



UNODC

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Islamic Republic of Afghanistan
Ministry of Counter Narcotics



Afghanistan Opium Survey 2016

Cultivation and Production
Executive Summary

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MCN/NSD
Narcotics Survey Directorate

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Prof. Salamat Azimi (Minister), Dr. Javid Ahmad Qaem (Deputy Minister Policy and Coordination), Sayed Faisal Hosainy (Deputy Minister Admin and Finance), Mohammad Osman Frotan (Director General Policy and Planning), Sayed Najibullah Ahmadi (Acting Director of Narcotics Survey Directorate), Mohammad Humayon Faiazad (Provincial Affairs Director), Saraj Ahmad Yousufzai (Deputy Director of Narcotics Survey Directorate), Nasir Ahmad Karimi (Deputy Director of Narcotics Survey Directorate), Mohtarama Habibi (NSD Advisor), Mohammad Ajmal Sultani (Statistical Data Analyst), Mohammad Hakim Hayat (GIS & Remote sensing analyst), Shabir Ahmad Taieb (GIS & Remote Sensing Analyst), Sayed Shahenshah Sadat (Quality Control and Data Specialist), Ahmad Mustafa Safi (Database Analysis & Statistics Member), Najeem Alcozai (Database Analysis & Statistics Member), Karimdad Qadari (Database Analysis & Statistics Member), Sayed Tajuddin Hashimi (Database Analysis & Statistics Member) and Salma Rezayee (Administrative Officer).

Survey Coordinators: Sayed Eshaq Masumi (Central Region), Abdul Latif Ehsan (Western Region), Fida Mohammad (Northern Region), Mohammed Ishaq Anderabi (North-Eastern Region), Khalil Ahmad Noori (Southern Region), Abdullah Jan Daudkhail (Eastern Region).

United Nations Office on Drugs and Crime (Kabul)

Andrey Avetisyan (Regional Representative), Mark Colhoun (Deputy Representative), Devashish Dhar (International Project Coordinator), Abdul Manan Ahmadzai (Senior Survey Officer), Noor Mohammad Sadiq (Database Developer).

Remote Sensing Analysts: Ahmad Jawid Ghiasee and Sayed Mehdi Sadat. Ziaulhaq Sidiqi (GIS Associate), Asia Noory (Project Associate).

Survey Coordinators: Rahimullah Omar (National Field Survey Officer), Abdul Basir Basiret (Eastern Region), Jawad Ahmad Omari (Western Region), Mazullah Ahmadzia (North-eastern region), Abdul Jalil Hussain Khail (Northern region).

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Jean-Luc Lemahieu (Director, Division for Policy Analysis and Public Affairs), Angela Me (Chief, Research and Trend Analysis Branch), Anja Korenblik (Chief, Programme Development and Management Unit), Coen Bussink (Team leader, International Crop Monitoring Programme), Irmgard Zeiler (Statistician), Jaqueline Garcia-Yi (Research Officer), Lorenzo Vita (GIS & Remote Sensing Expert).

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ABBREVIATIONS

ALP	Afghan Local Police
ANA	Afghan National Army
ANP	Afghan National Police
CNPA	Counter Narcotics Police of Afghanistan
GLE	Governor-led eradication
ICMP	Illicit Crop Monitoring Programme (UNODC)
MCN	Ministry of Counter-Narcotics
UNODC	United Nations Office on Drugs and Crime

Introduction

This Executive Summary presents the key findings of the *Afghanistan Opium Survey 2016*. The full report on cultivation and production will be published in November 2016 and a separate report presenting the results of the socio-economic survey will be published early 2017. The survey is implemented annually by MCN in collaboration with UNODC. The survey team collects and analyses information on the location and extent of opium poppy cultivation, potential opium production and the socio-economic situation in rural areas. Since 2005, MCN and UNODC have also been involved in the verification of poppy eradication conducted by provincial governors and poppy-eradication forces. This information is essential for planning, implementing and monitoring counter-narcotic efforts.

