmental, and psychosocial determinants with a potential to cause health, safety and social problems. However, evidenced based prevention and treatment programmes, and policies are shown to reduce drug use disorders and related harms significantly. Expanding access to evidence-based treatment for drug use disorders and prevention of drug use should be a policy priority with adequate resource allocation. Collaborative actions are needed to develop comprehensive, public health-based approaches that reduce demand for illicit substances, relieve suffering, and decrease drug-related harm. Untreated drug use disorders increase morbidity, mortality, and societal costs, including lost productivity, healthcare expenses, and various social consequences. Support for evidence-based treatment should be integrated into public health measures and assistance.

Introduction

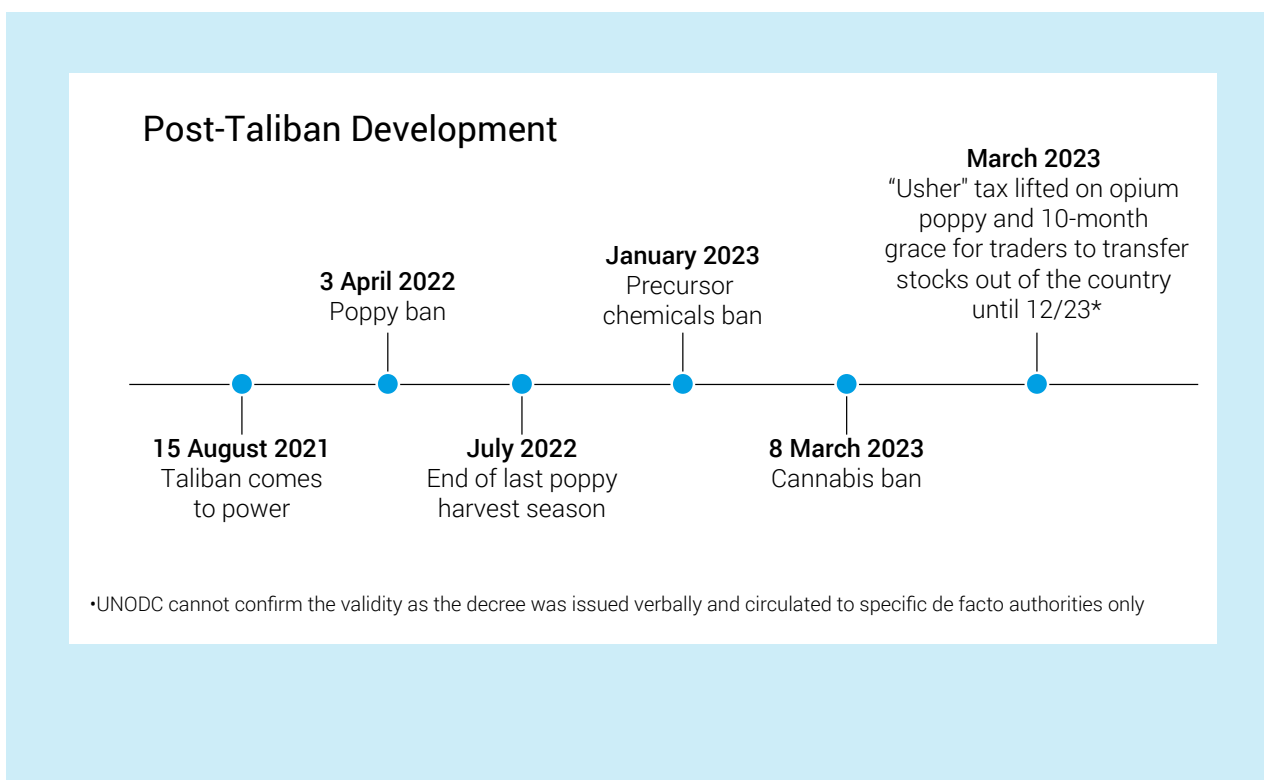
The Afghanistan Opium Surveys are implemented under the project “Monitoring of Opium Production in Afghanistan” (AFG/F98). Information and data contained in this report, unless otherwise stated, are based on data collected by UNODC by remote sensing, through rural village surveys and other tools; as well as through global data collections on drugs (UNODC Annual Report Questionnaires and UNODC Drugs Monitoring Platform). Data on opium cultivation and production are based on the Afghanistan Opium Surveys 1994-2020 jointly published by UNODC and the Government of Afghanistan, as well as the Afghanistan Opium Surveys conducted by UNODC in 2021, 2022, and 2023.

The results provide a detailed assessment of the outcome of the current year’s opium season and together with data from previous years, enable the identification of medium- and long-term trends in the evolution of the illicit drug problem. This information is essential for planning, implementing and monitoring the impact of measures required for tackling a problem that has far-reaching implications for Afghanistan and the international community.

The opium survey is implemented within the technical framework of the UNODC Illicit Crop Monitoring Programme (ICMP), established in 1999 upon request of the Commission on Narcotic Drugs in its resolution 42/3, Monitoring and verification of illicit cultivation. The objective of ICMP is to assist the international community in monitoring the extent and evolution of illicit crops and to compile reliable and internationally comparable data. Currently, UNODC carries out and supports monitoring activities in seven countries affected by illicit crop cultivation: coca surveys in Bolivia, Colombia, and Peru; and opium poppy surveys in Afghanistan, Lao PDR, Mexico and Myanmar.

Timeline of drug-related decrees issued by the De facto Authorities

- On 3 April 2022, the DfA issued a Decree on the “Prohibition of Poppy Cultivation and All types of Narcotics.” The Decree not only prohibited poppy cultivation but also usage, transportation, manufacture, trade, export, and import of all types of narcotics.
- The previous government, as state party to the international drug control conventions, had in place bans on opium poppy cultivation and other drug production and trafficking. The DfA’s Decree, however, may have sent a strong signal to farmers and producers, as did the previous Taliban ban on opium poppy in 2000 and 2001, which was strongly enforced.
- The April 2022 decree included a two-month grace period granted to farmers to harvest and sell their products, which allowed for the 2022 opium season to be concluded without being affected by the policy. That year the harvest was estimated at 6,200 tons of opium, equivalent to some 350-580 tons of heroin of export quality.
- Most of the 2023 winter crop (including opium poppy) had been sown in November 2022 and harvest started in April 2023.
- On January 2023, the DfA promulgated a ban on the import of precursors used to manufacture heroin from opium. Precursors were controlled in Afghanistan before the decree; the ban, however, reinforced the signalling of strong enforcement.
- In March 2023, media sources suggested for some areas a 10-month period to traders to export opium out of Afghanistan, during which imposed taxes for the trade in opium are being waived. The goal was reportedly to end the opium trade in Afghanistan by liquidating all remaining stocks and discouraging future poppy cultivation.⁶



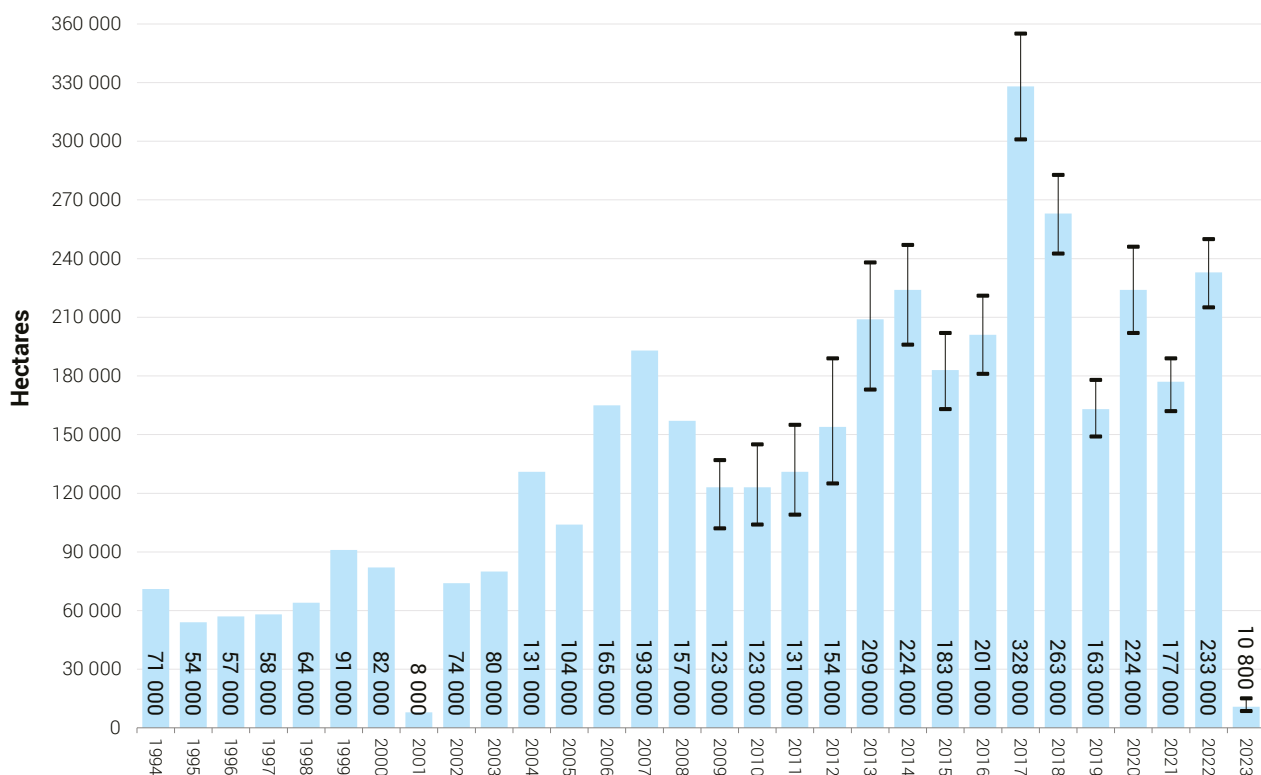
Opium and heroin production

As a result of declines in poppy cultivation, opium production is down sharply as is the amount of export quality heroin

Poppy cultivation estimates

The area under opium poppy cultivation in 2023 was estimated at 10,800 (8,600-15,100) ha, which is a 95% decline from the 2022 estimate (233,000 ha). In absolute numbers, area under cultivation declined by 222,000 ha. The 2023 area under cultivation is by far the lowest in the past twenty years. Since the beginning of systematic monitoring, only in 2001, during the previous opium ban, was less poppy cultivated in Afghanistan (8,000 ha).

Area under opium poppy cultivation in Afghanistan, 1994-2023



Source: UNODC

Decreases in opium cultivation were observed in all major opium poppy cultivating provinces; most importantly in Helmand province, which stands virtually poppy-free at 142 ha in 2023; a reduction of more than 121,000 ha. In 2022, Helmand province accounted for more than 50% of national area under cultivation. In 2023, the province accounted for just 1%.

Opium poppy cultivation is now concentrated in Kandahar, particularly in the northern part of the province, which in 2023 accounted for 33% of the estimated national total, making it the country's dominant poppy-producing province. Badakhshan, at some 1,573 ha made up 15% of the national total, followed by Zabul at 8%. Opium cultivation remained concentrated in the South-western region of the country, comprising Helmand, Kandahar, Nimroz, Uruzgan and Zabul, with some 49% of the total, followed by the North-East contributing 15%.

