





Understanding Control and Influence:

What Opium Poppy and Tax Reveal about the Writ of the Afghan State

David Mansfield August 2017



15 YEARS OF HIGH-QUALITY RESEARCH



Afghanistan Research and Evaluation Unit

Issues Paper

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About the Afghanistan Research and Evaluation Unit

The Afghanistan Research and Evaluation Unit (AREU) is an independent research institute based in Kabul. AREU's mission is to inform and influence policy and practice by conducting high-quality, policy-relevant research and actively disseminating the results, and by promoting a culture of research and learning. To achieve its mission AREU engages with policymakers, civil society, researchers and students to promote their use of AREU's research and its library, to strengthen their research capacity, and to create opportunities for analysis, reflection, and debate.

AREU was established in 2002 by the assistance community in Afghanistan and has a Board of Directors comprised of representatives from donor organisations, the United Nations and other multilateral agencies, and non-governmental organisations.

Specific projects in 2017 are being funded by the European Union (EU), Promundo-US, Norwegian Institute of International Affairs (NUPI), United States Institute of Peace (USIP), German Federal Ministry for Economic Cooperation and Development (BMZ) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

FOREWORD

As an independent, impartial and research-based organisation, AREU is focused on ensuring that all findings gathered and analysed meet rigorous standards of quality control before they are disseminated to a diverse audience of stakeholders. We strive to convey this data in a forthright way that allows readers to reach their own conclusions.

This paper has been a particularly interesting one for AREU to be involved in, as it has employed a unique pilot study drawing on both in-depth research gathered from rural respondents across 32 sites in some of Afghanistan's most challenging regions and geospatial imagery collection and analysis. Merging these two methods has provided fascinating insights into the complexities of identifying influence between state and non-state actors.

We hope this paper will spark debate, initiate dialogues and instigate discussions that can lead to policy reform and ensure a better Afghanistan for all.

Dr Orzala Nemat **Director, AREU**

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It is important to thank colleagues at the Organization for Sustainable Development and Research (OSDR) and Alcis Ltd for their invaluable contributions to this report. OSDR continues to provide an unrivalled quality of research in some of the most challenging parts of rural Afghanistan. I know of no other researchers that provide the depth and quality of fieldwork that OSDR offer in what are often very trying circumstances. The quality of imagery analysis and representation of geospatial data provided by Matt Angell, Tim Buckley, Lisa Moran and the team at Alcis is also unique. In partnership with these two organizations it is possible to combine both high resolution imagery with well-focussed indepth research and provide verifiable data and deep insights into the complex workings of rural Afghanistan.

It is also important to thank John Collins, Paul Fishstein, Jonathan Goodhand, Gran Hewad, Orzala Nemat, Ghulam Rasool, and Matt Rubin for their comments on earlier drafts of this report. The time they put into reviewing the paper and their insightful comments are much appreciated. I apologise for any shortcomings the report continues to contain; these are my responsibility alone.

ACRONYMS AND ABBREVIATIONS

ANDSF	Afghan National Defense and Security Forces
ATFC	Afghan Threat Finance Cell
CENTCOM	Central Command
CIA	Central Intelligence Agency
CN	Counternarcotics
DoD	Department of Defense
FTE	Full-time Equivalent
GDP	Gross Domestic Product
GIRoA	Government of the Islamic Republic of Afghanistan
GIS	Geographic Information Systems
GLE	Government Led Eradication
IED	Improvised Explosive Devices
INL	International Narcotics and Legal Affairs
MCN	Ministry of Counternarcotics
MOAB	Massive Ordinance Air Blast, "Mother Of All Bombs"
NATO	North Atlantic Treaty Organization
NUG	National Unity Government
OSDR	Organization for Sustainable Development and Research
PDPA	People's Democratic Party of Afghanistan
RPG	Rocket Propelled Grenade
SRAP	Special Representative on Afghanistan and Pakistan
UNDCP	United National Drug Control Program
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
USFOR-A	United States Forces Afghanistan
USG	United States Government

GLOSSARY

Jerib	Unit of measurement for land, and is the equivalent of 1/5 of 1 hectare
Karez	Underground channel
Khairat	Charity
Komak	Assistance
Lekha	A land tenure system that is particular to the desert areas in the South
Malik	A formal title given by the government to an individual responsible for acting as a representative between the Afghan State and the community
Rishwat	Bribe
Ushr	A traditional Islamic tithe on agricultural production
Zahar	Poison

Executive Summary

There are a number of organisations that have sought to map government control in Afghanistan.¹ However, given the frequency it is cited in the media and official reports, this paper offers a critique of the current way that North Atlantic Treaty Organization's (NATO) and US Forces in Afghanistan (USFOR-A) measure government influence and control in Afghanistan. It describes the limits of the current approach within the confines of what is currently known about the methodology. It shows that the concept of state or insurgent "control" over a population or area jars not only with historical understandings of the State in Afghanistan, but also contemporary events across large swathes of the country. It also illustrates how the categories adopted by USFOR-A - "state influence", "insurgent influence" and "contested" - are not mutually exclusive, and argues that district wide assessments do not offer sufficient granular detail to understand how the insurgency gains influence in an area, strengthens its position in rural communities before consolidating its position and encircling a district or provincial centre. The report goes onto use detailed empirical data on shifting patterns of opium poppy cultivation and changes in insurgent taxation to highlight the increasingly tenuous hold the government has over many parts of rural Afghanistan, as well as to challenge the current understanding of the revenue generated by the Taliban from the farmgate production of opium. The report concludes with an outline of an alternative methodology for assessing and mapping the influence of state and non-state actors over terrain and population; a methodology that draws on locally defined indicators that are clearly identifiable using satellite imagery or can be collected relatively easily across a wide geographic area; and that provides a greater level of disaggregation. Moving away from the kind of aggregate district assessments USFOR-A uses is essential if there is to be an accurate measure of the territory and population under different levels of government influence, but also if there is to be a diagnostic tool to determine which areas are most vulnerable to falling beyond the government's reach.

Currently, the NATO narrative is one of an Afghan State that dominates over the majority of its population. As of March 2017, they reported that the Government of the Islamic Republic of Afghanistan (GIRoA) controlled each of the country's 34 provincial centres and all but 11 of the 407 district centres.² According to this assessment GIRoA had "control" or "influence" of 59.7 percent of the population, compared to the insurgency where only 11.1 percent of the population were under their "control" or "influence".³ The "stalemate"⁴ between GIRoA forces and the insurgency that frustrates General Nicholson, the Commander of NATO and USFOR-A, appears to be in the area USFOR-A define as "contested" - the 21 percent of the territory where 25.2 percent of the total population live - and where neither the Taliban or the government have the upper hand.⁵ General Nicholson's stated ambition is for GIRoA to increase their presence over some of these areas, and by 2019 have extended its writ to an area covering 80 percent of the Afghan population.⁶

¹ These include the Institute for the Study of War and the Taliban, see Institute for the Study of War. "Afghanistan Threat Assessment as of November 22, 2016." http://www.understandingwar.org/sites/default/files/ISW%20November%20 Afghanistan%20Partial%20Threat%20Assessment_1_0.pdf. 22 November 2016 (accessed 19 August 2017).

and The Long War Journal. "Afghan Taliban lists 'Percentage of Country under the control of the Mujahideen'." http:// www.longwarjournal.org/archives/2017/03/afghan-taliban-lists-percent-of-country-under-the-control-of-mujahideen.php. 28 March 2017 (accessed 19 August 2017).

² SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress." https:// www.sigar.mil/pdf/quarterlyreports/2017-07-30qr.pdf. 30 July 2017 (accessed 19 August 2017), 88.

³ SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress."

⁴ Gordon, Michael. "U.S. General Seeks 'a Few Thousand' More Troops in Afghanistan." https://www.nytimes. com/2017/02/09/us/politics/us-afghanistan-troops.html. 9 February 2017 (accessed 19 August 2017).

⁵ SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress."

⁶ United States Department of Defense. "Enhancing Security and Stability in Afghanistan." https://www.defense.gov/ Portals/1/Documents/pubs/June_2017_1225_Report_to_Congress.pdf. 1 June 2017 (accessed 19 August 2017), 2.

While these assessments are cited frequently in the media and in official publications,⁷ other indicators suggest a more sanguine account of the distribution of power in Afghanistan, particularly in rural areas, where the writ of the State is increasingly limited. Indeed, the return of opium to areas where it had once been effectively banned highlights just how limited the coercive power of the Afghan National Defense and Security Forces (ANDSF) has become. Widespread cultivation alongside main roads and district centres, and perhaps most tellingly on the perimeter of military bases, presents an image of national, provincial and local authorities who are no longer able to coerce the population to abandon the crop as they once did. In many cases they do not even have the leverage to negotiate with rural communities to solicit reductions in cultivation using a combination of threats and the promise of assistance, as they did prior to NATOs current mission Resolute Support (RS).⁸ Under current conditions crop destruction is all the more theatrical; a bargain struck between the authorities, the local elite and farming households; where the destruction of a few jeribs⁹ of poorly germinated crop in a badly tended field represents a symbol of "political will' to national and international patrons, while "something for the cameras" to the local population. The return of widespread cultivation in the rural areas surrounding a district centre where the GIRoA forces hold sway says much about the divergence between official indicators and ground realities. Where USFOR-A might assess the entire district under government "control" or 'influence" and classify the whole population (in thousands) and area (in square kilometers) accordingly; the rural population, sees a government imprisoned within the district centre and governor's compound.