The opium survey is implemented within the technical framework of the UNODC Illicit Crop Monitoring Programme (ICMP). The objective of ICMP is to assist the international community in monitoring the extent and evolution of illicit crops in the context of the Plan of Action adopted by the 53rd session of the United Nations Commission on Narcotic Drugs in March 2009. Under ICMP, UNODC carries out monitoring activities in other countries affected by illicit crop cultivation: in Asia, Myanmar; in Latin America, Bolivia (Plurinational State of), Colombia, Ecuador, Mexico and Peru; and in Africa, Nigeria.

The *Afghanistan Opium Survey 2016* was implemented under the project “Monitoring of Opium Production in Afghanistan” (AFG/F98), with financial contributions from the Governments of Japan and United States of America.

Fact Sheet, Afghanistan Opium Survey 2016¹

	2015	Change from 2015	2016
Net opium poppy cultivation (after eradication)	183,000 ha (163,000 - 202,000)	+10%	201,000 ha (182,000 - 221,000)
Number of poppy-free provinces ²	14	-1	13
Number of provinces affected by poppy cultivation	20	+1	21
Eradication	3,760 ha	-91%	355 ha
Average opium yield (weighted by cultivation)	18.3 kg/ha	+30%	23.8 kg/ha
Potential production of opium	3,300 tons (2,700 - 3,900)	+43% ³	4,800 tons (4,000 - 5,600)

¹ Numbers in brackets indicate the lower and upper bounds of the 95% confidence interval.

² Poppy-free provinces are estimated to have less than 100 hectares of opium poppy cultivation.

³ The change percentage is calculated with exact values before rounding (3,343-4,793).

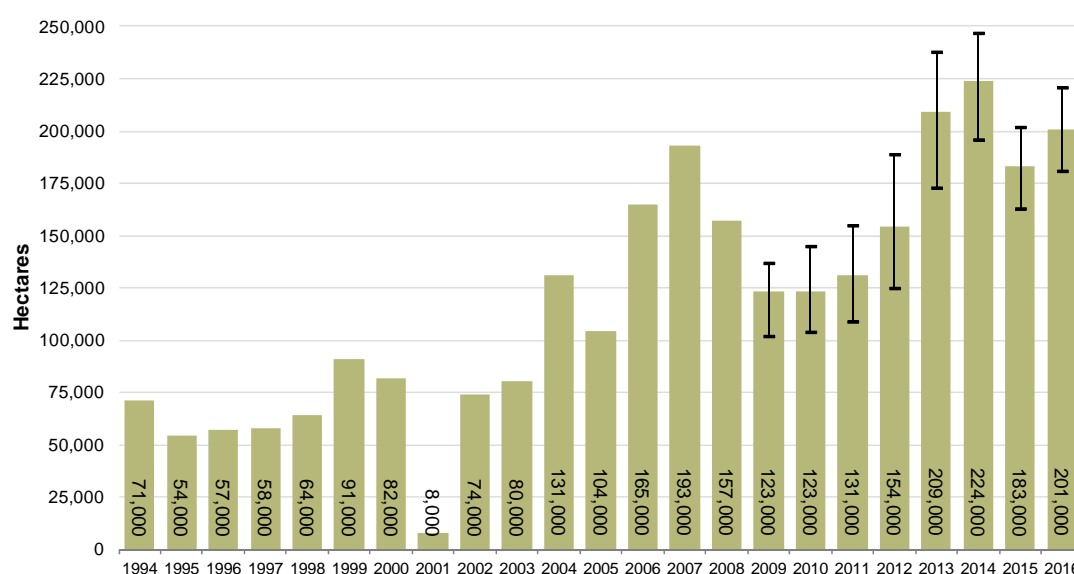
Executive Summary

The area under opium poppy cultivation increased by 10% in 2016

The total area under opium poppy cultivation in Afghanistan was estimated at 201,000 hectares (182,000 - 221,000) in 2016, which represents a 10% increase from 2015. Strong increases were observed in the Northern region and in Badghis province where the security situation has deteriorated since 2015.

In 2016, 93% of the total opium poppy cultivation in Afghanistan took place in the Southern, Western and Eastern regions of the country. The Southern region accounted for 59% of the total cultivation; the Western for 25% and the Eastern for 9%. The remaining regions (Northern, North-Eastern and Central) together accounted for 7% only.