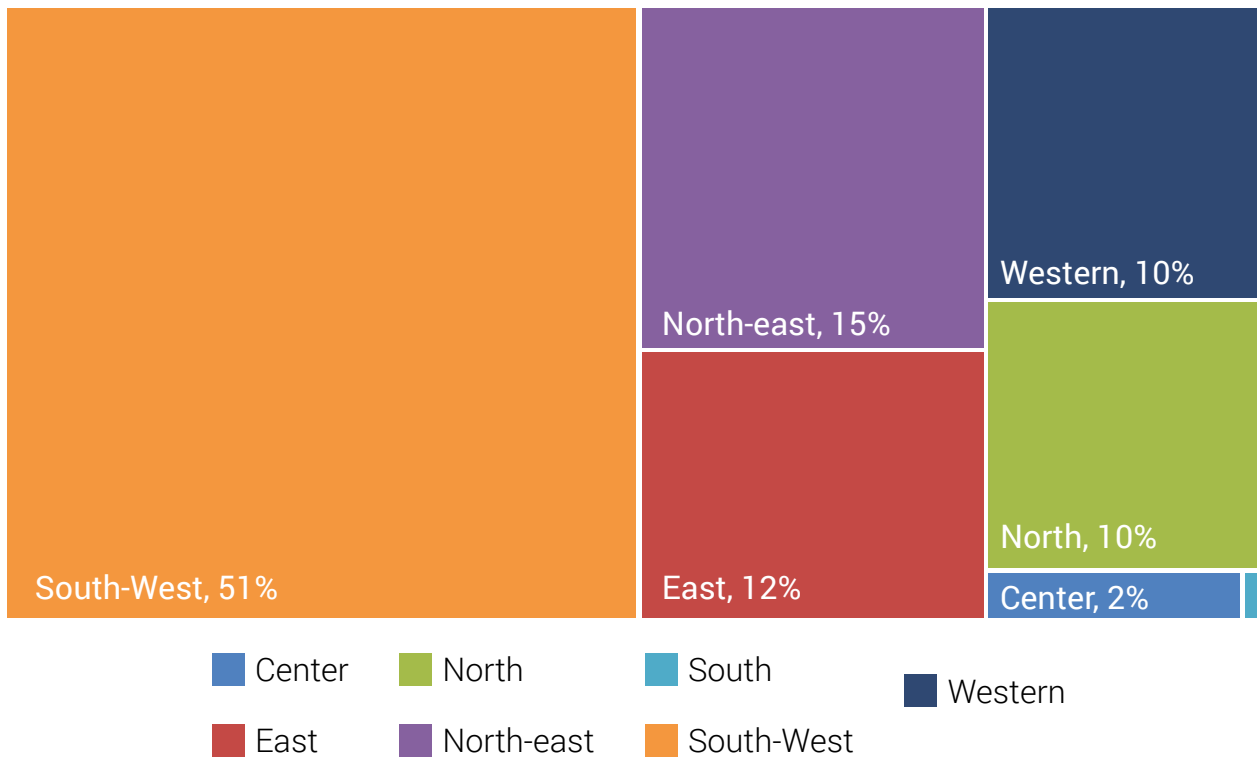
The number of poppy-free provinces, more than doubled in 2023 from the year before from 11 to 24 provinces out of a total of 34 provinces in Afghanistan. A province is considered to be poppy-free if there are less than 100 ha of estimated cultivation. The area under cultivation estimated in provinces considered poppy free totalled some 420 ha.

Main opium poppy cultivating provinces and former important provinces, 2019-2023

Province	2019	2020	2021	2022	2023	Reduction (ha) 2022 - 2023	Percentage of country total
Kandahar	14,000	20,600	17,000	29,200	3,550	25,650	33%
Badakhshan	4,700	6,400	3,600	4,300	1,600	2,700	15%
Zabul	200	400	1,000	1,550	900	650	8%
Uruzgan	11,600	13,400	9,700	14,600	650	13,950	6%
Faryab	6,600	13,100	4,800	6,900	550	6,350	5%
Nangarhar	3,100	2,200	2,000	5,200	550	4,650	5%
Badghis	7,600	22,400	4,900	14,100	400	13,700	3%
Helmand	90,700	115,600	109,800	122,000	150	121,850	1%
Balkh	7,000	5,900	2,200	4,500	150	4,350	1%
Farah	7,100	10,500	11,500	15,800	150	15,650	1%

Estimates are rounded, percentage changes have been calculated based on precise figures.

Distribution of opium poppy cultivation by region, 2023



Opium cultivation by province and region, 2020-2023

PROVINCE	Cultivation 2020 (ha)	Cultivation 2021 (ha)	Cultivation 2022 (ha)	Cultivation 2023 (ha)	Change 2022-2023 (%)
Bamyan	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Day Kundi	550	792	837	Poppy-free	Poppy-free
Kabul	284	216	216	Poppy-free	Poppy-free
Kapisa	178	216	184	Poppy-free	Poppy-free
Logar	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Panjshir	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Parwan	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Wardak	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Central Region	1,011	1,223	1,236	Poppy-free	-100%
Kunar	595	626	822	364	-56%
Laghman	723	987	1,102	435	-61%
Nangarhar	2,225	2,027	5,241	530	-90%
Nuristan	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Eastern Region	3,543	3,639	7,165	1,329	-81%
Badakhshan	6,395	3,561	4,305	1,573	-63%
Kunduz	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Takhar	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Baghlan	572	188	615	Poppy-free	Poppy-free
North-eastern Region	6,967	3,750	4,920	1,573	-68%
Balkh	5,946	2,177	4,542	132	-97%
Faryab	13,083	4,778	6,929	532	-92%
Jawzjan	1,124	708	1,359	Poppy-free	Poppy-free

Samangan	Poppy-free	141	132	Poppy-free	Poppy-free
Sari Pul	2,607	1,975	3,454	318	-91%
Northern Region	22,760	9,780	16,415	983	-94%
Helmand	115,597	109,778	122,045	142	-99.9%
Kandahar	20,555	16,971	29,229	3,544	-88%
Uruzgan	13,444	9,746	14,557	647	-96%
Zabul	408	980	1,531	882	-42%
Nimroz	2,931	2,304	2,429	102	-96%
South-Western Region	152,935	139,780	169,791	5,316	-97%
Khost	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Paktya	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Ghazni	290	127	163	Poppy-free	Poppy-free
Paktika	Poppy-free	Poppy-free	Poppy-free	Poppy-free	No change
Southern Region	290	127	163	Poppy-free	-100%
Badghis	22,402	4,904	14,110	368	-97%
Farah	10,483	11,461	15,829	127	-99%
Ghor	2,848	1,451	1,784	647	-64%
Hirat	455	290	1,337	Poppy-free	Poppy-free
Western Region	36,188	18,107	33,059	1,142	-97%
Total (rounded)*	224,000	177,000	233,000	10,800	-95%

* Poppy-free provinces include provinces with less than 100 ha in cultivation. National total includes opium poppy found in poppy-free provinces. Numbers are rounded, percentages are calculated based on exact figures.

Methodology for estimating area under cultivation with opium poppy

UNODC acquired and analysed almost 900 very high-resolution satellite images on a field-by-field basis, building on two decades of experience in monitoring opium cultivation in Afghanistan and other countries. This process yields high-precision results and is considered to be more accurate than other methods that automatically compare overall changes in agricultural patterns based on lower resolution imagery.

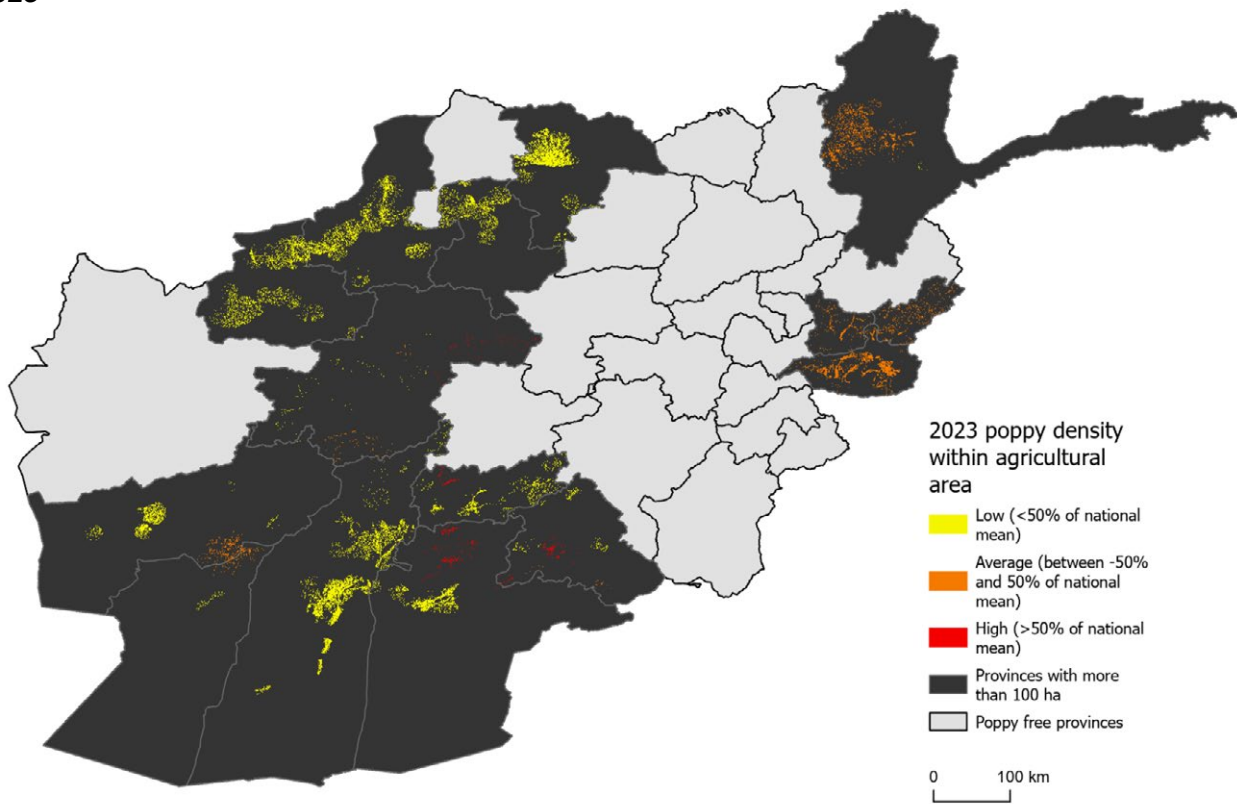
Opium poppy can best be identified on imagery when it is in bloom, close to harvest time. Harvest time can vary by region in Afghanistan. In the South, maturity occurs around April, but in provinces in the North and provinces with cultivation at high altitudes (such as Badakhshan or Ghor provinces), opium harvesting starts at the end of June and beginning of July. Satellite imagery is obtained during a time window that varies across provinces before the harvest commences.

Once the imagery is collected it is analysed by trained staff and the interpretation process is subject to standard quality control measures. In addition, supplementary data are collected, including on harvesting of other crops which aids in identifying opium poppy fields, remoteness, and location of fields (such as in backyards) and field sizes. These allow for understanding the dynamics of opium poppy cultivation in each field.

The methodology is designed to furnish accurate estimates at a local level and involves a detailed assessment of other crops that have been planted instead of opium poppy. The methodology further enables the identification of pockets of opium poppy that might not be visible in lower-quality imagery, where small fields are not likely to be identified correctly.

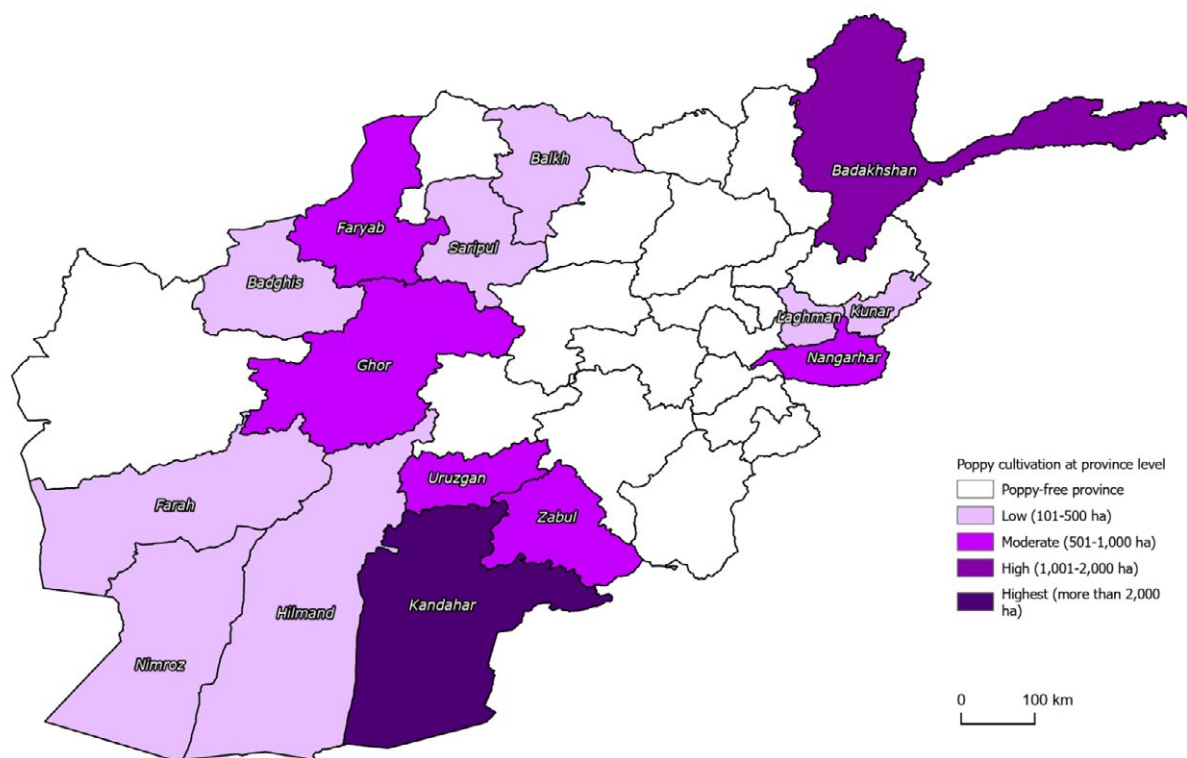
A detailed description of the methodology is provided in the online annex.