Revenue collection - or taxation - by the insurgency in Afghanistan presents a similar picture to opium poppy; one in which the State is increasingly losing ground in rural areas. Differences in the type of payment and the mechanism for collection offer a measure of the insurgency's penetration; a typography that charts the insurgency's consolidation of power across parts of the Afghan countryside. Initial encroachment by insurgents is often associated with the extortion of those individuals with wealth and links to the government in the name of "khairat", charity,¹⁰ the collection of payments at vehicle checkpoints after dusk, as well as the collection of the sale on hides sold after Eid al Adha. These are what might be termed "raidable taxes" which do not require permanent physical presence in an area. These are followed by more permanent checkposts on main roads and when a more significant presence has been established, and a greater knowledge of the area and its population is gained, there are requests for financial contributions from the wider rural population, typically in the form of an agricultural tithe. Once the insurgency consolidates its position taxes are charged on land, either through direct charges according to the size of landhold or indirectly through taxes on the means of irrigation. Within a single district each of these taxes may work in tandem with the rural population paying tax on land and crops, and in transit. Meanwhile, the mosques and the traders in the district centre pay tribute to the insurgents in the form of hides and charity, highlighting the differing levels of influence the insurgency exert within the same administrative boundary; a phenomena that current measures of control and influence that use the district as the unit of analysis, fail to include.

⁷ SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress," 88.; Camilla Schick and Mashal, Mujib. "Seesaw Conflict With Taliban Takes Toll in Fallen Afghan District." https://www.nytimes. com/2017/08/07/world/asia/afghanistan-taliban-taiwara.html. 7 August 2017 (accessed 19 August 2017).District

⁸ Resolute Support is the successor to the NATO led International Security Assistance Force (ISAF) mission which began in December 2001 and ran until December 2014. Resolute Support is a NATO led "train and assist mission" that began in January 2015 and is designed to support the Afghan security forces.

⁹ A jerib is unit of measurement for land and is the equivalent of 1/5 of 1 hectare.

¹⁰ Payments are not just in cash; clothes, food items and dried fruits are also sent as gifts to the Taliban.

The report draws on in-depth research with rural respondents in 32 research sites in South and Southwestern Afghanistan in April/May 2017,¹¹ fieldwork in Nangarhar,¹² and combines it with both longitudinal data collection from Helmand,¹³ Nangarhar,¹⁴ Farah¹⁵ and Balkh,¹⁶ and geospatial imagery and analysis covering each of these provinces, as well as Badghis.¹⁷ It is one of a series of reports funded by the European Union's "Opium, Water and Livestock" project. This project is designed to provide policy tools to the Afghan Government, donor community and practitioners to improve management of natural resources in three key areas: area-based poppy control strategies, national groundwater management and conflict prevention between nomad and settled populations. Reports to follow will examine the socio-economic and political developments in Central Helmand in 2017 and identify what this says about the impact of both the Helmand Food Zone and the surge in military forces between 2011 and 2013. A second paper will examine the sustainability of the settlement and agricultural production in the former deserts of Southwestern Afghanistan.

¹¹ This fieldwork involved household interviews with 300 respondents in 20 research sites in Helmand, located both North and South of the Boghra canal, as well as a further 180 household interviews in Bakwa in Farah. Further interviews were conducted with those that traded herbicides, diesel and solar power, those "renting" the equipment to dig tubewells and labourers in the bazaars of Delarem, Lashkar Gah, Farah, Gereshk and Nad e Ali.

¹² In spring 2017 research was conducted through a series of interviews with key informants with in-depth knowledge of each of the districts of Nangarhar.

¹³ This body of historical data consists of a total of 3,460 individual interviews, which were conducted every six months over seven consecutive years and that by May 2011 came to cover 28 distinct Research Sites (RS), including seven in the desert area to the North of the Boghra canal. The first round of fieldwork was conducted in November/December 2007 (N 42) but covered only seven RS; the second round in November/December 2008 (N99) covered ten RS; the third round in November/December 2009 (N112) covered 11 RS; the fourth round in April/May 2010 (N 87) covered 11 RS; and the fifth round in November/December 2010 (N 360) covered 23 RS. From the sixth round in April/May 2011 (N 447) until November 2013, 28 RS were covered. The seventh round was in November/December 2012 (N 404); the tenth round was in April/May 2013 (N 462); and the eleventh round was in November/December 2012 (N 404); the tenth round was in April/May 2013 (N 462); and the eleventh round was in November 2013 (N 472). The last round of fieldwork consisted of 140 in-depth interview conducted in ten RS in May 2015.

The historical data set for Nangarhar consists of a body of 75 in-depth household interviews conducted each April for AREU from 2005 to 2008, and from 2011 to 2013. A final round of in-depth data for AREU was collected in Nangarhar in December 2015 /January 2016. All of this research covered the same villages in the districts of Achin, Bati Kot, Khogiani, Kama, Khogiani, Surkhrud, and Shinwar. A further data set this work draws on consists of fieldwork conducted for the UK Government in the same villages and districts in November/December each year between 2003 and 2013. The final set of data reviewed was conducted for DAI as part of a review of their rural development programmes in the province and consists of 75 households interviews conducted in the same locations in 2009 and 2010 as well as a further 300 in-depth household interviews conducted in 20 research sites in the spring and summer of 2014.

¹⁵ The historical data consists of 170 interviews conducted with farmers in the same 12 research sites in Bakwa in September/ October 2013.

¹⁶ AREU has conducted fieldwork during the harvest season in the April of each year in in Balkh between 2006- 2009, 2011-2013 and in 2014 and 2015. This work was conducted in the districts of Charbolak, Farah, Chemtal and Shulgara. The UK Government also funded fieldwork during the planting season each November/December from 2003 to 2013.

¹⁷ GIS analysis was undertaken by Alcis Ltd. "Homepage." https://www.alcis.org/. (accessed 19 August 2017).

1. Control and Influence: What Does It Mean and How is It Measured?

Since 2002, the success and failure of the Afghan State-building project has been measured by a range of different indicators. The choice of indicators has varied over time, reflecting the particular interests and concerns of donor nations, their different understandings of the breadth and scope of the Afghan mission, as well as the ability to measure indicators and their trajectory. At the high water mark of the state-building project in Afghanistan between 2009 and 2012, when NATO's role in country had expanded to include involvement in a wide range of socio-economic sectors, and not just security, performance indicators came to include a myriad of different measures such as: school enrollment, and the attendance of girls; the timing and results of elections;¹⁸ and economic indicators like the growth in Gross Domestic Product (GDP), and the revenue of the Government of the Islamic Republic of Afghanistan (GIROA).¹⁹

Less obvious performance measures were things like the Survey of the Afghan People, a poll implemented each year by the Asia Foundation.²⁰ Reported to be a statistically robust measure of the Afghan population's perception of the state-building project, it has often been cited by donors and the media as a litmus test of the success or failure of the intervention in Afghanistan.²¹ Between 2004 and 2010 levels of opium poppy cultivation were also cited as a proxy indicator for performance at the local, provincial and national level, not just of the Afghan Government and the state-building efforts but of individual donors, of the Provincial Reconstruction Teams (PRT) that existed at the time, and of those officials that led them.²² This judgement was derived in part from a widely-held view that a strong state does not have widespread illicit drug crop cultivation; therefore those that intervened to reduce opium production - be they a provincial governor, a western military commander or senior civilian official - would be also showing strong leadership and "control".²³

With a more limited mission after 2014, under Resolute Support NATO has turned to measures of government "control or influence" as performance indicators. For example, in August 2016 US Forces in Afghanistan (USFOR-A) reported that 63 percent of the total population of Afghanistan was under the control or influence of the government.²⁴ This compared with 8 percent of the population who were under the control or influence of insurgents, and the remaining 29 percent of the population that were in contested areas, where government nor insurgents held power.²⁵ By May 2017, USFOR-A claimed that GIRoA's writ extended to 65.6 percent of the Afghan population, while 9.2 percent of the population were under the control or influence of the insurgents, and 25.2

23 Mansfield, David. A State Built on Sand.

¹⁸ World Bank. "Afghanistan: Supporting State-building and Development." http://siteresources.worldbank.org/IDA/ Resources/IDA-Afghanistan.pdf. July 2009 (accessed 19 August 2017). ; De Weijer, Frauke. "Harvard CID Working Paper: A capable state in Afghanistan, A building without a foundation?" https://bsc.cid.harvard.edu/files/bsc/files/59_weijer.pdf. May 2013 (accessed 19 August 2017).

¹⁹ Byrd, William and Payenda, Khalid. "USIP Peace Brief: Revenue Growth in Afghanistan Continues Strong but Future Uncertain." https://www.usip.org/sites/default/files/2017-02/PB219-Revenue-Growth-in-Afghanistan-Continues-Strongbut-Future-Uncertain.pdf. February 2017 (accessed 19 August 2017).; Byrd, William and Payenda, Khalid. "USIP Peace Brief: Afghanistan's Revenue Turnaround in 2015." https://www.usip.org/sites/default/files/PB201-Afghanistans_Revenue_ Turnaround_In_2015.pdf. February 2017 (accessed 19 August 2017).

²⁰ The Asia Foundation. "Afghanistan in 2016: A Survey of the Afghan People." http://asiafoundation.org/publication/ afghanistan-2016-survey-afghan-people. 7 December 2016 (accessed 19 August 2017).

²¹ BBC News. "Asia Foundation Afghan poll reveals increased pessimism." http://www.bbc.com/news/world-asia-15733320. 15 November 2011 (accessed 19 August 2017).

²² Mansfield, David. A State Built on Sand: How opium undermined Afghanistan. Oxford: Oxford University Press, 2016.