Figure 1: Opium poppy cultivation in Afghanistan, 1994-2016 (hectares)



Sources: UNODC/MCN opium surveys 1994-2016. The vertical lines represent the upper and lower bounds of the 95% confidence interval.

Hilmand remained the country's major opium poppy cultivating province (80,273 ha), followed by Badghis (35,234 ha), Kandahar (20,475 ha), Uruzgan⁴ (15,503 ha), Nangarhar (14,344 ha), Farah (9,101 ha), Badakhshan (6,298 ha) and Nimroz (5,303 ha).

In 2016, the number of poppy-free provinces in Afghanistan decreased from 14 to 13. Opium poppy cultivation in Jawzjan, in the Northern region, was estimated at 409 hectares and this province lost its poppy-free status, which it had regained in 2008.

All regions except the Southern region experienced an increase in opium poppy cultivation in 2016, with the largest relative increase being in the Northern region (+324), followed by the North-eastern (+55%), Eastern (+44%), Central (+24%) and Western (+15%) regions. Cultivation in the Southern region stayed practically stable (-1%). The largest absolute increases took place in the Western and Northern regions, where, respectively, 6,759 and 6,076 more hectares were under opium poppy cultivation.

⁴ Including Gizab district, a district formally part of Day Kundi province, but since 2014 under the administration of the Governor of Uruzgan province.

The main opium poppy-growing provinces showed diverging trends. Opium poppy cultivation rose in Badghis (184%), Nangarhar (+43%) and Uruzgan (+37%) whereas decreases were seen in Farah (-57%), Nimroz (-40%), Hilmand (-7%) and Kandahar (-3%).

Table 1: Regional distribution of opium poppy cultivation, 2015-2016 (hectares)

Region	2015 (ha)	2016 (ha)	Change 2015-2016 (%)	2015 (ha) as % of total	2016 (ha) as % of total
Southern	119,765	117,987	-1%	66%	59%
Western	44,308	51,067	+15%	24%	25%
Eastern	12,242	17,608	+44%	7%	9%
North-eastern	4,056	6,298	+55%	2%	3%
Central	321	398	+24%	0.2%	0.2%
Northern	1,875	7,951	+324%	1.0%	3.9%
Rounded total	183,000	201,000	+10%	100%	100%

Total eradication of opium poppy decreased by 91%

A total of 355 hectares of poppy eradication was carried out by the provincial Governors in 2016, as verified by MCN/UNODC. This represented a decrease of 91% from 2015 when 3,760 hectares were eradicated (verified by MCN/UNODC).

In 2016, eradication took place in 7 provinces (compared to 12 provinces in 2015): Badakhshan, Kandahar, Laghman, Nangarhar, Nimroz, Sari Pul and Takhar.

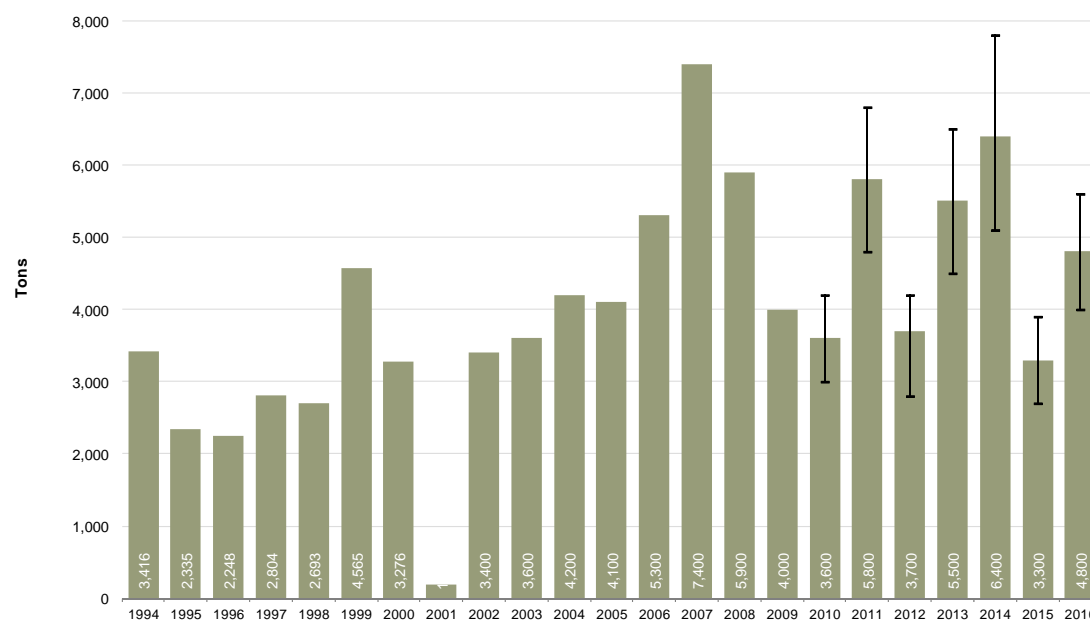
Most of the poppy eradication took place in Badakhshan province (270 hectares; 78% less than in 2015). No eradication took place in the provinces with high levels of opium poppy cultivation due to the extremely poor security situation in those areas and logistical/financial challenges to organize the eradication teams on time.