Density distribution of the 10,800 ha of opium poppy cultivation across provinces in Afghanistan, 2023

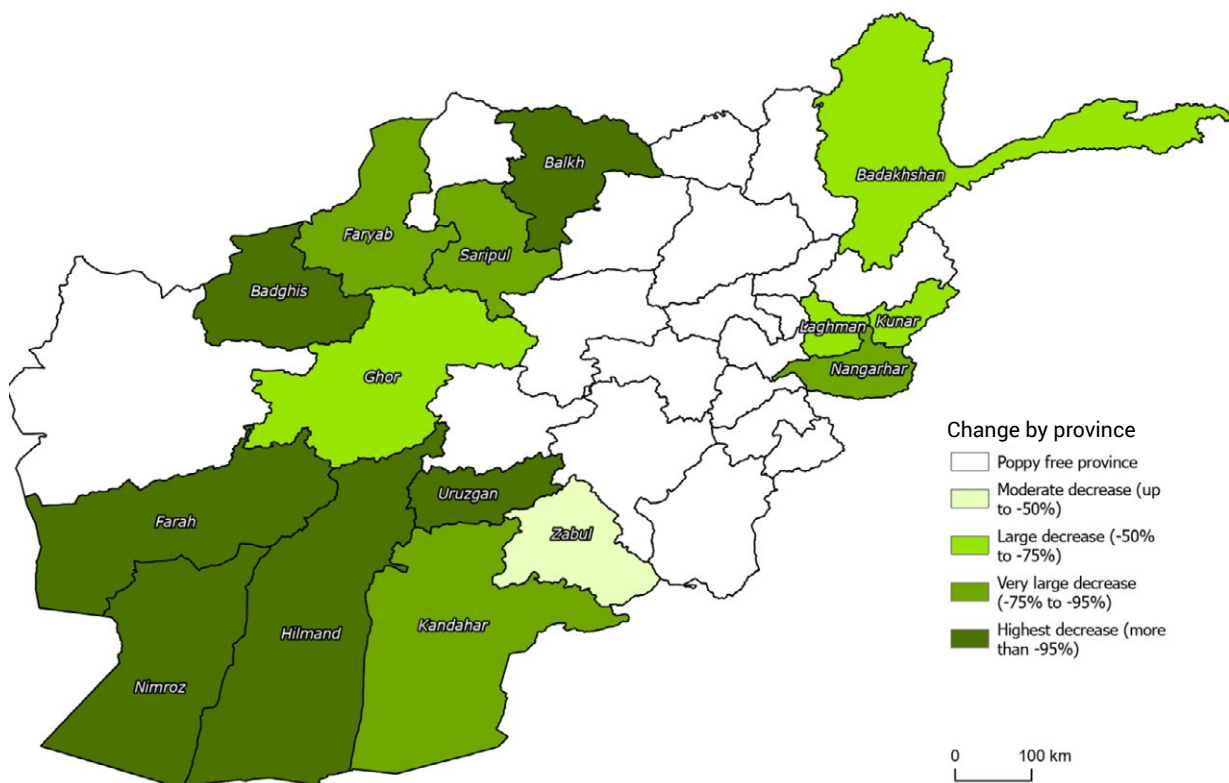


Red areas indicate 'pockets' of opium poppy cultivation, with – in comparison to the remainder of the country – high densities of opium poppy cultivation. In comparison to earlier years, density is very low. Grey provinces are estimated to have less than 100 ha of cultivation and are considered poppy-free. Opium poppy density is calculated by its preponderance within the area's agricultural land.

Opium poppy cultivation by province, 2023



Change in area under opium poppy cultivation, by province, 2022 to 2023



Historical context of previous opium ban under the Taliban in 2000 and 2001

From July 2000 until fall 2001 the Taliban, which had assumed control over much of Afghanistan in the mid-1990s, issued a similar ban on poppy cultivation and opium production, resulting in a 90% reduction of opium poppy (from 82,000 ha in 2000 to 8,000 in 2001). The ban was short lived as the Taliban was toppled in late 2001. However, the ban affected the opiate market similarly to what is witnessed today.

Nominal price of a kilogram of dried opium at farm-gate jumped from under US\$100 in 2000 to a peak of nearly US\$700 by September 2001. Traders sold off stocks fearing destruction or the inability to sell opium.¹² Analysis pointed to an abrupt reduction of seizures for heroin and opium in Afghanistan and in neighbouring countries. There were some indications of declining purity of heroin seizures and modest increases in prices in retail markets long supplied by Afghanistan.¹³ However, supply-side shocks were mitigated by substantial opium inventories along the entire supply chain that were sold off at the time.¹⁴

Opium production and potential heroin production

The drastic reduction in opium poppy cultivation in 2023 led to an equally severe reduction in opium production. Estimated at less than 333 (265-465) tons, opium production remains a fraction of what it has been in previous years – for six consecutive years, opium production exceeded 6,000 tons annually. In 2022, production totals were estimated at 6,200 tons and the decline to 333 tons represents a 95% decline in total production.

In absence of a field-based survey, UNODC used remote sensing techniques coupled with historical information on opium poppy yields to construct region-specific yield estimates for 2023 (nationally, the average yield is estimated at 31.0 kg of opium per hectare: this is an average of the past six years for which data is available). Agricultural cultivation and output in general was near the five-year average in many parts of the country.¹⁵ The drastic reduction in opium production is driven almost entirely by the reduction in opium poppy cultivation, and not by variation in opium poppy yields.

Heroin production estimates

The entire 2023 opium harvest of 333 tons could theoretically be converted into 24-38 tons of heroin at export quality (50-70% purity). In comparison, the 2022 harvest could have produced 350-580 tons of heroin of export quality.

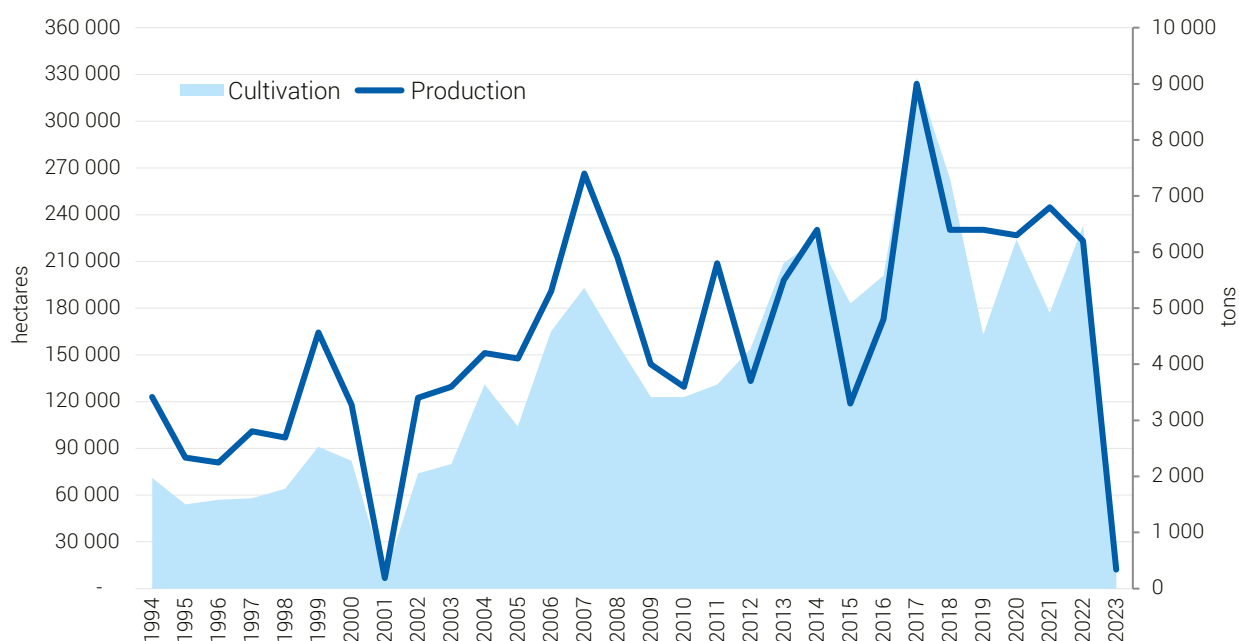
These estimates do not consider seizures or other losses along the supply chains from source to destination countries or consumption of opium in Afghanistan and the wider region; the amount of heroin that potentially reaches international markets is therefore lower than these estimates.

The value of exported opiates depends on the shares of opium exported in the form of heroin and in the form of opium. Analyses of previous years indicated that between 40% to 60% of the opium harvest was exported either for use directly in neighbouring countries or for conversion into heroin outside of Afghanistan.¹⁷ It is challenging to produce a similar estimate for 2023 given the selling of stored opium, however, seizure data in and around Afghanistan indicates increasing opium seizures and declining heroin seizures since the 2022 opium harvest (see respective section later in the report). This points towards reductions in heroin manufacture inside the country.

There is great uncertainty around these estimates, since potential heroin production is driven by a variety of factors. Little is known about the efficiency and capacity of heroin and morphine laboratories in Afghanistan in recent years, and the purity of seized product is often unknown. Precursors and chemicals used, such as acetic anhydride, ammonium chloride, acids, bases and solvents, are of unknown purities. Purity data collected on heroin in and around Afghanistan suggests that there is a wide range of different qualities of heroin in the market.

The estimates here are based on a number of assumptions,¹⁸ which are subject to change – many of the above factors may have changed subject to the currently dynamic situation in and around Afghanistan.

Area under opium poppy cultivation (line) and opium production (shaded area) in Afghanistan, 1994-2023



Opium production, by region, 2022 and 2023

Region	Production 2022 (tons)	Production 2023 (tons)	Change (%)	Production 2023 as % of total
Central	38	6	-84%	2%
Eastern	268	47	-82%	14%
Northern	555	37	-93%	11%
North-eastern	181	60	-67%	18%
Southern	6	<0.6	-83%	<0.2%
South-western	4,496	158	-96%	47%
Western	656	25	-96%	7%
Total*	6,200	333	-95%	100%

Production in tons is rounded to the nearest whole number. Detailed yield estimates and a description of the methodology can be found online.¹⁶ The totals include production from provinces with less than 100 hectares of cultivation (considered poppy-free), this is for example the case in provinces in the Southern region (poppy-free)