²⁴ SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress." https://www.sigar.mil/pdf/quarterlyreports/2017-04-30qr.pdf. 30 April 2017 (accessed 19 August 2017).

²⁵ SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress: April.".

percent proportion of the population lived in contested areas.²⁶ In its latest "train and assist" mission USFOR- A and NATO have tasked themselves with supporting GIRoA to increase its control and influence over an area that covers 80 percent of the population by 2019.²⁷

1.1 A Critique of Definitions and Measures

How USFOR-A defines "control" and "influence" is currently far from clear as it is unavailable to those without NATO security clearances. Therefore, the methodology used to assess control and influence along with the map of Afghanistan's districts and how they are subsequently categorised are not shared widely. What can be gleaned from what appears a rather opaque methodology is that a range of different indicators, intended to measure including stability, governance, security, infrastructure, economy and communications, are used to identify whether a district falls under the control or influence of either the government or insurgents.²⁸ Those districts that are not identified as either falling under the control or influence of the government or the insurgency are identified as 'contested' - a district where neither side appears to have the upper hand.

For many analysts, these NATO assessments of control and influence are confusing. In particular, while individual districts are identified (and mapped) as belonging to one category or another it is hard to see how control and influence are aggregated when it comes to reporting at the national level. Control and influence are, after all, two very distinct terms with quite different meanings. "Control" implies hegemonic or near-hegemonic rule by a single entity. 'Influence' would seem to be an intermediate point between control at one end of the spectrum, and a complete lack thereof, or impotence, at the other. To aggregate these two categories and then identify a target - as NATO has with its goal of 80 percent of the population falling under GIRoA's control or influence - is to mix two quite different end states - one of which is potentially much more achievable - that of influence - but potentially less desirable in the context of NATO and the GIRoA's overall objectives in Afghanistan.

Furthermore, in the context of Afghanistan, "control" is a term that oversimplifies the complex and often fluid nature of the relationship between the population and the government, especially in rural areas. Control implies a centralisation of power and the capacity to utilise it to coerce or subjugate the population. Historically, the Afghan State has not had the ability to enforce its will over large tracts of its own territory. For example, Amir Abdur Rahman Khan (1880-1901), the "Iron Amir", killed more than 100,000 of his own population²⁹ in his drive to control the Afghan territory, but ultimately the writ he established by the end of his rule withered following his death, culminating in the collapse of his grandson's reign, Amanullah Khan, in 1929. Instead, political power has been decentralised and mediated in Afghanistan, with the government having differing degrees of influence over the population depending on their location, resources, social structures and histories.

A further difficulty lies with the classification of government and insurgent influence as mutually exclusive - as is currently the case with the NATO assessment. In fact, in recent years rural Afghans have become familiar with the presence of a range of different politico-military groups, each vying for influence over population groups and geographic areas. This is an environment of shifting alliances, competition and collusion, not that of a single dominant force having coercive power over a large area and its population over long periods of time.

Moreover, as a consequence, elements of the population have become adept at working with and between these different politico-military groups. Far from being passive actors subjugated by either the state or insurgents, the rural population are active players in the politics, shaping the

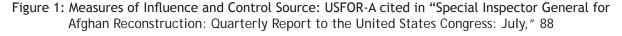
²⁶ SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress: July," 88.

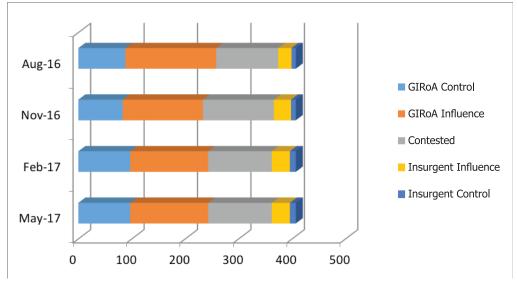
²⁷ United States Department of Defense. "Enhancing Security and Stability in Afghanistan," 88.

²⁸ SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress: April," 88.; SIGAR, Quarterly Report, January 31, 2017, 89.

²⁹ Mansfield, David. A State Built on Sand: How opium undermined Afghanistan. Oxford: Oxford University Press, 2016, 174.

environment they inhabit.³⁰ It is also wrong to assume that the government and insurgents are exogenous or distinct from communities. Many households, particularly some of the most prominent in a community have links to a range of different centres of power: a son in the Afghan National Army, a brother teaching at the local government school, while contributing in-cash or in-kind to insurgent elements. As such, government and insurgents often have influence in the same area at the same time and it is unclear how these areas might be qualitatively different from those areas that NATO identifies as contested. If we were to accept this critique and the categories of "government influence", "insurgent influence" and "contested" are not mutually exclusive then USFOR-A's own assessment suggests that since August 2016 GIRoA has controlled less than 25 percent of the districts in the country, and that throughout the same period almost 75 percent of the districts are either under insurgent control or fall in disputed territory (see Figure 1). ³¹





Finally, the everyday experience of rural Afghans is somewhat lost in the fact that USFOR-A's assessment is district wide and there is no attempt to offer a more granular account of control and influence at a subdistrict or even lower level. Districts can be based on rather arbitrary boundaries that may transcend tribal or familial affinities and networks, or cut across common resources, such as waterways. While districts represent the State's administrative boundaries they actually tell us little of the population within them, their affinities, experiences and links to government. Within districts there are patterns of gradation of government influence, shaped both by historical and current events. Typically, state influence will be at its most pronounced near the district and provincial centre where the Afghan State resides and where representation and services are sought and delivered.

Further afield, or in some cases, no distance from the boundary of the district centre, or the security infrastructure the government has established, there are few indicators that the population is subject to the control or influence of state actors. Opium poppy and taxes are two such measures that suggest that the government's control and influence over the population and territory are far less significant than current USFOR-A assessments suggest as the next two sections highlight.

³⁰ Mansfield, David. A State Built on Sand.

³¹ SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress: April," 88.; SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress: January," 89.; SIGAR. "Special Inspector General for Afghan Reconstruction: Quarterly Report to the United States Congress: October," 115.

2. Opium Poppy Cultivation: What Does It Tell Us About State Influence?

The release of the UN Office on Drugs and Crime's (UNODC) annual poppy survey generally provokes a scurry of media activity. For example, the announcement that opium production had risen in Afghanistan by 43 percent between 2015 and 2016 was perhaps destined to provoke headlines.³²

Yet production figures - especially at the national level - are largely a distraction. Yield is after all not a measure of the rural population's judgment of their livelihood options and their perception of the coercive power of the State, but largely of climatic factors; in the mind of farmers the yield is "an act of God". The far more important estimate that UNODC provided in its annual opium poppy survey was the hectarage of opium poppy cultivation in 2016. This had risen to 201,000 hectares (ha), up from 183,000 ha in 2015, and was broadly in line with the USG estimated increase from 198,000 hectares in 2015 to 203,000 hectares in 2016 (see Figure 2).³³ While UNODC's 2016 estimate represented the third highest since 1994 when the survey began, many might have expected far higher levels of cultivation. After all, deteriorating security, relatively high opium prices, and GIRoA's inability to deliver development assistance and support economic growth in a growing number of rural areas - each evident in 2016 - often encourage cultivation.

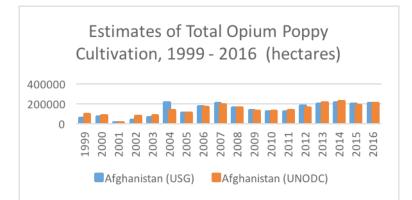


Figure 2: Poppy cultivation in Afghanistan, 1999-2016 (hectares)

Some might have even taken comfort from the relatively small increase in aggregate cultivation in 2016, perhaps believing the country had reached a saturation point in terms of supply. However, beneath the national figure were quite contrasting trends in cultivation at the provincial and district level that suggest that there is a potential for even further increases - possibly dramatic ones in the coming years. A closer look at the 2016 data released by UNODC indicates that dramatic increases in cultivation in the North and East - particularly the provinces of Nangarhar, Badghis, Balkh, and Badakhshan - were largely been offset, by reductions in the South and Southwest. This suggests that the rise in 2016 may just be a precursor of what is to come, particularly in light of growing political uncertainty, fractures in the National Unity Government (NUG), a deteriorating economy and a lack of strategic clarity from the new American administration under President Trump. In this context opium serves not only as a byproduct of underlying political and socioeconomic drivers, but also an indicator.

This section provides an analysis of changing levels of cultivation in 2016 and 2017, in-depth fieldwork, UNODC data and high resolution imagery. In doing so this section directly ties the expanse of opium

³² Agerhorn, Harriet. "Opium Production soaring in Afghanistan as struggle to suppress drug production fails, UN reveals." http://www.independent.co.uk/news/world/middle-East/opium-production-soaring-afghanistan-un-reveals-heroin-drugnarcotic-poppy-fields-a7376666.html. 23 October 2016 (accessed 19 August 2017).

³³ UNODC. "Afghanistan Opium Survey 2016: Cultivation and Production." https://www.unodc.org/documents/cropmonitoring/Afghanistan/Afghanistan_opium_survey_2016_cultivation_production.pdf. December 2016 (accessed 19 August 2017).

poppy cultivation in 2016 and 2017 with GIRoA's diminishing influence over the population in parts of rural Afghanistan, and highlights the role that the mapping of opium poppy can play in charting the writ of the Afghan State in those areas where cultivation has a history.