In 2016, farmers' resistance against poppy eradication operations was occasionally expressed through direct attacks on eradication teams. During the eradication operations 8 persons (1 ANA officer and 7 insurgents) were killed and 7 persons were injured (2 ANA officers, 1 ALP officer, 1 ANP officer and 3 insurgents).

Potential opium yield and production increased in 2016

In 2016, the estimated potential opium production in Afghanistan amounted to 4,800 tons (4,000-5,600 tons), an increase of 43% from its 2015 level (3,300 tons). The average opium yield was 23.8 kilograms per hectare, which is 30% higher than in 2015 (18.3 kilograms per hectare). There were no widespread reports of any diseases affecting the quality of the opium poppy crop.

Figure 2: Potential opium production in Afghanistan, 1994-2016
(tons)



Sources: UNODC/MCN opium surveys, 1994-2016. Figures refer to oven-dry opium. The vertical lines represent the upper and lower bounds of the 95% confidence interval.

The increase in potential opium production in 2016 is only partly explained by the larger area under opium poppy cultivation. The most important driver is the higher opium yield per hectare. The largest yield increase occurred in the Western region where the average yield grew by 37% (16.3 kg/ha in 2015 to 22.3 kg/ha in 2016) and the Southern region, with a 36% rise (from 16.1 in 2015 to 22.0 kg/ha in 2016). Since these two regions account for 84% of the total opium poppy cultivation in Afghanistan, the yield increases in these regions had a strong impact on the national potential opium production.

There are some limitations in these estimates since the yield survey was not implemented in all main cultivating provinces for security reasons. For the provinces not covered, the regional average was used. There are indications that the regional average may not reflect the situation in some of the provinces not included in the survey. In Badghis for example, a yield survey could not be implemented, but a comparison of the quality of the crop as observed on satellite images indicated that the potential opium yield might have been higher than the yield in other Western provinces used to calculate the regional average. As Badghis is the province with the second largest area under opium poppy cultivation in Afghanistan, this suggests that the national potential opium production in 2016 could be an underestimation.

The Southern region continued to produce the majority of the opium in Afghanistan, accounting for 54% of national production. With 24% of national production, the Western region was the country's second most important opium-producing region in 2016, followed by the Eastern region (12%) and Northern region (6%).