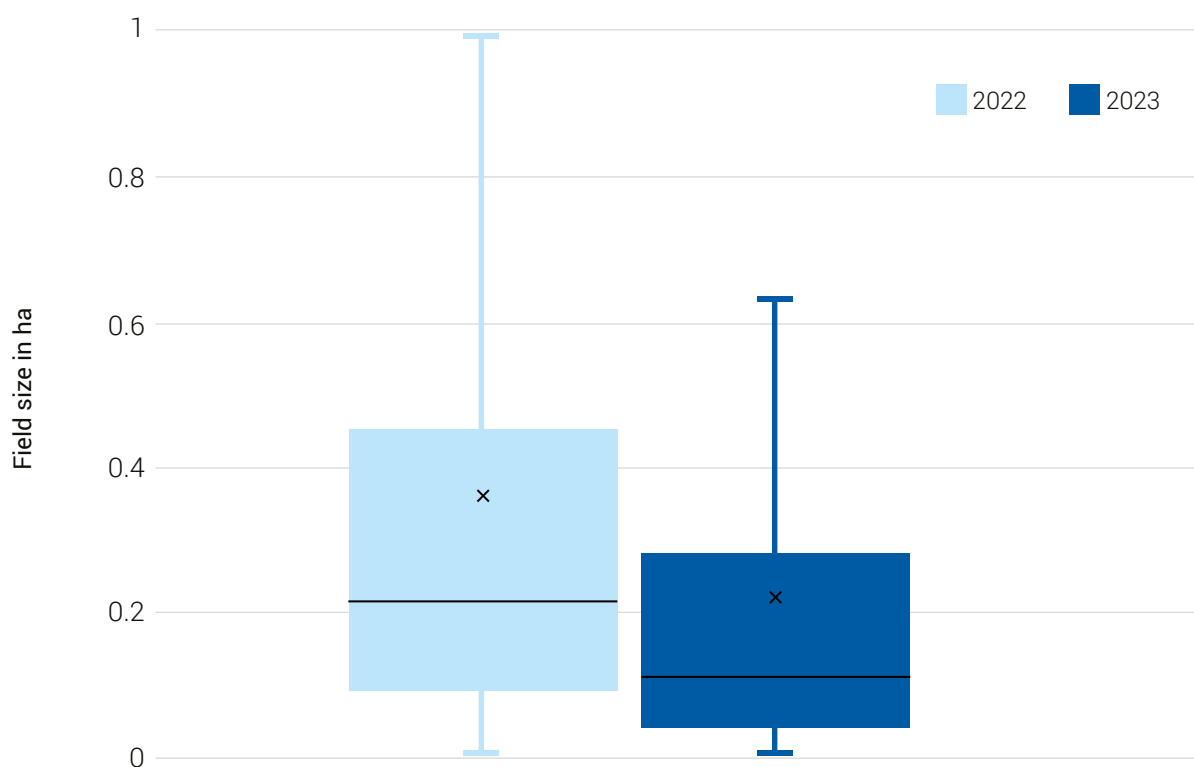
Poppy fields characteristics

Farmers cultivated opium on smaller fields and in more remote locations

Farmers cultivated much less opium poppy in terms of the number of plots but also less intensively on significantly smaller fields than in 2022. The median field size reduced by 49%, and the share of fields smaller than half a hectare increased from 78% in 2022 to 87% in 2023.

Remote sensing data and reports from the field indicated that opium poppy was moved to more remote and concealable locations, such as into yards and other confined areas, hidden from sight. Farmers may have done so to avoid eradication and other legal repercussions. Smaller fields not only reduce the footprint, and thus visible risk of detection, but also the amount and variety of inputs needed. Smaller field size means less need for pesticides, fertilizers, and labour for weeding and lancing. Additionally, some farmers may have attempted to spread the risk of eradication over multiple smaller fields.

Boxplot of opium poppy field sizes 2022 and 2023



The whiskers show the range of field sizes for each year, 50% of values fall within the box and the line in the box indicates the median (50% of values are larger, 50% smaller than that value). Outliers have been omitted in the graph for clarity.

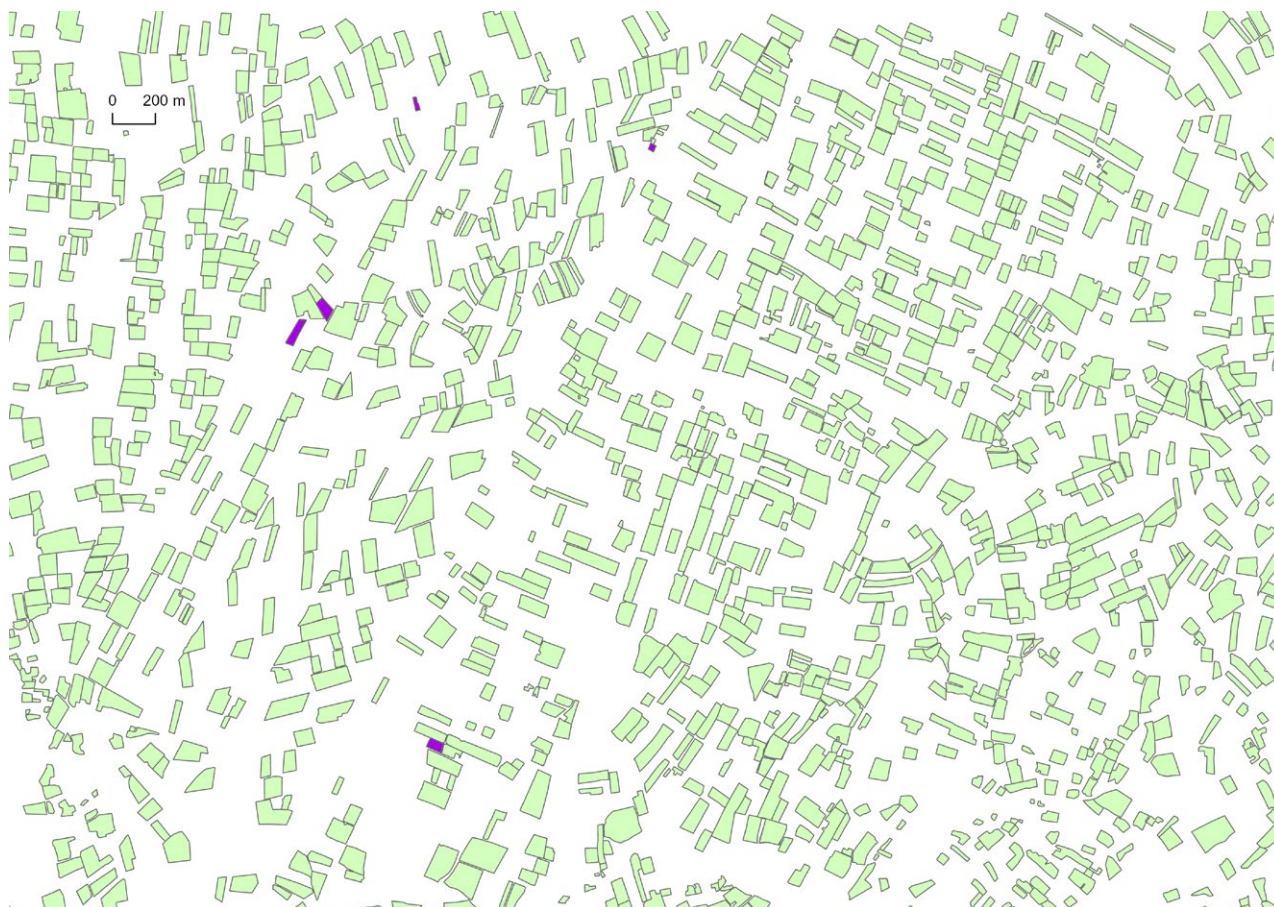
Comparison of the share of opium poppy field sizes, all opium poppy cultivating provinces, 2022 and 2023

	2022	2023
Average field size (ha)	0.36	0.23
Median field size (ha)	0.22	0.11
Fields larger than 0.5 ha (% of all fields)	22%	13%
Fields larger than 1 ha (% of all fields)	7%	3.7%
Fields larger than 2 ha (% of all fields)	1.3%	0.5%
Fields larger than 5 ha (% of all fields)	0.08%	0.01%

Examples of small fields and fields in confined areas (gardens) in Nangarhar. As comparison, a soccer field has the area of 0.714 ha, and 0.01 ha corresponds to 100 square metres.



Example of opium poppy fields identified in 2022 (green) and 2023 (purple) in Helmand province



Alternatives to opium

Farmers adhered to the ban and cultivated other crops in 2023, but most alternatives did not generate the same levels of income as poppy

A comparison of planting patterns of 2022 and 2023 revealed that many farmers that planted opium poppy in 2022 cultivated cereals (mostly wheat) in 2023. In most provinces, the primary opium poppy season runs from October/November to April/May, with a secondary, albeit less productive sowing and harvest period later in the year. Wheat shares this dual-harvest cycle, unlike many cash crops such as okra or peas, which yield only a single annual harvest. Moreover, wheat is typically sown concurrently with opium poppy.

Wheat is the most important licit crop in Afghanistan (with 2,350,000 ha harvested in 2022).¹⁹ However, production does not meet the needs of Afghans, as each year millions of wheat tons need to be imported (3.4 million tons in 2023, 8% less than in 2022).²⁰

An analysis of 9,700 locations using remote-sensing data from Helmand, Nangarhar, Farah and Kandahar (representing 74% of all opium poppy cultivation in 2022), showed that 68% of the 2022 opium poppy fields were planted with cereals in 2023, and 15% with summer crops, such as maize, cotton or some vegetables, which are planted and harvested later than poppy or cereals. Cereal cultivation increased overall in these provinces by some 160,000 ha when compared to 2023.

Increased wheat production, in the immediate period, may alleviate food insecurity to a certain extent (the additional amount of wheat harvested in the four provinces adds up to some 352,000 tons) but cannot replace the cash income from the opium poppy crop.

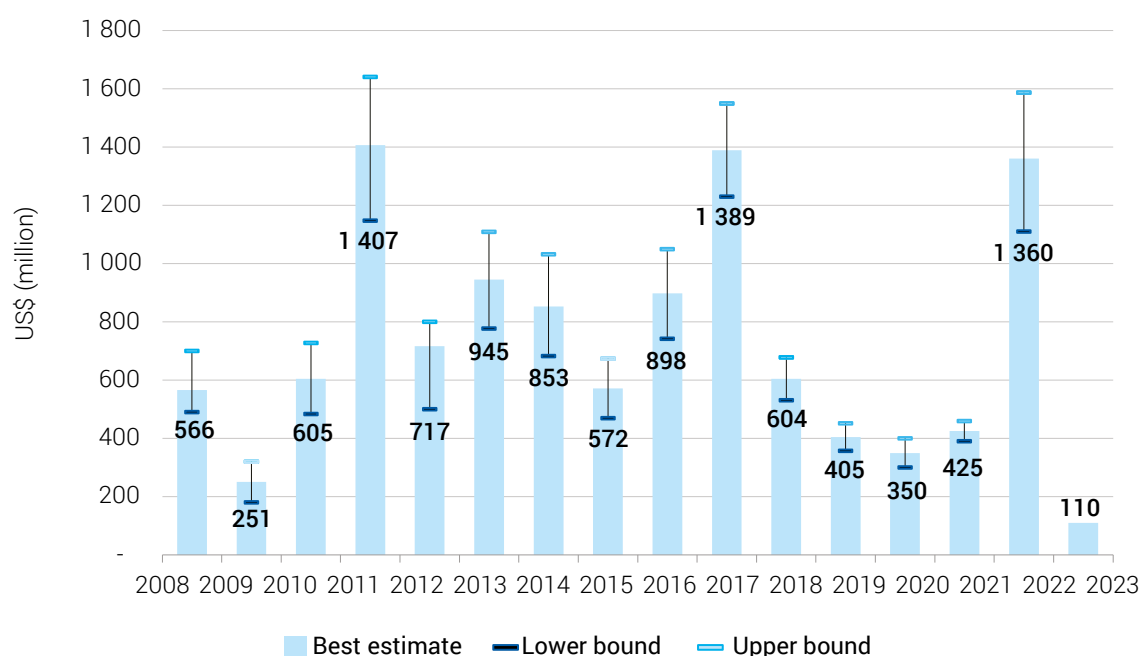
Wheat generates much less income than opium. In 2023, per-hectare income from wheat was US\$770 while opium yielded some US\$10,000.²¹ Many farmers were therefore not able to substitute the income lost from opium, even though some increasingly cultivated summer crops, which can include high-value crops such as cotton and maize. Others increased the cultivated area overall by reducing the number of fields left fallow.

In 2023, the farmers' income from selling opium to traders declined by 92% from an estimated US\$1.36 billion in 2022 to US\$110 million in 2023, and only a fraction of this was replaced by the income from alternative crops.²² Overall, in the four provinces covered, farmers who replaced opium poppy with wheat forewent about US\$ 1 billion of potential cash income between 2022 and 2023.²³

For some, however, the drastic reduction in income from the 2023 opium harvest might have been mitigated by the sales of stored opium. It is unknown how much stored opium each rural household has, but the absence of opium production for 2023 represents a nearly complete loss of opium income for farming households. Past research has estimated about 80% of opium was sold within the same year and that households that retained inventory were those that could afford to do so.²⁴ Therefore, most farmers may not have much inventory to cushion against such a contraction and those that did are unlikely to have sufficient stockpiles to last more than one annual season.