2.1 Between the Lion and a Man with a Stick in the East: Nangarhar

The province of Nangarhar has a history of prolific opium production with levels of cultivation typically exceeding 15,000 ha per year (see Figure 3). Temporary Iulls in production were achieved in 1995 as a consequence of an opium ban imposed by the then head of the Eastern Shura, Haji Qadir, as well as in 2001, following the nationwide prohibition imposed by the Taliban. Subsequent counternarcotics (CN) efforts under the Karzai Government - prompted by the international community - led to further bans on opium production being imposed by Governors Hajji Din Mohammed in the 2004/05 growing season and by Gul Aga Shirzai in 2007/08. The ban imposed by Gul Agha Shirzai, with the support and presence of the US military, represents the longest standing respite in cultivation, and led to the province being declared "poppy-free"³⁴ by UNODC in 2008. Cultivation then remained relatively low throughout the 2009 and 2010 growing seasons.

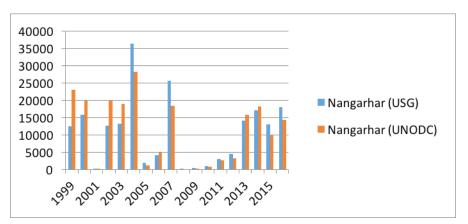


Figure 3: Poppy cultivation in Nangarhar, 1999-2016 (hectares)

From 2011 onwards, levels of opium poppy cultivation in Nangarhar began to rise as GIRoA's writ diminished and a growing number of areas fell beyond the reach of the government and the ANDSF. Initially, the increase was relatively slow rising from 2,700 ha in 2011 to 3,151 in 2012. However, by 2014, levels - when the combination of a growing insurgent presence, the withdrawal of US forces and economic downturn were taking effect - cultivation reached an estimated 18,227 ha. Many expected cultivation to rise even further in 2016. The worsening security situation - with further incursions by the Taliban into the lower valleys of the Southern districts - alongside further reductions in wage labour opportunities and even fewer development interventions, created the conditions for a peak year of cultivation.

Indeed, by the planting season in the fall of 2015 there were signs of opium production moving further North into the lower parts of the Southern valleys where the crop had not been seen for a number of years. For example, opium poppy was grown extensively in the lower parts of Khogiani, on the outskirts of the district centre (see Figure 4), and in Chapahar, Rodat, and Bati Kot in 2016. Cultivation also moved into parts of lower Surkhrud, in the foothills of Tor Ghar, minimal distance from the provincial centre of Jalalabad where the government has traditionally held sway. By the time the UNODC poppy survey was released in the fall of 2016, UNODC confirmed levels of opium poppy cultivation in districts like Chapahar (2,472 ha) and Rodat (1,426 ha) that had not been seen since 2007; a year when cultivation was estimated at 18,739 ha and was found in all but five of Nangarhar's 22 districts.

³⁴ Defined as less than 100 hectares (ha) see UNODC. "Afghanistan Opium Survey 2007" https://www.unodc.org/documents/ crop-monitoring/Afghanistan-Opium-Survey-2007.pdf. October 2007 (accessed 19 August 2017), 11. In 2008 the USG estimated there were 265 hectares of opium poppy in Nangarhar, in contrast to UNODC's declaration of the province as "poppy free".

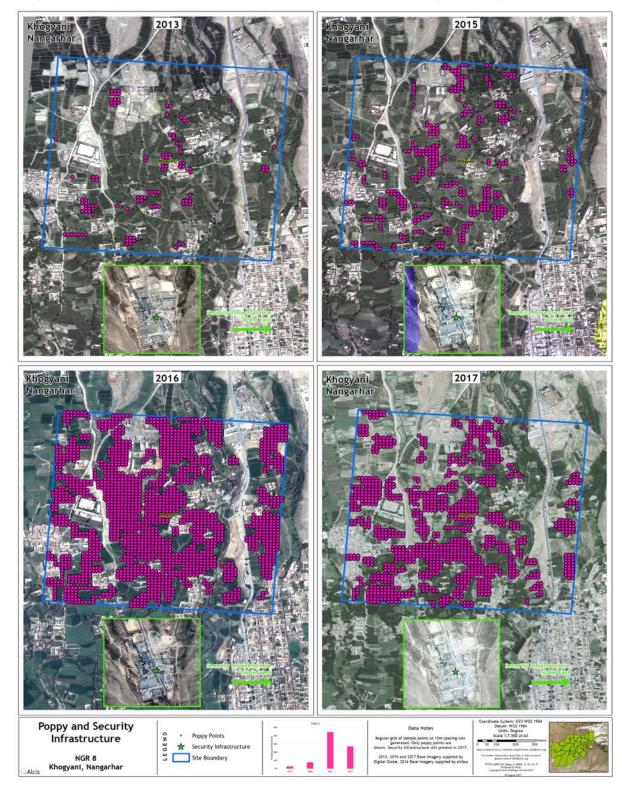


Figure 4: Poppy cultivation to the South of the district centre of Khogiani, Nangarhar, 2013-2017

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However, the anticipated record cultivation in 2016 did not emerge. The reason was to be found in Daesh's (Islamic State) occupation of the upper reaches of the Spinghar piedmont and not the actions of GIRoA or any sense of the government increasing its territorial control. Almost immediately after taking control of the Mahmand valley in upper Achin in July 2015 Daesh imposed a ban on drug crop cultivation. First the summer cannabis crop was prohibited and farmers were required to destroy any marijuana they had already planted. In the fall of 2015 the prohibition of cannabis was followed by a ban on opium production. Alongside these actions against drug crops there were also reports that the trade in drugs was curtailed by Daesh. Shopkeepers in Shadal bazaar, a major entrepot for the opium trade, as well as in Abdul Khel, were told to stop trading and those who continued were punished. Many traders left the area and by February 2016 much of Shadal stood empty.

Were the upper reaches of Achin and Kot to have cultivated opium poppy as extensively as they had in the past, UNODC's estimate of total cultivation in Nangarhar would have once again surpassed 18,000 ha. However, the absence of opium poppy in these areas potentially says much about the nature of Daesh's rule in the upper valleys of Nangarhar as well as their source of funding. While many might cite the ban on illicit drug crops as evidence of Daesh's Islamic credentials - much as is the case when the Taliban prohibition on opium poppy in the 2000/01 growing season is discussed - there is an important difference. The Daesh ban in upper Achin was accompanied by significant movements of people in the summer and fall of 2015, as farmers sought to escape the conflict that ensued. The Taliban's attempts to regain the territory they had lost to Daesh in 2015, and the support they got from the local population, led to brutal reprisals from Daesh fighters. As an earlier AREU Briefing paper reported "The result was an exodus of families relocating to the relative safety of their relatives' houses in Taliban or government-controlled areas. In their stead, Orakzai and Bajauri families moved into their homes - the most prestigious going to senior Orakzai commanders".³⁵

It is a simple fact that it is much easier to impose a ban on opium production in the absence of a wellarmed local population who is reliant on the crop for their livelihood. For one, there is no need for those seeking to subjugate the area to concern themselves with the welfare of the local population and what farmers and their families they might do in the absence of opium poppy cultivation. Historically those who have sought to impose a ban on opium production in these areas have engaged in some kind of negotiation, even if it has been heavily tinged with coercion. The Taliban made promises of development assistance and offered the Shinwari tribes of upper Achin unparalleled access to an international donor's mission in the spring of 2001 that examined the impact of the ban on opium and that included US, UK, Dutch and UN officials.³⁶ Governor Gul Aga Shirzai drew on the lessons of the Taliban prohibition: with the support of Kabul he coopted prominent Shinwari leaders and local elders, Malik Niaz and Malik Usman, into supporting the ban he imposed in late 2007, and made bold promises that development monies would be forthcoming. The significant uptick in the number of US military in the province beginning in late 2007, particularly in the Southern districts of Nangarhar, including their presence in the villages around the district centre in Kahi, also provided the coercive element the Governor needed to convince the local population to forgo their poppy - if only for a few seasons.

The population of upper Achin has historically resisted efforts to restrict opium production on a number of occasions. From the reports of local men shaving their beards and playing music in reaction to the news of the Taliban prohibition in the fall of 2000, to the resurgence in cultivation in 2010/11, provoked by the continuing economic damage caused by a land conflict and then Governor Gul Aga Shirzai's ban on opium between 2008 and 2010, there is a history of resistance quickly turning into armed rebellion in these upper valleys.³⁷ High population densities, small units of agricultural land

³⁵ Mansfield, David. "The Devil is in the Details: Nangarhar's continual decline into insurgency."

https://areu.org.af/wp-content/uploads/2016/02/1602E-The-Devil-is-in-the-Details-Nangarhar-continued-decline-into-insurgency.pdf. February 2016 (accessed 19 August 2017), 12.

³⁶ Mansfield, David. "The Impact of the Taliban Prohibition on Opium Poppy Cultivation in Afghanistan." http://www. davidmansfield.org/home/docs/field/5.pdf. 25 May 2001 (accessed 19 August 2017).

³⁷ Mansfield, David. A State Built on Sand.

and limited non-farm income opportunities render farmers highly dependent on opium production for their livelihood. When compelled to abandon poppy this well-armed population has proven its capacity to become unruly, rebel and/or look to others for the military support to overturn those that would seek to deprive them of the livelihoods they derive from opium production. Ultimately both the Taliban ban and Gul Aga Shirzai failed to suppress opium and maintain their rule in the absence of viable economic alternatives and in the face of widespread local dissent.

Yet, it may well be possible to maintain Islamic credentials and ban opium where there is no need to gain the succor of the local population, in the form of food, taxes, and fighters. The exodus of the local population might also have allowed Daesh to focus its efforts on their external enemies - ANDSF, US forces, local militia groups and the Taliban - rather than concern themselves with internal dissent and a rebellious population. At the same time, what does the ban on poppy cultivation and prevalence of wheat in these upper valleys say of the funding of Daesh in these areas? In the absence of a large proportion of the population there is neither opium poppy nor the magnesium silicate mines that successive elites have taxed and predated on. Without these revenue streams, and only wheat and small scale horticulture to feed its fighters and their families, there are questions over where the money for food and weapons actually comes from.