Table 2: Opium yield, by region, 2015-2016 (kilograms per hectare)

REGION	2015 average yield (kg/ha)	2016 average yield (kg/ha)	% change
Central	41.5	46.1	+11%
Eastern	36.5	32.4	-11%
North-eastern	39.6	31.2	-21%
Northern	38.3	35.0	-9%
Southern	16.1	22.0	+36%
Western	16.3	22.3	+37%
Weighted national average	18.3	23.8	+30%

Table 3: Potential opium production, by region, 2015-2016 (tons)

Region	Production 2015	Production 2016	Change 2015-2016 (%)	2015 (tons) as % of total	2016 (tons) as % of total
Central	13	18	+38%	0.4%	0.4%
Eastern	447	571	+28%	13%	12%
North-eastern	161	196	+22%	5%	4%
Northern	72	278	+286%	2%	6%
Southern	1,928	2,591	+34%	58%	54%
Western	722	1,139	+58%	22%	24%
Total (rounded)	3,300	4,800⁵	+43%⁶	100%	100%

⁵ The potential opium production in 2016 might be an underestimation, since a comparison of the quality of the crop as observed on satellite images indicated that opium yields in Badghis could have been higher than in the other Western provinces used to calculate the regional average applied to this province where MCN and UNODC were not able to conduct field measurements in 2016. In 2017, research will be conducted to better understand provincial differences.

⁶ The change percentage is calculated with exact values before rounding.

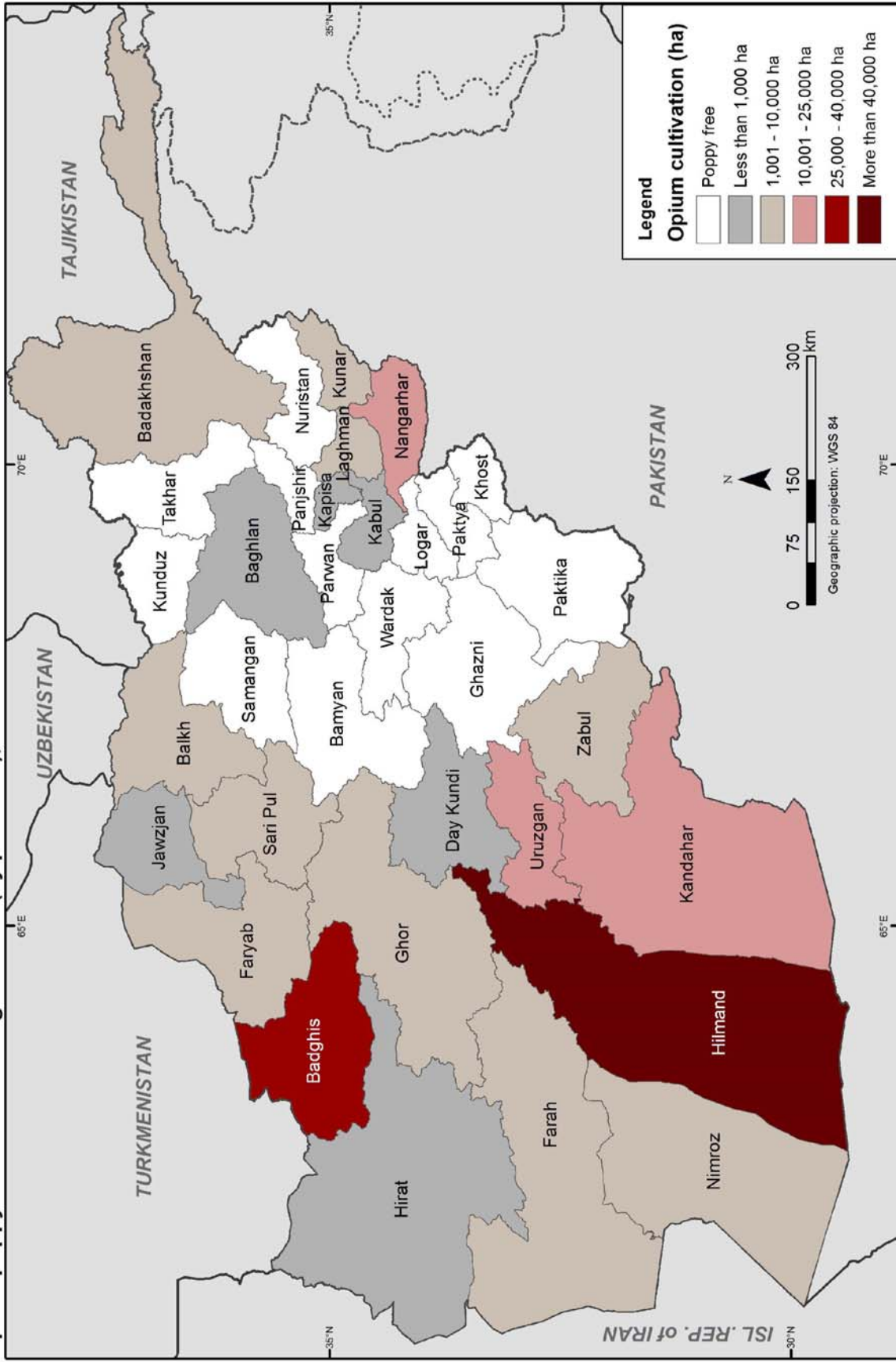
Table 4: Opium poppy cultivation and eradication in Afghanistan 2015-2016 (hectares)