The drastic decline in opium income may exacerbate the lack of economic opportunities and the overall dire economic situation of farmers in rural Afghanistan, especially if the trend continues in coming years.

Farmers' income from opium sales to traders, 2008-2023

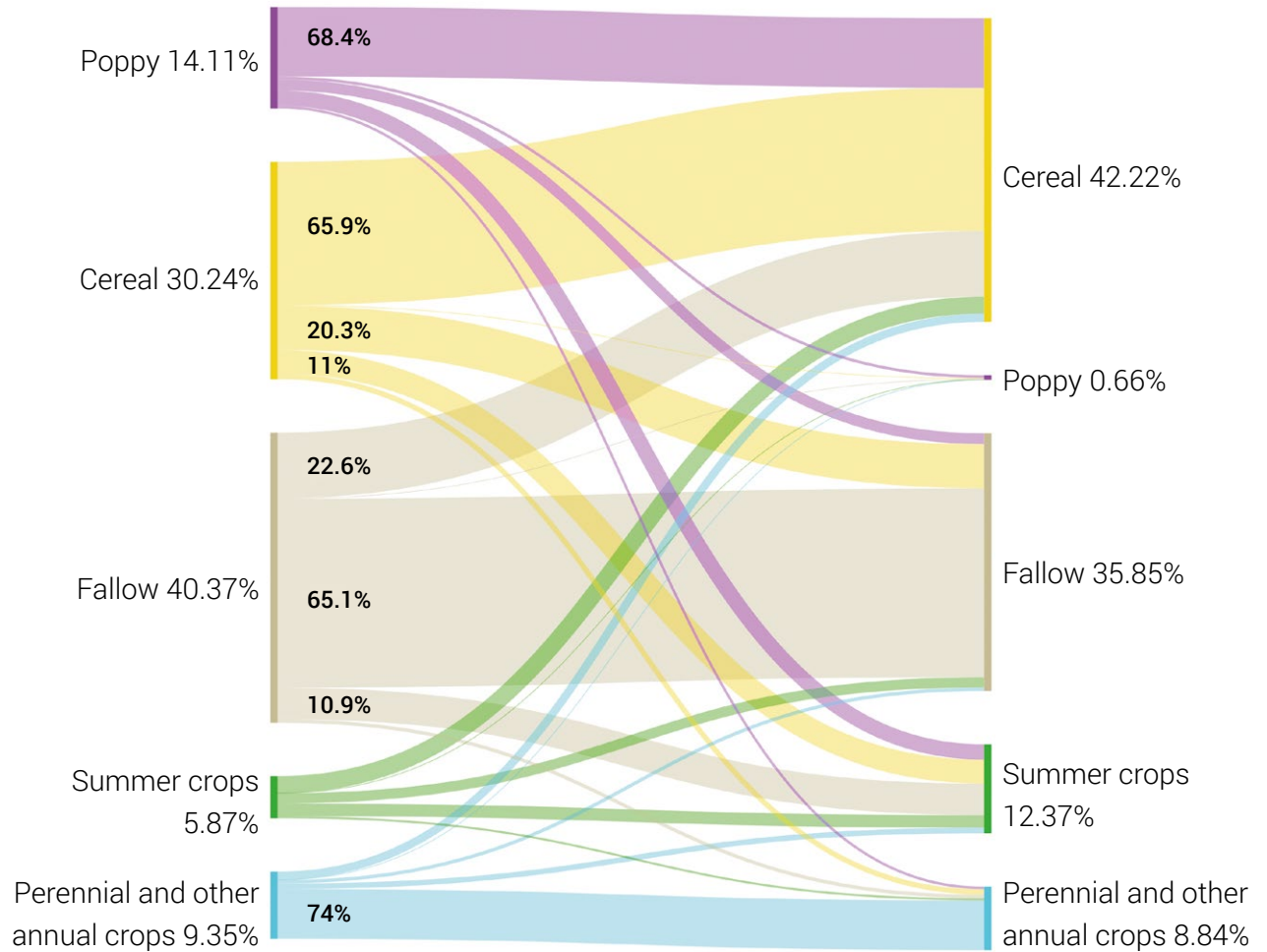


How did eradication efforts impact area under cultivation?

The De-facto Authorities reported to UNODC a total of 100.63 ha of eradicated opium poppy fields in Nangarhar. A total of 170 points of alleged eradication were shared with UNODC, 94% concentrated in Shenwar and Achen districts. There have been media reports of authorities eradicating opium poppy crops in other provinces, but UNODC was not able to confirm this information. The extent to which eradication occurred across the country can therefore not be quantified with the current data available.

However, the available evidence indicates that the reduction in opium poppy cultivation has been mostly due to farmers' choices not to grow opium poppy from the outset rather than eradication of opium poppy fields. The shift toward wheat cultivation suggests that farmers mostly adhered to the drugs ban announced in April 2022 from the beginning of the sowing season around October and November 2022. Eradication efforts thereafter could be interpreted as signals of the authority's position to enforce the ban and discourage future cultivation, but the declines in the 2023 harvest are largely driven by farmers deciding to grow alternatives instead of opium poppy.

Change in crop cultivation, as measured in shares of hectareage, from 2022 to 2023 in Farah, Helmand, Kandahar, and Nangahar



The analysis is based on the evaluation of 9,700 locations in Farah, Helmand, Kandahar, and Nangahar, representing 74% of opium poppy cultivation in 2022. Cereal is mostly wheat but includes crops like barley or rye that have a similar signature on the imagery. Fallow land is land not used in order to restore its fertility but includes here land that may not be cultivated for other reasons. Summer crops are crops planted and harvested later than cereal and include higher value crops like cotton or maize. Perennial and other annual crops includes orchards, vineyards, melons, vegetables and other crops not included as part of the other categories.

Poppy cultivation drivers

The underlying conditions that drive opium poppy cultivation persist

Past UNODC research has shown that the cultivation of opium poppy in Afghanistan has been driven by many socioeconomic and security-related factors, including multi-dimensional poverty, lack of licit economic opportunities, and limited access to markets. Prior surveys reported that most of the farmers who cultivated opium poppy lived in villages with lower quality infrastructure, and poorer living conditions. Villages where opium poppy was cultivated, in general, had less access than other villages to functioning public electricity grids, schools, literacy programs, and agricultural cooperatives. In addition, farmers in villages where opium poppy was cultivated were found to have on average 40% less available agricultural land and face 20% longer journeys to markets for selling legal crops.²⁵

At the household level, factors associated with opium poppy cultivation have included lower earnings from legal crops, larger household sizes, lower crop and income diversification, and less access to credit.²⁶ Food, medical expenses, and paying debt were the three most common uses of opium income reported by farmers.

In general, rural communities – not only farmers – often depend on the income from opium to sustain their livelihoods. In some regions, opium poppy cultivation had traditionally occupied a significant proportion of the overall agricultural land. For example, in Helmand province in 2022, 20% of the land was dedicated to opium poppy, and in some districts the proportion was even higher. Results from earlier surveys revealed that in more than 35% of all villages in Afghanistan opium has been cultivated, and in the south-western region in more than 80% of villages.²⁷

The income earned at the farm gate supported the wider, licit rural economy, as Afghan farmers purchased food, paid for medical expenses, and obtained other products and services. These expenses – paid from opium revenues – benefited local shops and other small-scale businesses in rural Afghanistan. The opium harvest also contributed to a wide range of seasonal jobs, including weeding poppy fields and lancing poppy bulbs.

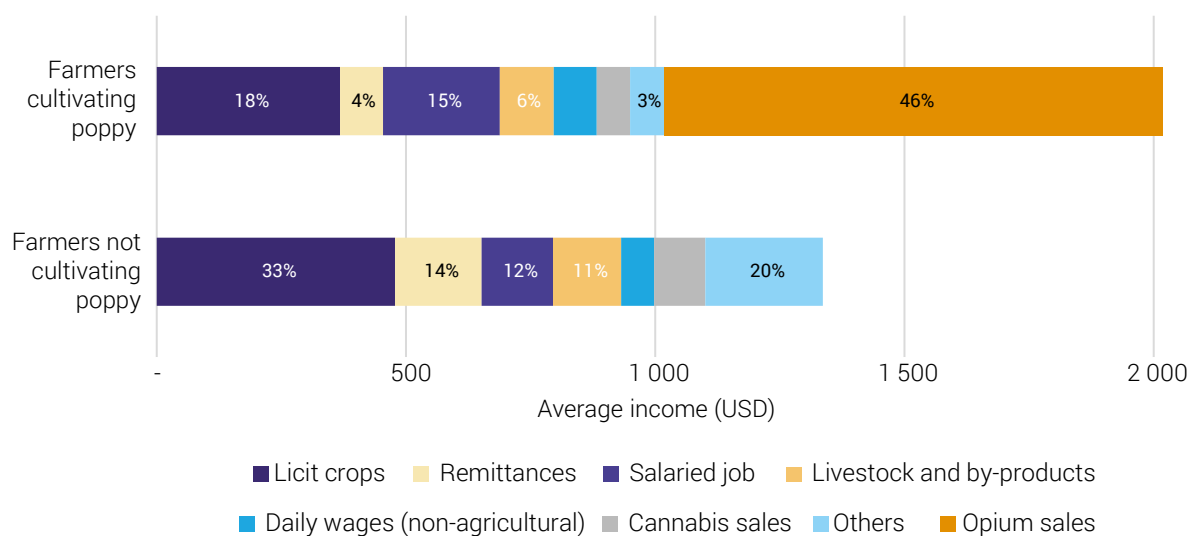
Opium poppy is a labour-intensive crop that provided employment for many in Afghanistan. In 2019, the last year for which data are available, harvesting activities provided the equivalent of up to 119,000 full-time jobs to local and migrant workers hired by farmers. Reported wages for those weeding opium poppy fields were comparable to other types of farm labour at roughly US\$4 a day. But lancing for harvest could have brought in US\$6 a day – 50% more. As with farmers who cultivated opium poppy, the hired workers said their wages went to covering basic needs such as food, paying debt and medical expenses, rather than purchases that could improve livelihoods in the long run. This is an indication that savings or investments were difficult to achieve.²⁸

Overall, farmers who cultivated opium had higher incomes than those who did not. For farmers who cultivated opium poppy, sales of opium and poppy derivatives constituted the main source of income at 46% of overall income.²⁹ However, household income does not always measure standards of living or livelihood opportunities that also depend on other household assets, such as livestock and size of landholdings, as well as on local costs of living.

The opportunities and availability of income-generating activities may therefore be different for those farmers who engaged in opium poppy cultivation and those who abstained from it.³⁰

The overall socio-economic situation of farmers did not improve since the Taliban's return to power in August 2021³¹ or after the announcement of the opium ban in April 2022. Between May and October 2023, an estimated 15.3 million Afghans were acutely food insecure, including 3.4 million that required sustained humanitarian support to prevent catastrophic levels of hunger. Decades of conflict, climate shocks, and severe economic decline characterised by high unemployment, cash shortages, and rising food prices have left 29.2 million people in need of humanitarian assistance.³²

Average annual income (in US\$) as reported by farmers, by income-generating activity, 2019



The length of the bar shows the average income as reported, the percentages represent income shares by activity.