And what of the 2017 crop? Reports suggest that in 2017 the opium crop made further inroads into the lower areas of the Southern districts of Nangarhar, reflecting the loss of influence the Afghan Government and the ANDSF had in the area compared to 2016. By the fall of 2016 there were already reports of opium having been planted in government land in the district of Bati Kot and farmers paying rent to both the government and the Taliban.³⁸ By the spring of 2017, the Afghan administration claimed to have destroyed hundreds of hectares of opium in districts like Bati Kot, Shinwar, Surkhrud, Rodat and even Dara-e-Noor;³⁹ districts where cultivation had been negligible in 2016.⁴⁰ Locally, there were reports of opium poppy cultivation in the lower parts of Shinwar and Bati Kot, no distance from the Torkham to Jalalabad road. There were also reports of the government losing further influence in upper Sukhrud beyond the district centre of Sultanpur and poppy being cultivated in close proximity to the road main road; a 30-minute drive from Jalalabad. Eradication was also alleged to be a negotiated affair; limited to those areas where the government wielded some influence and even there it involved agreements where farmers agreed to compensate those neighbours who lost their crop.

In the upper parts of the Southern districts outside Daesh's influence, cultivation thrived in 2017 (see Figure 5). In Khogiani farmers reported that much of the agricultural area was opium poppy with only a few plots of wheat and clover. The absence of wheat and the weakness of the district authorities were such that one farmer suggested "there is no wheat inside the governor's compound". In parts of Achin and upper Shinwar opium poppy was the dominant crop, occupying as much as 90 percent of agricultural land in places like Pakhel.

³⁸ Zarihi, Yousuf. "In Batikot District, Taliban collect govt land rents." https://www.pajhwok.com/en/2016/10/20/batikot-District-taliban-collect-govt-land-rents?utm_source=twitterfeed&utm_medium=twitter. 20 October 2016 (accessed 19 August 2017).

³⁹ By the end of the season it was reported that 731 hectares of opium had been destroyed in Nangarhar. UNODC. "Afghanistan: Total area under opium poppy cultivation expanding, threatening sustainable development in the country." http://www.unodc.org/unodc/en/frontpage/2017/May/afghanistan_-total-area-under-opium-poppy-cultivation-expandingthreatening-sustainable-development-in-the-country.html 19 May 2017 (accessed 19 August 2017), 13.

⁴⁰ Khamaa Press. "335 acres of land cleared of opium poppy by Afghan forces in Nangarhar." https://www.khaama.com/335acres-of-land-cleared-of-opium-poppy-by-afghan-forces-in-nangarhar-02592. 18 April 2017 (accessed 19 August 2017).



Figure 5: Poppy harvest in Khogiani, Nangarhar, April 2017

In the face of dwindling government influence across much of Nangarhar and expanding cultivation in the lower valleys near the Kabul River, it is unclear whether there is an aggregate increase in opium poppy cultivation in the province in 2017. Much depends on what happens in the areas where Daesh maintain its dominant position. At the time of planting in the fall of 2016, Daesh were still in charge and a ban on opium poppy remained in place. High resolution imagery in the early spring of 2017 supports the claims that the area was once again awash with wheat and opium production remained negligible. The influx of journalists into the Mahmand Valley two weeks after the Mother of All Bombs (MOAB) was dropped on Asadkhel on 13 April 2017 also reported wheat planted in fields throughout the valley. The irony is that were Daesh to be subdued and the local population to return to their homes - as they so desperately wish to - there is a strong likelihood that opium poppy also returns in the fall of 2017 - and cultivation will rise significantly in Nangarhar in the 2017/18 growing season.

In conclusion, this expanse in poppy cultivation in Nangarhar in 2016 and 2017 - with its extension into the lower valleys nearer the main highway - reflect the ever diminishing writ of the Afghan State within the province. Where the State could once impose a ban in some of the most remote parts of a district in 2008, poppy can be seen surrounding the district centre and military bases in 2017. To categorise the population or territory within these districts as under government control or influence, as the current assessments do in some cases, is meaningless.

2.2 Rising Cultivation in the Northwest: Badghis

As in Nangarhar, changing patterns of opium poppy cultivation in the Northwestern provinces of Badghis, Faryab, Jawzjan and Sar e pul also reflect the government's dwindling hold over rural areas. Although there is some disagreement over the scale and pace of the increase in opium poppy cultivation in these provinces (See Box 1), most notably Badghis, it is clear production has risen dramatically.

As things stand little is known as to why cultivation has risen in the Northwest over the last five years, and why it appears to have risen so dramatically in Badghis. There are of course the rather ubiquitous explanations for increasing poppy tying it to growing insurgent presence, but many of the existing intelligence reports on Badghis link the cultivation and trade to those in government, perhaps more so, than those that oppose it.

For example, in 2006 and 2007 there were reports of the provincial and district authorities being engaged in the opium trade - with strong ties to the "Bala Murghab Mafia"⁴¹ - as well as allegations of "large amounts of poppy grown" in 'the fertile environs circling Murgab city" and of "many [poppy] fields readily apparent from major roadways".⁴² The annual Governor Led Eradication (GLE) campaigns conducted between 2006 and 2013 were also tarred with allegations of widespread corruption⁴³ and exaggerated reports of crop destruction⁴⁴ - the kind of behavior that fuels antipathy to the authorities and anti-government behavior. GIS analysis highlights just how erratic some of these eradication campaigns were, with minimal levels of crop destruction over large distances. It seems unlikely that this effort was ever a deterrent. Furthermore, by 2010 the Taliban would seem to have already been deeply embedded in the districts of Ghormach and Bala Murghab where poppy is concentrated,⁴⁵ raising the question why it took a further five to six years for cultivation to increase so dramatically.

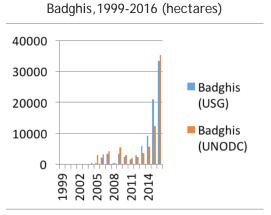
⁴¹ Stability Operations Information Center. "Murghab District, Badghis District Narrative Assessment." https://info. publicintelligence.net/SOICMurghabAssessment.pdf. 5 May 2010 (accessed 19 August 2017).

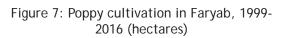
⁴² Wikileaks. "PRT Qal-E-Now: Badghis Governor Set to Profit from a Good Opium Harvest." https://wikileaks.org/plusd/ cables/07KABUL1571_a.html. 9 May 2007 (accessed 19 August 2017).

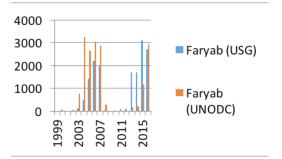
⁴³ Wikileaks. "PRT Qal-E-Now: Badghis Governor Set to Profit from a Good Opium Harvest."; Wikileaks. "PRT/Qal I Now: Badghis Province Security Overview." https://wikileaks.org/plusd/cables/06KABUL2093_a.html. 10 May 2006 (accessed 19 August 2017). Wikileaks. "PRT/Qal I Now: Badghis Province Security Overview."

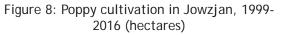
⁴⁴ Wikileaks. "PRT/Qal I Now: Badghis Province Security Overview."; Wikileaks. "PRT Qal-E-Now: Badghis Governor Set to Profit from a Good Opium Harvest.";

⁴⁵ Bernabe, Monica. "Afghan Analysts Network: New troops too late for Badghis?" https://www.afghanistan-analysts. org/new-troops-too-late-for-badghis/. 7 March 2010 (accessed 20 August 2017).; Stability Operations Information Center. "Murghab District, Badghis District Narrative Assessment."









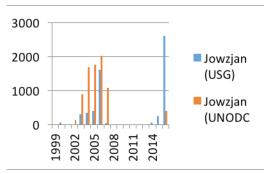


Figure 9: Poppy cultivation in Sar e Pul, 1999-2016 (hectares)