PROVINCE	Cultivation 2015 (ha)	Cultivation 2016 (ha)	Change 2015-2016 (%)	Estimation method 2016	Eradication in 2015 (ha)	Eradication in 2016 (ha)	Change 2015-2016 (%)
Kabul	321	398	+24%	T	0	0	NA
Khost	Poppy-free	Poppy-free	NA	V	0	0	NA
Logar	Poppy-free	Poppy-free	NA	V	0	0	NA
Paktya	Poppy-free	Poppy-free	NA	V	0	0	NA
Panjshir	Poppy-free	Poppy-free	NA	V	0	0	NA
Parwan	Poppy-free	Poppy-free	NA	V	0	0	NA
Wardak	Poppy-free	Poppy-free	NA	V	0	0	NA
Ghazni	Poppy-free	Poppy-free	NA	V	0	0	NA
Paktika	Poppy-free	Poppy-free	NA	V	0	0	NA
Central Region	321	398	+24%		0	0	NA
Kapisa	460	608	+32%	T	0	0	NA
Kunar	987	1,276	+29%	S	9	0	-100%
Laghman	779	1,380	+77%	T	7	3	-57%
Nangarhar	10,016	14,344	+43%	S	137	1	-99%
Nuristan	Poppy-free	Poppy-free	NA	T	0	0	NA
Eastern Region	12,242	17,608	+44%		153	4	-97%
Badakhshan	4,056	6,298	+55%	S	1,246	270	-78%
Takhar	Poppy-free	Poppy-free	NA	T	12	21	+75%
Kunduz	Poppy-free	Poppy-free	NA	T	0	0	NA
North-eastern Region	4,056	6,298	+55%		1,258	291	-77%
Baghlan	180	849	+373%	T	0	0	NA
Balkh	204	2,085	+921%	T	0	0	NA
Bamyan	Poppy-free	Poppy-free	NA	V	0	0	NA
Faryab	1,160	2,923	+152%	T	0	0	NA
Jawzjan	Poppy-free	409	+100%	T	0	0	NA
Samangan	Poppy-free	Poppy-free	NA	V	0	0	NA
Sari Pul	331	1,686	+409%	T	33	55	+67%
Northern Region	1,875	7,951	+324%		33	55	+67%
Hilmand	86,443	80,273	-7%	S	1,747	0	-100%
Kandahar	21,020	20,475	-3%	S	396	4	-99%
Uruzgan*	11,277	15,503	+37%	S	75	0	-100%
Zabul	644	1,363	+112%	S	0	0	NA
Day Kundi	381	374	-2%	S	5	0	-100%
Southern Region	119,765	117,987	-1%		2,223	4	-100%
Badghis	12,391	35,234	+184%	S	0	0	NA
Farah	21,106	9,101	-57%	S	52	0	-100%
Ghor	1,721	1,222	-29%	T	0	0	NA
Hirat	285	208	-27%	T	0	0	NA
Nimroz	8,805	5,303	-40%	S	40	1	-98%
Western Region	44,308	51,067	+15%		92	1	-99%
Total (rounded)	183,000	201,000	+10%		3,760	355	-91%