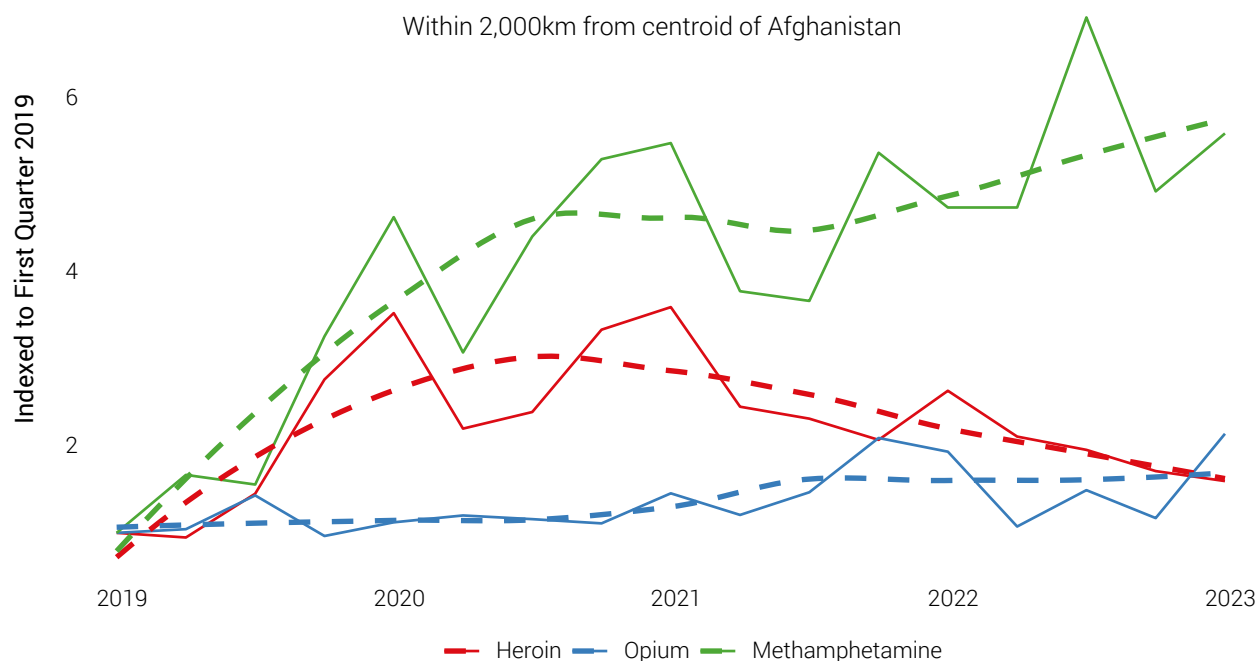
Opium and heroin seizures

Opium seizures continue to increase while heroin seizures decline inside and around Afghanistan, suggesting a liquidation of opium stocks and a reduction in heroin manufacture in Afghanistan

As Afghanistan has long been the leading global producer of opium poppy for illegal opiate markets, there is considerable interest in possible downstream effects in the availability of heroin and opium related to a sharp contraction in opium production. An examination of seizures recorded in and around Afghanistan shows that opium seizures around Afghanistan are increasing, while heroin seizures are declining. Continued opium seizures throughout 2022 and well into 2023 suggest existing opium stocks built up from recent productive years' harvests are being liquidated.

The figure below shows the trend in seizure events relative to the baseline of the first quarter of 2019 along with smoothed trends as dashed lines. The number of heroin seizures declined, in the second through fourth quarters of 2021, and while quarterly counts increased slightly in the first quarter of 2022, heroin seizures saw a general decline thereafter. In contrast, opium seizure events increased in the latter half of 2021. Seizure events for both heroin and opium declined in the second quarter of 2022, when the ban was announced, but opium seizures recovered toward the end of the series. Seizures of methamphetamine were included to check if trends in opiate seizures were affected by lags in data reporting. While changes in seizures can be an indication of supply changes or interdiction capacity or priority changes, comparing seizure patterns across three substances is unlikely to be related to the effectiveness of interdiction, which generally is not drug specific and does not change homogeneously across many countries.

Trend in quarterly counts of seizure events relative to Q1 2019

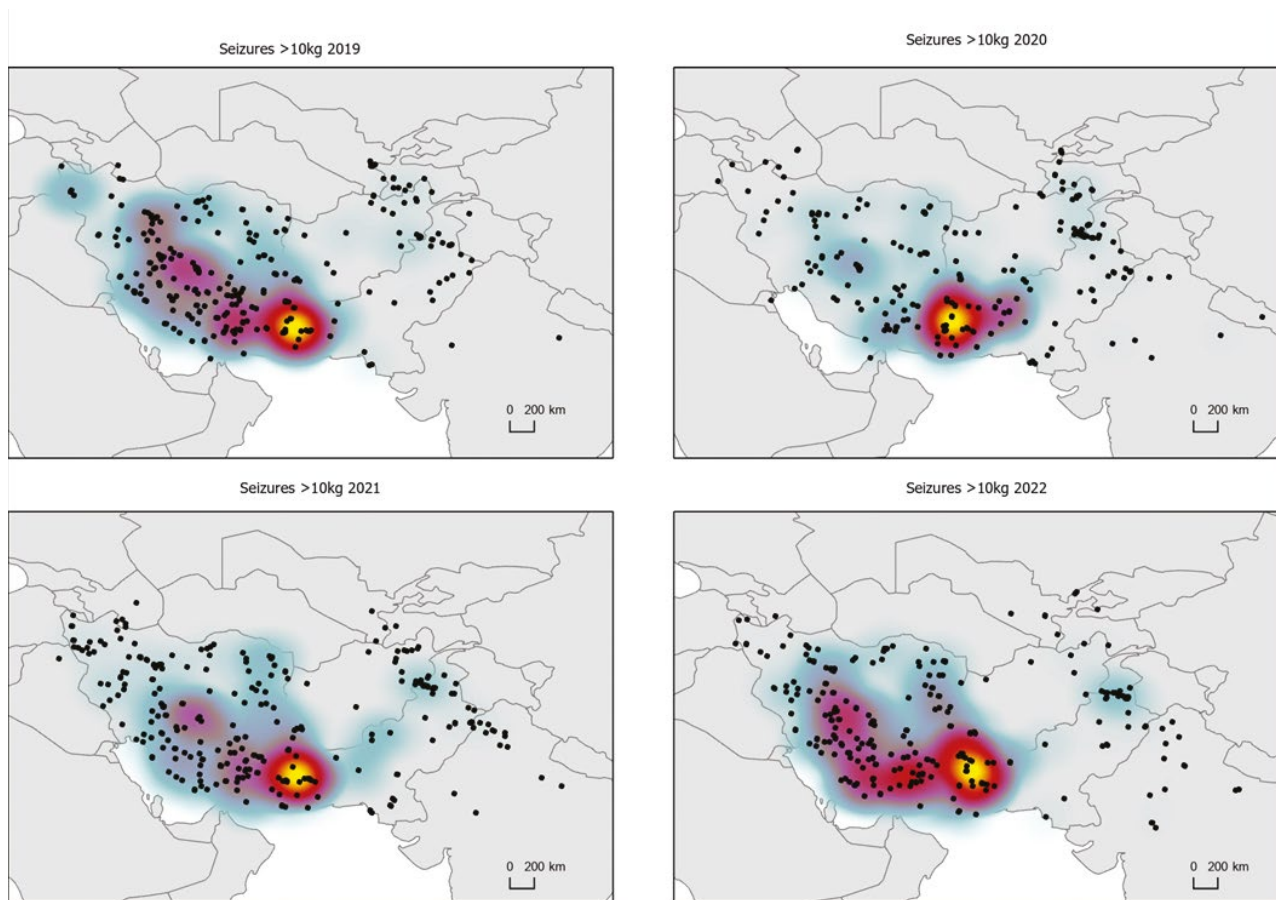


Source: UNODC Drugs Monitoring Platform

One possible explanation for diverging seizure counts for heroin and opium relates to declining reports of seizure events within Afghanistan during 2021, approximately around the time when the Taliban was challenging the previous national government. Continued absence of heroin or opium seizures in Afghanistan may be due to reporting challenges since then. Nevertheless, the overall trend in reported counts in other countries shows an increasing trend in opium seizure events driven by sharp increases in early 2023. Continued declines of heroin seizures around Afghanistan may also point to a shift away from heroin processing in the country.

In terms of locations for opium seizure events suggestive of trafficking, Iran (Islamic Republic of) reports the greatest share, especially since mid-2021 when reported seizure events from Afghanistan sharply declined. Heroin seizures are frequently reported in North Pakistan. This could be explained due to disruptions in heroin processing related to the recent ban of precursors in Afghanistan and increases in opium exportation. In contrast, the frequency of opium seizures has increased in the south, near the border region between Pakistan and Iran.

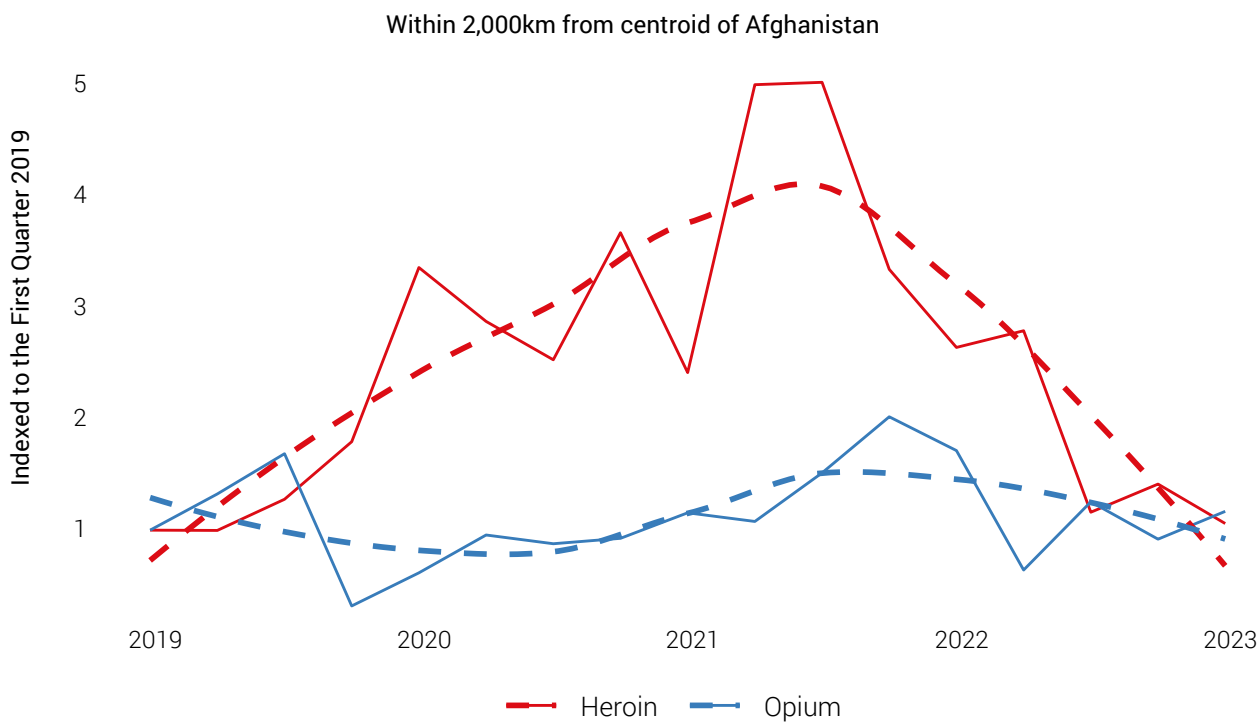
Density of quantities of opium seizures larger than 10 kg within 2000 kms from Afghanistan in 2019, 2020, 2021 and 2022



Source: UNODC Drugs Monitoring Platform

A look at the trend of quarterly seizure weight totals indexed to the first quarter of 2019 shows a similar trend for opiates. For heroin there is a continual decline in seized weight since 2021. Assuming that law enforcement efforts toward drug trafficking remained the same, this would suggest that less heroin is being processed in Afghanistan or at all and that those holding opium inventories are selling it off. Seizure totals for heroin peaked in mid-2021 at nearly five times the amount reported in the first quarter of 2019 but have since fallen to amounts first reported in the series. In contrast, opium seizure totals show relative stability throughout the series, peaking in late 2021 at nearly twice the amount reported in the first quarter of 2019, and declining slightly thereafter.

Trend in quarterly weight of recorded seizures relative to Q1 2019



Source: UNODC Drugs Monitoring Platform

Opium prices

Opium prices increased sharply and are now at a twenty-year peak

Opium prices typically follow market dynamics and are correlated to supply – years with high levels of production have been accompanied by decreasing prices and vice versa. For example, prices increased after a failed harvest in 2010 and decreased in the period 2017-2021 where high levels of production followed the 2017 record harvest. Moreover, opium prices vary by season: over the agricultural year, they are at their highest before harvest, and at their lowest after harvest time, when farmers sell the opium.