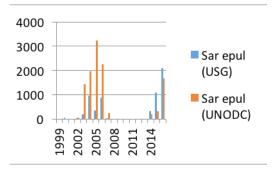


Figure 6: Poppy cultivation in

Box 1: Methodological Differences

It is clear there is agreement that levels of opium poppy cultivation rose sharply in the Northwest since 2010 and both UNODC and the USG report unprecedented level of production in the Northwest, primarily in the province of Badqhis in 2016. However, there is disagreement as to the pace of the increase and when the most significant rise in cultivation took place. For instance, UNODC report a dramatic increase in opium poppy cultivation in the province of Badghis between 2015 and 2016, rising from 12,391 ha to 35,234 ha. The USG on the other hand reports a less dramatic uptake in cultivation between 2015 and 2016, and suggest that the most significant rise in cultivation occurred between 2014 and 2015 when cultivation rose from 9,300 ha to 21,000 ha. Discrepancies can also be seen in the USG and UNODC estimates for the other Northwestern provinces of Faryab, Jawzjan and Sar e Pul, with the USG systematically reporting higher levels of cultivation than UNODC in each province since 2008 (see Figures 6, 7, 8, and 9). Part of the explanation for the difference in reported levels of cultivation may lie with UNODC's evolving methodology for estimating the amount of opium poppy grown in Afghanistan. The USG' method has remained constant and relied on remote sensing for many years unfettered by the budgetary constraints that others face. The methodology for UNODC's annual poppy survey, however, has changed dramatically since it began in Afghanistan in 1994 and it is worth outlining some of its different incarnations to better understand why estimates of cultivation might differ over time as well as the reasons why there may be for significant changes in estimated levels of cultivation that do not reflect changes on the ground or reported by other surveys. In its original form - from 1994 to 2001 - the UNODC poppy survey was based on the visual estimates of field surveyors - a method that is still used in some provinces and referred to as the "village survey" (V). This survey typically relied on Afghan surveyors often working in their own districts to estimate how much poppy was grown. In 2002 UNODC changed its methodology and began to incorporate what had then become lower cost remote sensing technology but limited its use to provinces where more extensive poppy cultivation was reported. As UNODC built its GIS capability and the cost of commercial imagery fell further, the number of provinces covered by remote sensing increased. So much so that by 2007, UNODC reported that as many as 24 provinces were covered using satellite imagery, up from only 7 in 2002. Ten other provinces - where cultivation was considered negligible or zero - were covered by the village survey. In 2009, UNODC further adjusted the methodology conscious of the growing challenges of obtaining adequate imagery coverage of a widening area in which poppy could be feasibly grown or had been reported, while recognizing the increasing concentration of more widespread opium in the South and Southwest Afghanistan. At this point UNODC elected to differentiate between those provinces where it used a "targeted approach" (T) to remote sensing "where only certain areas of a province are fully covered by satellite imagery", and those where a "sampling approach' (S) was adopted for "those provinces where most of the poppy is found". In 2015, the methodology changed once again for those provinces where a sampling approach was used to incorporate "new and better satellite technology" that allowed for a larger number of smaller images to be purchased and more representative data to be obtained. What can be understood from this brief history of UNODC's survey is a hybrid methodology where different provinces might be surveyed using different methods in any given year, and the same province might be surveyed using a variety of methods (which themselves may change) over a number of consecutive years. In fact, this mix of methodologies within and between provinces is perhaps best exemplified in the Northwest (see Table 1A). For example, where cultivation is considered negligible a village based survey is used that relies on the visual estimates of ground surveyors with no remote sensing component. Estimates in Sar e Pul and Jawzian were made using this method until as late as 2014. As cultivation rises UNODC deploy a targeted remote sensing approach which means that "certain areas of a province is fully covered" but "area estimatesshould be considered as a minimum" as some locations where poppy is grown could be omitted. In 2016 cultivation levels in Faryab, Jawzjan and Sar e Pul were estimated using this method. Finally, when cultivation is considered significant enough a sampled approach is used. This was used for estimating cultivation in 11 poppy producing provinces in 2016, including Badghis. The consequence of the changes to the approach used means that estimates of cultivation in a number of provinces in the Northwest have been made using three different methods since UNODC began the survey in 1994. Even in Badghis where poppy estimates were calculated using only two methods, the village survey between 2000 and 2005 and a sampled remote sensing between 2006 and 2016, there were a number of changes in methodology within these approaches, such as the shift to a greater number of smaller images in 2015. All of this has made year on year comparisons of the provincial data problematic, and as UNODC acknowledge "district level estimates are indicative only". Combined with the challenges over image timing which can inhibit image interpretation - particularly in a province like Badghis where there are two planting seasons - there is a need review any of these numbers with caution, particularly before attempting to relate reported increases in cultivation in any given year any to specific events or actions.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Badghis	S	S	S	S	S	S	S	S	S	S
Jawzjan	S	S	V	V	V	V	V	Т	Т	Т
Sar e Pul	S	S	V	V	V	V	V	Т	Т	Т
Faryab	S	S	V	Т	Т	Т	Т	Т	Т	Т

Table 1: Different Methods used by UNODC to Estimate Poppy Cultivation in the Northwestern Provinces of Afghanistan, 2007-2016

What is clear is that the kind of rise UNODC reports in a single year, with cultivation increasing by almost 23,000 hectares in 12 months and almost 30,000 hectares in two years is remarkable if it is, indeed, accurate, especially in a province where opium poppy was not even reported in 2002 and where there were only 400 hectares of poppy in 2005. Faced with such an exponential rise it is necessary to consider the resource intensive nature of opium poppy and question where the knowledge, skills, and different inputs required for such an expansion came from.

In terms of skills and knowledge of the crop, there are of course the usual rumors of apprenticeships and "training,"⁴⁶ as well as the provision of seeds by "Taliban" and "traders." There is a history of these kind of claims in Afghanistan.⁴⁷ They are often the "narratives of the powerful": the anecdotes of local powerbrokers and the landed elite who have little experience of farming themselves, and who often enjoy embellishing a story for a receptive audience. It is typically the same source that propagate claims of farmers being coerced to grow opium poppy by armed actors- warlords or the Taliban⁴⁸ - and reports of improved seed imported from countries as varied as India, Italy, Burma, the United States⁴⁹ and more recently from China⁵⁰ where it is also claimed the seeds were genetically modified.⁵¹ On occasion scholars and policy analysts can be beguiled by such claims and engage in what Furstenberg describes as 'an uncritical acceptance of local mythology'.⁵²

⁴⁶ Bjelica, Jelena. "Afghan Analysts Network: 'One Year's Result is Not a Trend:' the 2015 opium cultivation decrease." https://www.afghanistan-analysts.org/one-years-result-is-not-a-trend-the-2015-opium-cultivation-decrease/. 18 November 2015 (accessed 20 August 2017).

⁴⁷ For example, Felbab Brown (2006) alleges that in the 1990s the Taliban provided 'official Government licenses for opium cultivation, setting up 'model farms' teaching the farmers how to grow poppy more efficiently, and distributing fertilisers for the cultivation of poppy (page 137). A more recent example of this kind of claim can be found in an article by the Institute for War and Peace Reporting, 'Could new poppy strain be boosting Afghanistan's opium crop?', 16 March 2017, https://iwpr.net/global-voices/could-new-poppy-strain-be-boosting. Fieldwork by the author in Afghanistan over a two decades' period has not revealed any supporting evidence for such claims.

For example, it is often cited in the literature that Nasim Mohammed Akundzada of Helmand introduced opium poppy to Central Helmand in the 1980s and then instructed farmers to grow it. (McCoy 1991: 458; Rubin 1995: 262; Hafvenstein 2007: 129; Felbab Brown 2010: 116; Peters 2009: 34; Griffin 2001: 148; Johnson 2012: 291; Chandrasekaran 2012: 40-41). This reports argues that farmers had quotas imposed on them that required them to grow 50 percent of their land with poppy; a failure to do was alleged to result in fines, torture or death. This is a claim that is repeated time and time again in the literature - and repeated for other actors such as the Taliban. In depth fieldwork in rural Helmand over two decades has not found a single farmer who supports this claim. When asked about being coerced to grow opium poppy many farmers laugh, countering the claim with the comment with incredulity, arguing why would they need to be forced to grow opium poppy when as a crop it offers all the advantages that are well documented - it is non-perishable, relatively high value, access to credit and land, guaranteed market, and the buyer comes to the farm gate. Scholars who have spent considerable time in Helmand challenge the public narratives of the absolute power of characters like Nasim, as well as the Taliban. For example, Martin (2015) in his oral history of Helmand writes '[Nasim] was certainly not the governor of Northern Helmand, in the sense that a western observer would understand - he did not have control over all the territory that he 'owned' for example.....Some areas like Baghran, he was never able to influence at all, and others he could only influence by proxy.' (Martin 113:105-106)

⁴⁹ For some of the earlier stories of imported seeds see UNODC's Annual Opium Poppy Survey 1999 Annex E, page 32-49. This includes reports of seeds from America, Italy, Burma and India. This work found that farmers would name varieties after the perceived origin with no evidence that the variety actually came from there. It was also viewed as a marketing ploy - making the seeds seem 'exotic' and 'special' - by those selling the seed. Over the last decade or more I have I have heard similar reports of imported seed in the field, in the media and from the intelligence community. Often the attributes of particular varieties of opium don't match up with the crop grown in that country. For example, reports of a Burmese variety were accompanied by claims that it offers better yields than Afghan varieties, but that it required more water and fertiliser - the exact opposite as the crop grown in Burma.

⁵⁰ Reference to China as a source was first reported in the media in spring of 2015. More recent claims can be found in an article by the Institute for War and Peace Reporting, 'Could new poppy strain be boosting Afghanistan's opium crop?', 16 March 2017, https://iwpr.net/global-voices/could-new-poppy-strain-be-boosting.

⁵¹ It is unclear how those interviewed, as well as the journalists and analysts consulted, reached the conclusion that the seeds were genetically modified.

⁵² One of the most vivid examples of 'local mythologies' is the reports of the "opium melons of Kunduz". This story was first mentioned by UNODC (then UNDCP) surveyors in 1998 when they returned from doing the fieldwork for the annual poppy survey in the Northeast. They returned with tales of Kunduzi farmers that had crossed opium and water melon. They suggested that the crop looked like water melon but when the fruit was lanced opium could be extracted. When doubts were expressed about the veracity of the story, the surveyors supported their report with tales of the expertise of Kunduzi farmers and the fact that they had also developed plant that appeared to be tomatoes and bore its fruit above ground but had potatoes in its roots. The same tale of the "opium melons of Kunduz' were then repeated to the author by an agricultural officer working for the Aga Khan Foundation during fieldwork in Badakhshan in 2003.