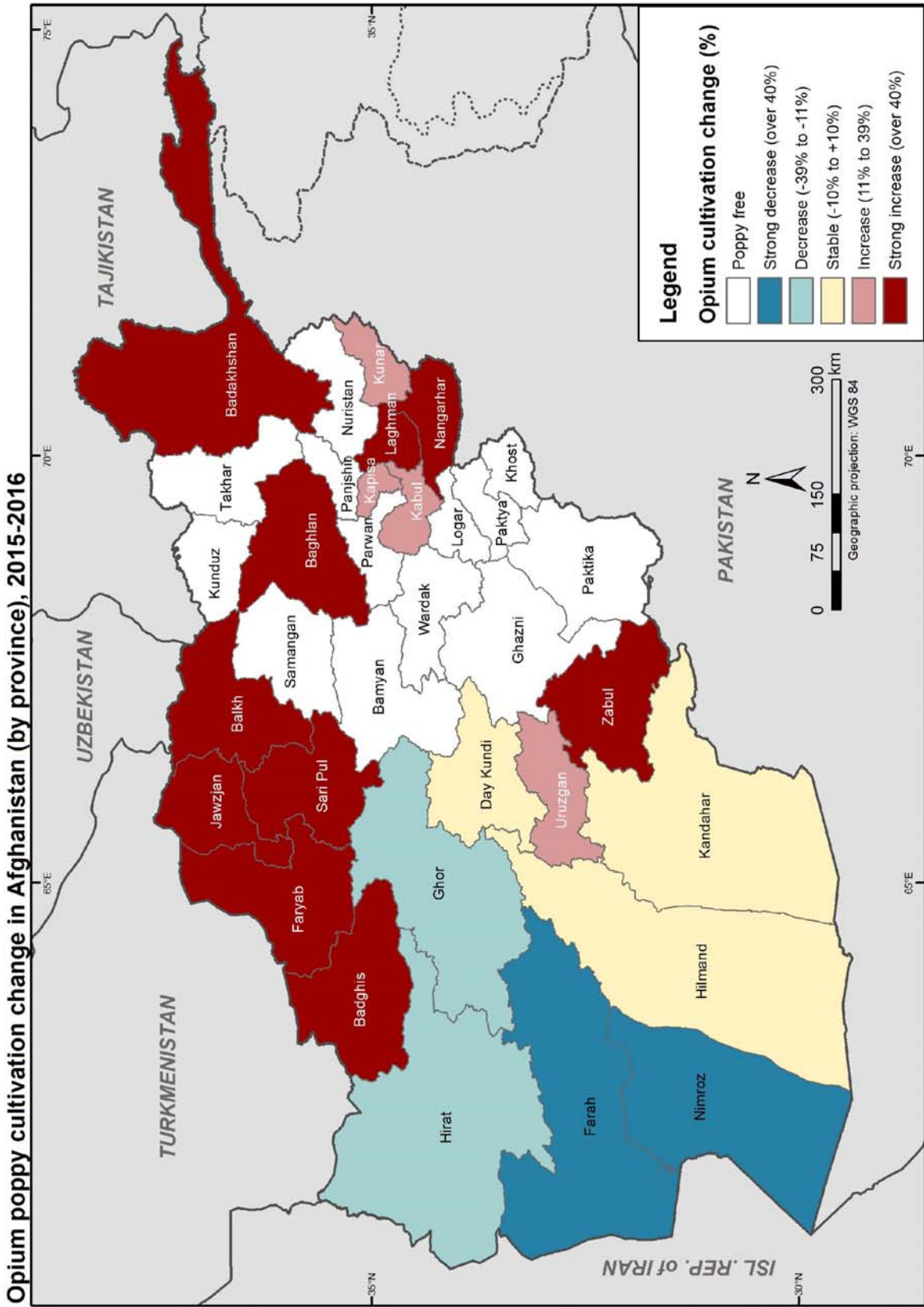
Area estimation method: S=remote sensing sample survey, T=remote sensing target survey, V=village sample survey and field observation. A province is defined as poppy-free when it is estimated to have less than 100 hectares of opium poppy cultivation.

* Gizab district of Day Kundi province was considered under Uruzgan province as per presidential decree.