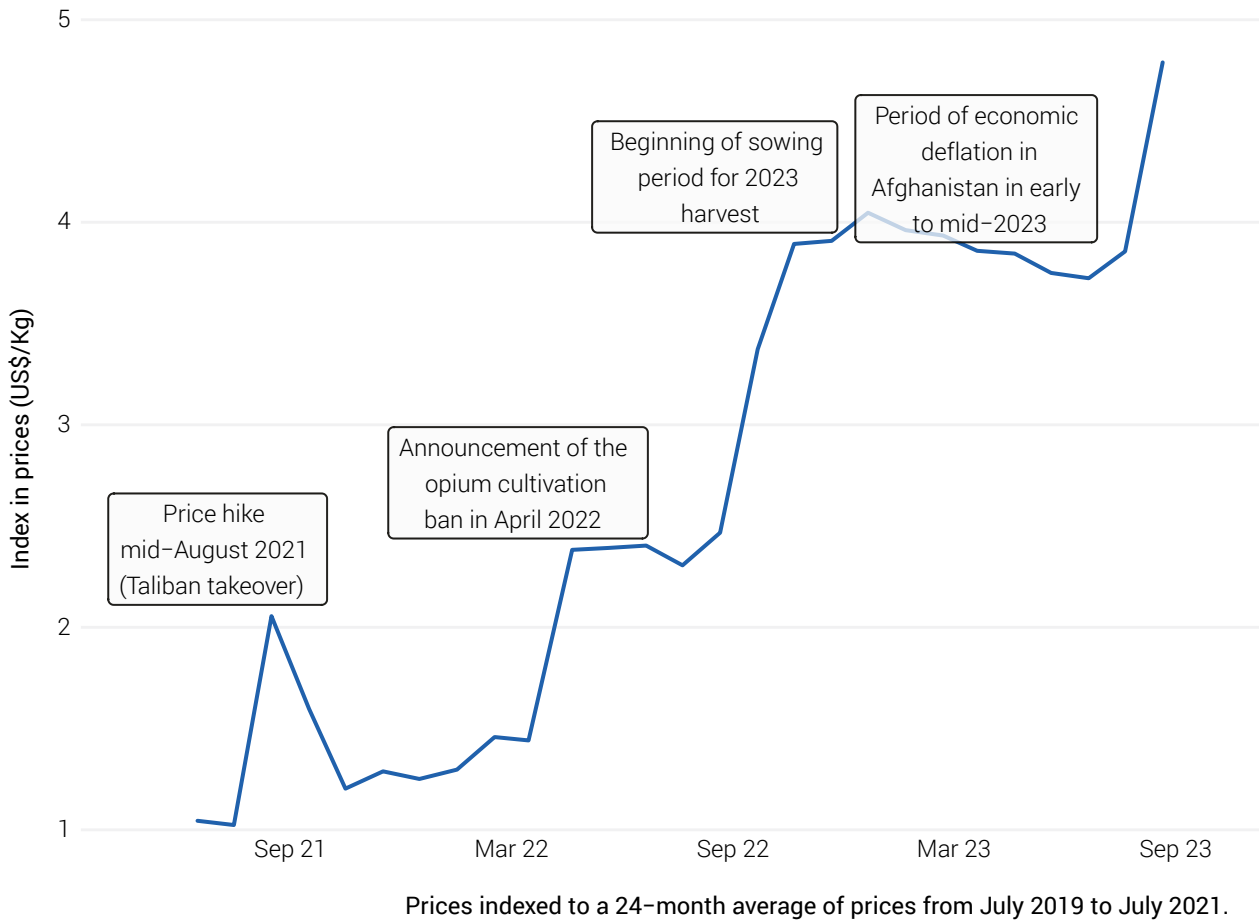
This dynamic has been seemingly disrupted for the most recent season. Prices have strongly increased after the announcement of the ban in April 2022. This sharp price spike was short lived and likely was due to the immediate uncertainty associated with the announcement. However, prices sharply increased again between August and October, possibly a reaction to the emerging signs of severely reduced poppy cultivation and farmer adherence to the drug ban. In the spring and early summer of 2023, opium prices declined slightly to around US\$325/kg. During this period, Afghanistan was experiencing economic deflation and its currency appreciated against foreign currency.³³ It is therefore possible that broader macroeconomic forces were holding down opium prices. As of August 2023, prices reached a twenty-year peak at US\$408/kg.

National monthly dried opium prices at farm gate August 2004 to August 2023, adjusted for inflation



A closer look at prices shows just how much they have increased in recent years. Farm-gate opium prices were relatively stable between 2019 and 2021. Opium prices for farmers and traders jumped by a factor of two relative to the prior twenty-four-month average as soon as the Taliban regained control in Afghanistan in August of 2021. Prices returned to these levels shortly after, but again jumped two more times, first in April 2022, surpassing the previous peak, and again in September and October 2022, jumping to almost four times the price from the prior two-year average (July 2019 to July 2021), remaining stable for several months. By August 2023, prices again increased to record levels and are now nearly five times more than the prior two-year average.

Change in national farm-gate price of opium relative to the prior two-year average between June 2021 and June 2023



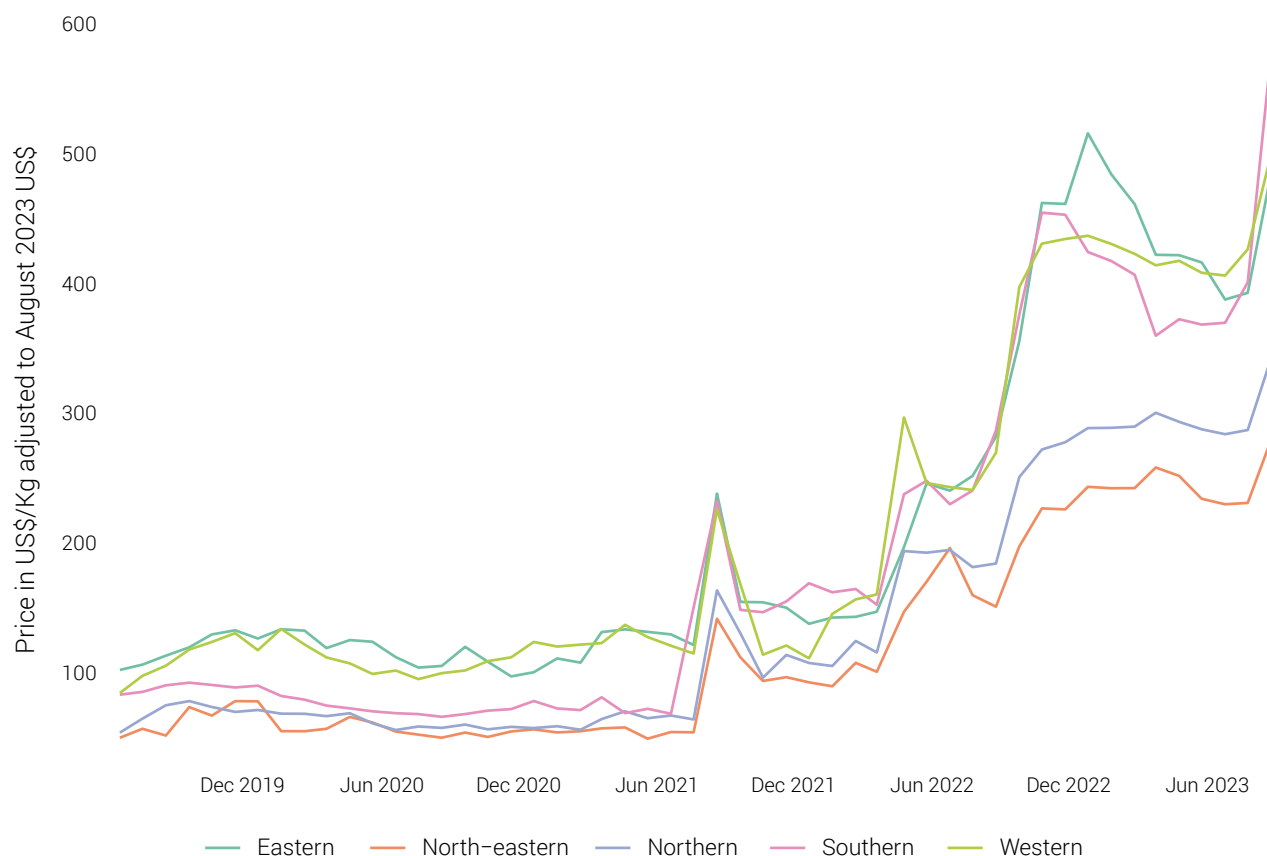
Regional prices

Data collected on kilogram prices of dried opium show important variations across parts of the country. Households will be impacted disproportionately by the poppy ban largely in terms of how well off they already were and how reliant they were on income from the production and sale of opium, which varies by region. Therefore, differences in opium prices need to be considered when discussing heterogeneity in farmer income.

Prior to August 2021, opium prices for all regions were relatively stable with prices lowest in the North, North-east, and South. The regions of the South, East, and West saw the sharpest increase in prices of dried opium per kilogram sold by traders. This was most prominent for the Southern region, which saw prices go from under US\$100 a kilogram to over US\$450 a kilogram in October of 2022 before settling at close to US\$370 by mid-2023. Prices for all regions increased by August 2023, with prices per kilogram in the Southern region at close to US\$580.

Price increases are not uniform when looking at different regions. The Northeast and Northern regions report smaller overall increases. However, across all regions, the dried price of opium sold by traders has roughly quadrupled.

Prices of dried opium sold by traders by region, June 2019 to July 2023

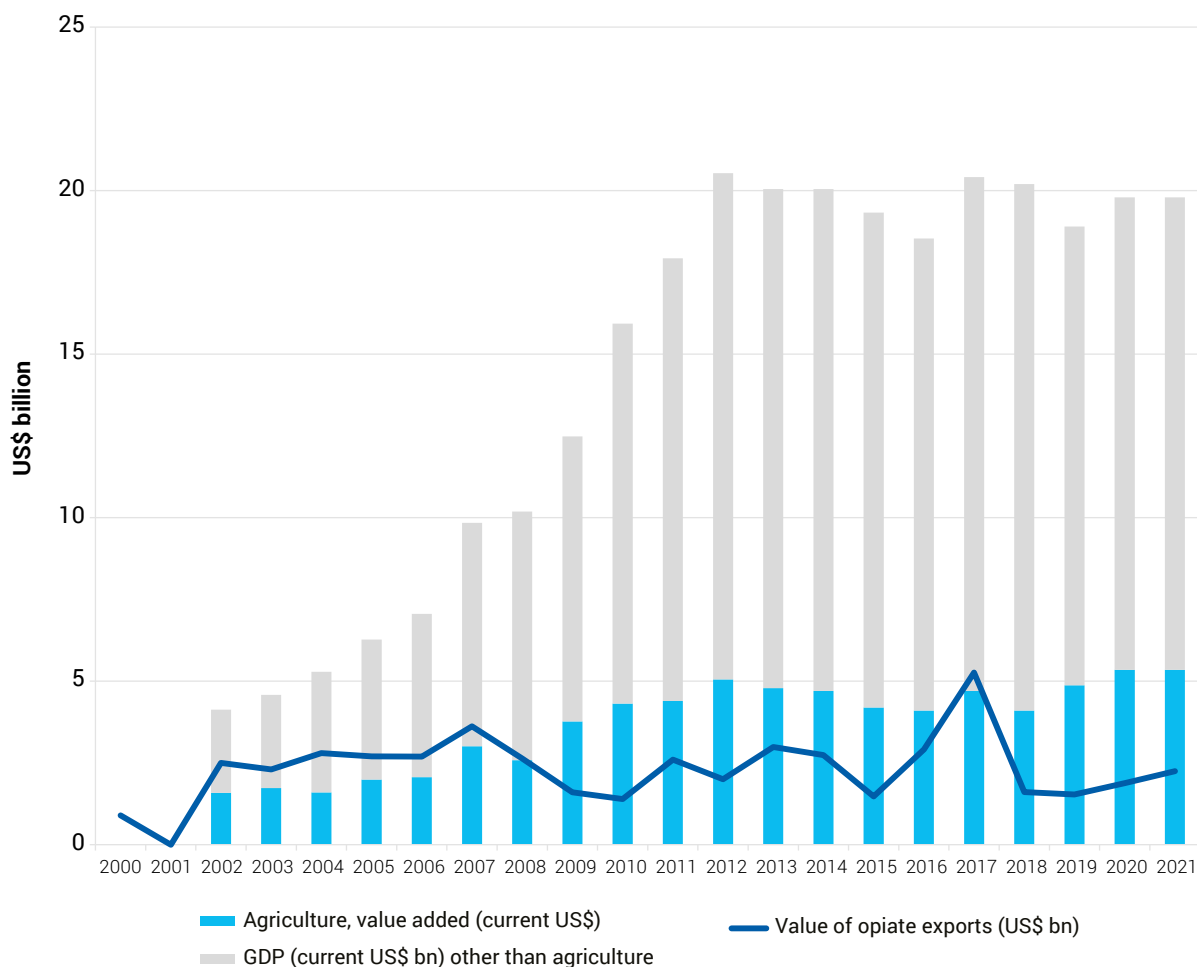


Opiate economy value

The opiate economy's value has contracted by 90%, largely driven by declines in production of opium but the sale of inventoried opium is likely mitigating some of the economic effect

The production and export of opiates (opium, morphine, and heroin) has arguably been Afghanistan's largest illegal economic activity. For decades it has provided a sizable share of income for rural populations and supported the entire Afghan economy. In 2022, only the income from opium poppy cultivation, excluding the larger profits from the processing and trade of heroin and other opiates, was equivalent to 29% of the value of the country's entire agricultural sector. For many years, the total value of exported opiates exceeded the value of officially recorded licit exports of goods and services.