However, in-depth livelihoods research with rural households over the last two decades has presented a different picture. This has shown that the introduction and expansion of opium poppy has been at the behest of farmers themselves rather than the actions of others. A common thread of this body of research are the familial and tribal linkages between different areas within Afghanistan and the patterns of seasonal and permanent migration they support, particularly during periods of economic, political or environmental stress. Indeed, some of UNODC's earliest research in the late 1990s that examined the expansion of cultivation into 13 districts in eight different provinces revealed that three quarters of those cultivating opium poppy in areas where the crop had been introduced had experience of opium poppy prior to growing it on their own land, with the majority working in other opium producing districts, either during the weeding or harvest season.⁵³ The remaining 25 percent, who had not grown poppy prior to growing it on their land claimed to have learned about the crop not from traders or the Taliban - but from their relatives and neighbors.

For example, the vast majority of those cultivating opium poppy for the first time in the district of Azra in Logar in 1998, had worked as seasonal labourers during the poppy season in various parts of Nangarhar, particularly in the district of Hisarak where they were linked by tribe and familial connections.⁵⁴ In the districts of Qarghai and in Mehtarlam in Laghman province, farmers had learned about poppy by working in other districts where the Ahmadzai tribe were concentrated, but also from tenant and sharecropping farmers from Khogiani who had travelled to Laghman to grow poppy due to insufficient land in their own villages.⁵⁵ In the districts of Asadabad, Marawara and Sheegal in the province of Kunar, farmers had previously cultivated opium poppy in neighboring Pakistan in the Federally Administered Tribal Area (FATA) of Bajaur where they had stayed with family as refugees to escape the fighting in the 1980s.⁵⁶ This pattern of movement continued into the 21st century with farmers from Kama travelling across the border to work during the poppy harvest in Mohmand Agency when poppy was initially banned in Nangarhar.⁵⁷

Fieldwork in Helmand in 1999 also highlighted the role of migrants from the districts of Pasaband, Taiwara, Chaghcharan and Sharaq in Ghor, in opium poppy cultivation in Northern and Central Helmand. ⁵⁸ In the mid and late 1990s, farmers from these areas, many of them Taimani, were found to work seasonally during the poppy weeding and harvest seasons, while some took land on a sharecropping basis.⁵⁹ Subsequent fieldwork in Ghor itself between 2005 and 2008 revealed how these Ghori farmers, as well as Helmandis looking to escape the Taliban's prohibition of opium poppy in the 2000/01 growing season, had supported the introduction and then expansion of opium production into the province of Ghor in the early part of the 21st century.⁶⁰ Similarly, research in the provinces of Balkh and Nangarhar highlighted the familial and tribal links between the districts of Char Bolak and Chemtal and how increasing number of farmers from districts such as Surkrud and Shinwar in Nangarhar had sought land on a seasonal basis, or work during the harvest season in response to the ban imposed by Hajji Din Mohammed in 2005.⁶¹

⁵³ UNODC. "UNDCP Strategic Study #5: An analysis of the process of expansion of opium poppy to new Districts in Afghanistan." November 1999 (accessed 20 August 2017).

⁵⁴ UNODC. "UNDCP Strategic Study #5," (accessed 20 August 2017).

⁵⁵ UNODC. "UNDCP Strategic Study #5," (accessed 20 August 2017).

⁵⁶ UNODC. "UNDCP Strategic Study #5," (accessed 20 August 2017).

⁵⁷ Mansfield, David. "Pariah or Poverty? The opium ban in the Province of Nangarhar in the 2004/5 gorwing season and its impact on rural livelihood strategies." http://www.akha.org/upload/documents/gtzreportopiumban.pdf. June 2005 (accessed 20 August 2017), 29.

⁵⁸ UNODC. "UNDCP: Strategic Study #4: Access to Labour: The Role of Opium in the livelihood strategies of itinerant harvester working in Helmand Province." June 1999 (accessed 20 August 2017), 9.

⁵⁹ UNODC. "UNDCP: Strategic Study #4," 9.

⁶⁰ Mansfield, David. "Opium Poppy Cultivation in Nangarhar and Ghor." https://areu.org.af/archives/publication/636. December 2006, (accessed 20 August 2017),31-32

⁶¹ Pain, Adam. "Opium Poppy Cultivation in Kunduz and Balkh." https://areu.org.af/wp-content/uploads/2015/12/618E-Opium-Cultivation-in-Kunduz-in-Balkh-CS-print.pdf. June 2006 (accessed 20 August 2017), 19.

These same reports of interdependent labour markets and tribal and familial connections can be heard in Badghis. In the districts of Bala Murgab and Ghormach in Badghis, Achekzai, Barakzai and Noorzai tribes are said to have migrated to Helmand and Oruzgan during the drought in the late 1990s. It is from these very same areas that their forebears had been resettled by Amir Abdur Rahman in the late 19th century. It is these farmers and their successors who travelled to their relatives during subsequent shocks, including the drought of 2008 that brought knowledge of the opium crop, seed and the potential labouring opportunities back to their villages in Bala Murghab and Ghormach.⁶² Indeed, as with Ghor the transfer of knowledge about the opium crop from the Southern province to Badghis is apparent from the use of the same style of harvesting tools, neshtars and rambeys, that can be found in Helmand.

Once sown in these districts, knowledge of the opium crop soon travelled within and between the districts of Badghis - as it has in other provinces where the crop has been introduced - through contact with family, neighbours and along existing transport and trading routes, Anyone who has spent time in rural Afghanistan will recognise how a new crop, or improved technology, provokes the interest of passersby, and the litany of questions that confront the farmer that has adopted them. This is, after all, the model farmer approach to extension pursued by numerous rural development programs, including USAID's four Regional Agricultural Development Programs (RADPs). Migration between districts - for example from Ghormach to Bala Murgab as families have sought to escape the conflict, staying with relatives until fighting subsides - has also facilitated a growing awareness of the opium crop, and subsequent uptake.

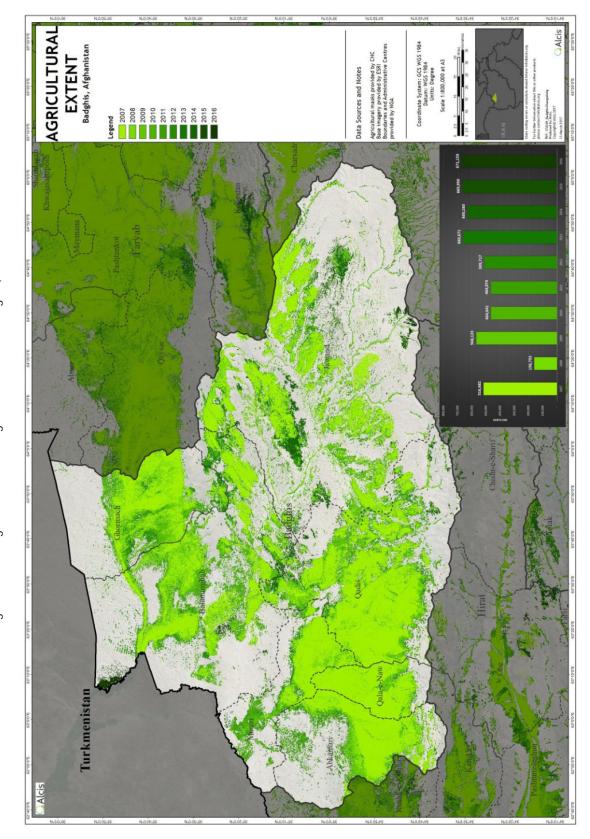
While skills and knowledge of the opium crop in Badghis can initially be traced to tribal and familial links in the South, followed by exposure within the province once the crop was introduced there is much less clarity regarding access to the extra land and labour required to expand the crop so dramatically. Claims that opium poppy has simply replaced wheat, accompanied by concerns over the food security of the population of Badghis,⁶³ would appear to be based on the assumption that the amount of land under agriculture has remained static⁶⁴ and a failure to understand how food security can be achieved through both the production of food crops and their purchase. Many farmers in Badghis would argue that they are more food secure as a consequence of cultivating opium poppy and from the fact that they are able to purchase more wheat from the sale of their opium than were they to have grown wheat on the same unit of land.

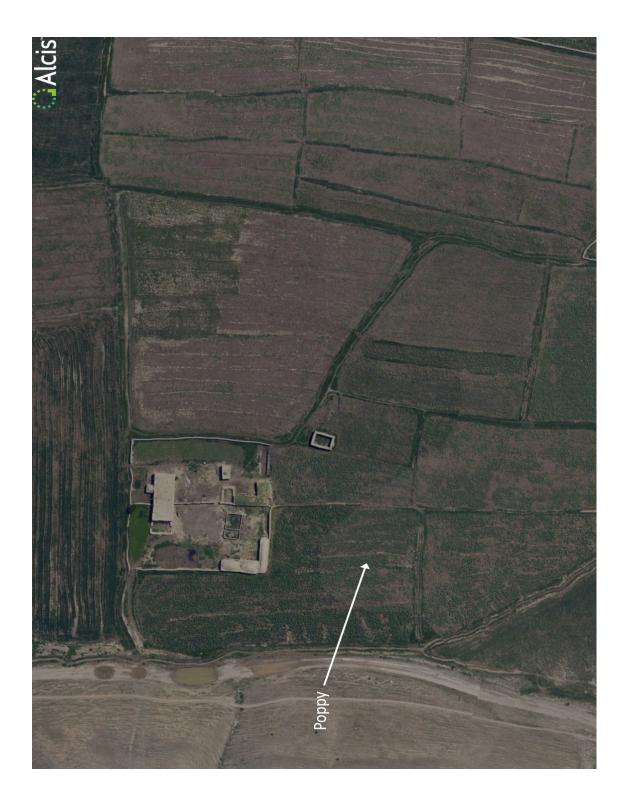
Furthermore, at an aggregate level there is little evidence of farmers in Badghis having to substitute poppy for wheat despite the dramatic increase in opium poppy cultivation since 2010. GIS analysis shows total agricultural land increasing from 464,641 hectares in 2010 to 671,153 hectares in 2016, an increase of 206,512 hectares, easily supporting the increase in opium poppy that has taken place, as well as an increase in wheat (see Figure 10). Much of this new land is in rain-fed areas where both crops, and barley is grown. The significant increase in the amount of agricultural land in Badghis means that only 5 percent was allocated poppy, allowing farmers to continue to grow wheat for their families and their livestock (see Figure 11).