Opium poppy cultivation in Afghanistan (by province), 2016

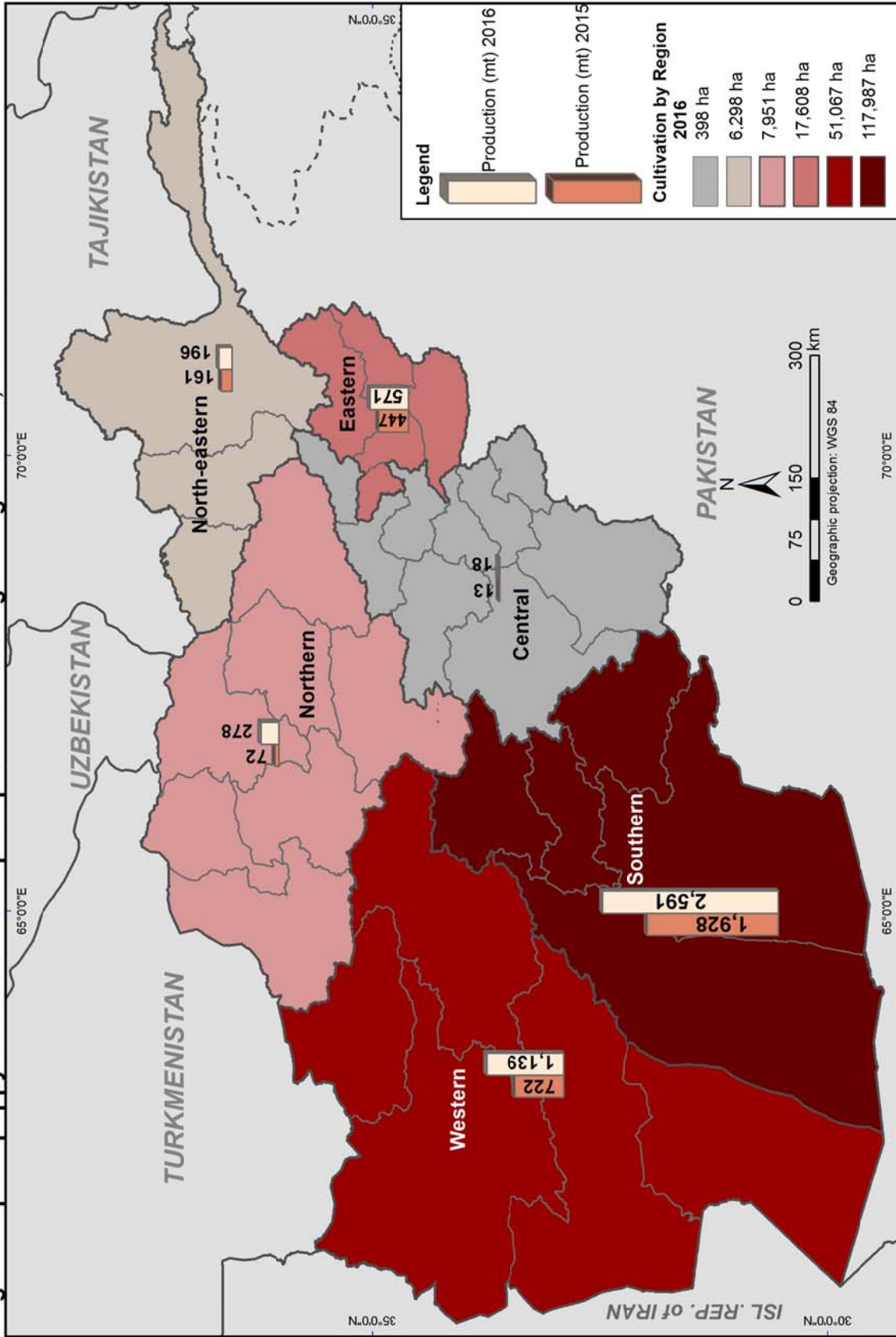


Source: Government of Afghanistan - National monitoring system implemented by UNODC
 Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
 The dotted line represents approximately the line of control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.



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Regional opium poppy cultivation and opium production change in Afghanistan, 2015-2016



Source: Government of Afghanistan - National monitoring system implemented by UNODC/MCN
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