Value of the agricultural sector, GDP other than agriculture and value of opiate exports, 2000-2021



Value of opiate exports for 2022 are not available, for 2023 GDP estimates are not available at time of writing.

The largest share of Afghan income from opiates is accrued by the manufacture and international export of opiates, often in the form of heroin. The value of the domestic use market and the income made by farmers are much smaller in comparison.

If the whole opium harvest from 2023 were exported in the form of opium or heroin, it would yield a value of US\$190-260 million, which compares to US\$1.7 to US\$2.5 billion in 2021. This amounts to a 90% decline in the value of total exports of opiates from this year's harvest from 2021.³⁴

The estimate is based on recent price data collected from Afghan traders by the UNODC price monitoring system and different assumptions on how much opium is exported as raw opium or in form of heroin. The ratio between export value and farm-gate value is smaller in 2023 than earlier years. Changes in purity, lags in price increases between the farm gate and export, and changing business models, can all influence the ratio between export value and farm-gate value. The estimates presented here are to be understood as orders of magnitude rather than precise statistical estimates.

The loss of income from opiates to the Afghan economy could affect the livelihoods not only of the households who were engaged in opium production, processing, or trafficking, but also of other households not directly involved. While a certain proportion of the earnings from trafficking has been moved abroad for investment outside the country, up to half of the funds might have been reinvested into the national and local economy.³⁵ A 90% contraction of the opiate economy means that reinvestment funds are likely severely impacted, particularly if cultivation remains at very low levels.

Calculating this year's opiate economy is challenged by the disruptive effects of the drug ban. For one, the ban has affected farmers' deciding not to cultivate opium poppy, which has reduced opium production by 95%. It is known from historical experience and contemporary field observations that producers and traders hold opium inventory to a certain degree.³⁶ How much opium and other opiates farmers and traders may have had in stock in the form of large stockpiles or simple inventories is unknown, but continued seizures of opium and field reports suggest that farmers and traders are drawing down on this inventory.

Although the Afghan opiate economy contracted, the sale of stockpiled opium at elevated prices might have mitigated some negative economic effects. However, stored opiates will deplete over time and the effects of a contracted opiate economy may be more severe next year if the opium economy remains at the same level.

This loss of income follows two consecutive years of a shrinking licit economy. In 2021, GDP contracted by 20.7%, followed by a further contraction of 3.6% in 2022. Considering a population growth rate of around 2%, per capita GDP is estimated to fall by 4% in 2023.³⁷ The ban on women participating in the labour market and higher education, alongside other governance issues, the insufficient fiscal capacity, and the disruptions to banking and international finance, were found to reduce the ability of the country to deliver economic growth over the longer term.³⁸

The many farmers who opted to cultivate cereals instead of opium poppy experienced considerable economic losses. There are high-value crops such as pomegranate, almond, pistachio and hing that could deliver a better return than cereals, closer to the high profits from opium, but these require considerable time and financial investments before their cultivation becomes profitable. However, many farmers are not capable of waiting several years.

However, the price increase of opium benefits those holding large inventories. Those holding these inventories are more likely to be regional traders, large landholders, and other traffickers, rather than small rural households. If opium production continues at minimum levels, opiate traffickers and traders are likely to look to expand in other illicit markets, trafficking in other drugs or activities such as illegal mining or trafficking in cultural properties.

In the past, prior to their takeover of the country in 2021, taxes on the opiates trade were an important source of income for the Taliban and other local powerbrokers. Media reports suggested that taxing the opiates trade allegedly stopped in some areas in March 2023 for 10 months, on condition that the traders move their opium products outside of Afghanistan.

Methodology

Please find the methodology documentation of the Afghanistan opium surveys and more information on the work of UNODC on drug cultivation and production here: <https://www.unodc.org/unodc/en/data-and-analysis/drug-cultivation-production-and-manufacture.html>.

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1. UNODC, "Afghanistan Opium Survey 2019: Socio-Economic Survey Report, Drivers, Causes and Consequences of Opium Poppy Cultivation," February 2021, https://www.unodc.org/documents/crop-monitoring/Afghanistan/20210217_report_with_cover_for_web_small.pdf.
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3. Food and Agricultural Organisation of the United Nations (FAO), "Afghanistan Country Brief June 2023," June 5, 2023, <https://www.fao.org/giews/countrybrief/country.jsp?code=AFG&lang=en>.
4. The rapidly changing market situation did not allow for an estimate in 2022.
5. The estimate is based on recent price data collected from Afghan traders within the UNODC price monitoring system. The ratio between export value and farm-gate value is smaller in 2023 than it has been in earlier years. Changes in purity, lags in price increases between the farm-gate and export, and changing business models, all can influence the ratio between export value and farm-gate value. The estimates provided here are to be understood as orders of magnitude rather than precise statistical estimates.
6. UNODC cannot confirm the validity of the reports as the decree was issued verbally. See, Hasht-E. Subh, "Taliban Waive Opium Tax in Nimroz Province for 10 Months," Hasht-e Subh Daily (blog), March 23, 2023, <https://8am.media/eng/taliban-exempts-opium-sales-tax-in-nimruz-province-for-10-months/>.
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18. UNODC, "Afghanistan Opium Survey 2017: Challenges to Sustainable Development, Peace and Security," May 2018, https://www.unodc.org/documents/crop-monitoring/Afghanistan/Afghanistan_opium_survey_2017_peace_security_web.pdf.
19. USDA, "Afghanistan Wheat Area, Yield and Production."
20. Food and Agricultural Organisation of the United Nations (FAO), "Afghanistan Country Brief June 2023."
21. UNODC calculations based on price data collected in the field and published yield estimates (USDA, Afghanistan yield and production estimates).
22. Farmers' income is calculated based on production and average opium prices at harvest time.
23. This is the difference between potential cash income from wheat at 2023 prices and potential income from selling opium at 2022 prices, which accounts for the strong price increase that likely would not have taken place if opium poppy cultivation had continued unabated. The calculation considers gross income if all produce was sold, it does not take into account potential self-consumption of wheat or differences in costs for maintaining fields or the harvest.
24. UNODC, "Afghanistan Opium Survey 2019: Socio-Economic Survey Report, Drivers, Causes and Consequences of Opium Poppy Cultivation."
25. UNODC, "Drug Situation in Afghanistan 2021: Latest Findings and Emerging Threats," November 2021, www.unodc.org/documents/data-and-analysis/Afghanistan/Afghanistan_brief_Nov_2021.pdf.
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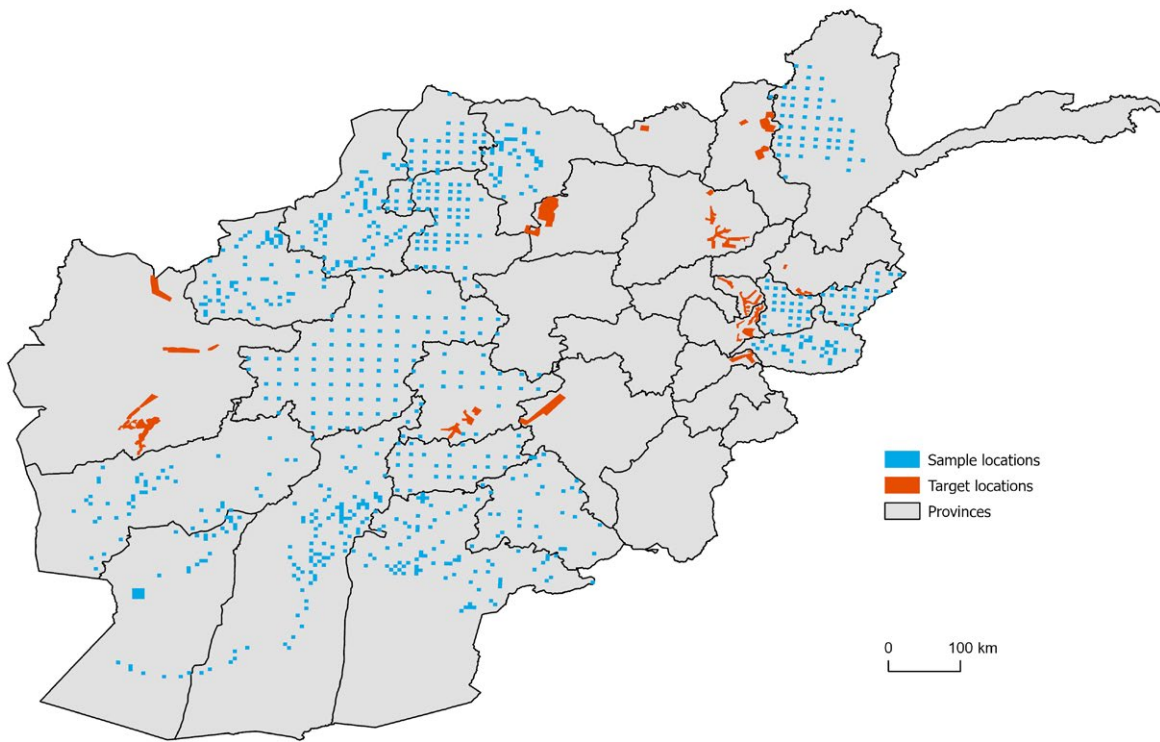
34. Estimating figures for 2023 that are directly comparable to 2021 is challenging as no updated data on drug use is available, and amounts seized in the country can – in view of the heavily reduced harvest – have a significant influence on the overall amounts trafficked.
35. UNODC, “Illicit Financial Flows from Trafficking Opiates Along the Northern Route,” 2022, https://www.unodc.org/documents/data-and-analysis/IFF/IFF_Afghanistan_2022.pdf.
36. UNODC, “Afghanistan Opium Survey 2019: Socio-Economic Survey Report, Drivers, Causes and Consequences of Opium Poppy Cultivation.”
37. UNDP, “Afghanistan Socio-Economic Outlook.”
38. UNDP.

Annex I

Regional breakdown used in the report



Sample locations 2023



ANNEX II

Response by the de facto Ministry of Interior of the Islamic Emirate of Afghanistan to the Draft Report by UNODC Afghanistan opium survey 2023. Cultivation and production after the ban: effects and implications received on 26 October 2023

Unofficial translation

**Ministry of Interior of the Islamic Emirate of Afghanistan
Deputy Ministry of Counter Narcotics
Chief of Staff**

Reference #: 582

Date: 11/04/1445 Solar date (26 October 2023)

Subject: Deputy Ministry Response to the UNODC Draft Afghanistan Opium Cultivation and Production Survey 2023

To the United Nations Office on Drugs and Crime (UNODC)!

May Allah's peace, mercy and blessing be upon you!

The Deputy Ministry of Counter Narcotics technical team discussed the findings of the Afghanistan Opium Cultivation and Production Survey 2023 draft with the UNODC team during a meeting held on the 25th of October 2023.

The Deputy Ministry of Counter Narcotics based on the meeting's decisions and the Deputy Ministry's available figures, to a certain extent, agrees and welcomes the opium poppy cultivation estimates by the UNODC office.

With regard to other parts of the report (opium production, socio-economic data, drug seizures, etc.), the Deputy Ministry does not express any specific opinion as UNODC has not conducted any field surveys and the reported data [for these sections] is based on subject matter experts' analysis and previous years' data. We expect UNODC to take into consideration the proposed comments which were agreed upon with the Deputy Ministry's technical team and to make appropriate decisions on the revision or deletion of those points.

Sincerely,

Alhaj Major General Mullah Abdul Haq Hamkar
Deputy Minister of Counter Narcotics (stamped)