⁶² Wikileaks. "PRT/Qal I Now: Badghis Province Security Overview."

⁶³ Bjelica, Jelena. "Afghan Analysts Network: 'One Year's Result is Not a Trend:' the 2015 opium cultivation decrease." https://www.afghanistan-analysts.org/one-years-result-is-not-a-trend-the-2015-opium-cultivation-decrease/. 18 November 2015 (accessed 20 August 2017).

⁶⁴ For example, Bjelica, Jelena. "Afghan Analysts Network: 'One Year's Result is Not a Trend" uses USAID data from 2008 - a drought year - and UNODC poppy data to project that one third of the Provinces agricultural land was under poppy in 2016. In fact there were 671, 153 hectares of agricultural land in 2016, which means that only 5% of the total agricultural land was under poppy. Bjelica, Jelena. "Afghan Analysts Network: How Neglect and Remoteness Bred Insurgency and a Poppy Boom: The story of Badghis." https://www.afghanistan-analysts.org/how-neglect-and-remoteness-bred-insurgency-and-a-poppy-boom-the-story-of-badghis/. 22 February 2017 (accessed 20 August 2017), 8.





With regard to agricultural inputs the much bigger question in Badghis is perhaps not that of sourcing the extra land given the expansion in total agricultural land in recent years, but more where the extra labour required to extend the opium crop would come from. Here it is important to recognise that the opium crop is labour intensive requiring as many as 360 person days per hectare, whereas wheat requires only 54 labour days per hectare. While there are signs of an expanding population and evidence of new settlements in places like Bala Murgab, there are also accounts of people fleeing fighting in the district of Ghormach which has been a focal point for conflict between Abdul Rashid Dostum and the Taliban for some years. There do not appear to be reports of a significant inflow of people into Badghis from other provinces.

Again, when it comes to the labour requirements for the expansion in opium poppy, it is necessary to look at what is feasible given what we know about the population of Badghis. The increase in opium reported by UNODC between 2015 and 2016 alone, would require an extra 8.2 million labour days. The estimated 32,276-hectare increase between 2010 and 2016 would require 11.6 million labour days and the opium crop in 2016 would require a total of 12.7 million labour days as a whole. While there are two growing seasons for opium in Badghis, allowing some of the labour demands to be spread, the expansion of the crop between 2010 and 2016 would require the equivalent of an extra 58,097 Full Time Equivalent (FTE) jobs and the 2016 crop would require 63,421 FTE jobs. Is this even practicable?

The population data indicates it is - particularly if farmers exploit their household labour, including women and children, a common tactic aimed at minimizing labour costs, particularly in the North where access to cheap labour through sharecropping is not so common. For example, the Afghan Government estimated the population of Badghis in 2012 at 610,000 people, and a labour force participation rate of 56 percent. Assuming the population has not grown markedly since then, opium poppy cultivation in 2016 would have directly employed 18.5 percent of the working population of Badghis,⁶⁵ and of course a much larger proportion of the population of Bala Murghab and Ghormach where the crop is heavily concentrated. A more realistic estimate - derived from high resolution imagery that has documented each of the household compounds across the country, including in Badghis - would suggest the 2016 crop may have absorbed as little as 8.5 percent of the working population,⁶⁶ - highlighting the scope for greater growth in the future even in the areas where it is already concentrated.

Ultimately, a closer analysis of the increase in opium poppy cultivation in the Northwest suggests that what has happened in provinces like Badghis may not be as dramatic as some have suggested. For one, it is not as clear that the rate of increase since 2015 is as exponential as reported by UNODC. UNODC has changed its method of assessing poppy cultivation repeatedly making year on year comparisons problematic. Moreover, there are other more robust estimates of the crop that indicate that the growth has been significant but more protracted than UNODC suggest. Second the way that the crop was introduced and then extended within Badghis follows a pattern that can be found in many other provinces in Afghanistan; one shaped by tribal and familial links, traditional patterns of seasonal and permanent migration during idiosyncratic and covariate shocks, and farmer's prior exposure to the opium crop in other provinces. Third, the crop has expanded in line with the overall growth in the amount of agricultural land in the province. Indeed, contrary to claims by the Afghan Analysts Network

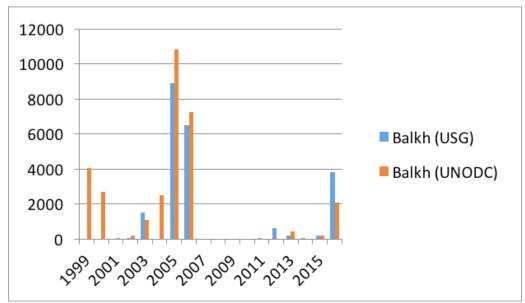
The Government of Afghanistan reports a population of 610,000 in Badghis in 2012. However, this estimate is derived from a sample of CSO villages and not of all the active household compounds in Afghanistan. GIROA. "National Vulnerability and Risk Assessment 2011-2012." http://www.af.undp.org/content/dam/afghanistan/docs/MDGs/NRVA%20REPORT-rev-5%202013.pdf. May 2013 (accessed 20 August 2017), 179.

⁶⁶ Alcis Ltd has used high resolution imagery to plot each active household compound in Afghanistan. In 2014 there were 132,262 household compounds. If the number of household members varied from 6 to 10 this would result in a population of between 793,572 and 1,322,620. Using the same 56 percent labour participation rate this 440,400 and 740,667 working people. With an estimated 35,234 hectares of crop requiring 360 persons days per hectare the 2016 poppy crop would absorb 12,264,240 labour days. If this were converted into full time equivalent employment at a rate of 200 person days per year, the 2016 crop would require 63,421 jobs to complete. This represents between 8.5 and 18.5 percent of the number of those in the working population.

that the crop is cultivated on one third of the provinces total agricultural land, it is in fact grown on only five percent, and the 200,000 hectare increase in cultivated land since 2010 would appear to support farmers to grow greater amounts of wheat and barley for their families and their livestock, and as opposed to what some have argued a livelihood that consists of a combination of food staples, a relatively high value cash crop with a guaranteed market, along with livestock and its byproducts is likely to aid food security in the area, and cushion against drought and falling wage labour opportunities. Finally, the population data suggests that not only is an increase in poppy cultivation feasible but that there is scope for further increases in the future, particularly in the wake of relatively high opium prices, improving yields and a steadily deteriorating legal economy in 2017.

2.3 Far from Poppy-Free in the North: Balkh

The province of Balkh and Governor Atta's rule was celebrated for many years due to the success in removing opium poppy. At its peak in 2005, UNODC estimated that cultivation in the province had reached over 10,000 hectares (see Figure 12). However, in 2007 the province was declared poppy free and Governor Atta was lauded both internationally and nationally for his efforts to reduce opium poppy cultivation. And unlike many provinces where cultivation had fallen dramatically one year only to rise a couple of years later, poppy cultivation remained at negligible levels in Balkh for four further years until 2012.⁶⁷ Even then the level of opium poppy only increased to 410 hectares, and Governor Atta soon moved against the crop and those growing it the districts of Chemtal and Charbolak in an attempt to reassert his dominance over the province.⁶⁸





⁶⁷ Fishstein, Paul. "Evolving Terrain: Opium Poppy Cultivation in Balkh and Badakhshan Provinces in 2013." https://areu. org.af/wp-content/uploads/2016/02/Poppy-Cultivation-in-Balkh-Badakhshan-Case-Study.pdf. February 2014 (accessed 20 August 2017).

⁶⁸ Mansfield, David. "Our friend in the North: Contrasting Images of Power and Poppy in the Provinces of Balkh and Badakhshan." http://www.davidmansfield.org/home/docs/field/58.pdf. 8 April 2014 (accessed 20 August 2017).

However, by 2016 things looked quite different in Balkh. In the fall of 2016, UNODC estimated that cultivation had risen to 2,085 hectares; the USG reported almost twice that amount.⁶⁹ This was a significant rise on the suppressed levels of cultivation Governor Atta had once again delivered in 2014 and 2015, highlighting the increasingly tenuous hold the Governor and the provincial authorities had over parts of the province, most notably the districts of Chemtal and Char Bolak.⁷⁰

By the spring of 2017, cultivation looked as if it was getting out of hand. There were reports of an increasing number itinerant harvesters arriving to take advantage of the growing crop in the spring of 2017.⁷¹ Imagery and GIS analysis also showed marked increases in the level of opium poppy cultivation in Chemtal, Char Bolak and even in close proximity to a main road in the district of Balkh (see Figures 13 and 14). Photographic images even showed cultivation adjacent to base of the Afghan National Police, a development that further showed the reluctance - or inability - of the Afghan State to intervene in the province of Balkh (see Figure 15). ⁷²

With such a rise in cultivation, fields less than 20 km from the provincial centre of Mazar e Sharif, and farmers making such little effort to conceal them, the 2017 growing season could not be more of a contrast with the period from 2007 to 2011 when the Governor counternarcotics efforts and his reputation as a 'strong governor' earned him such acclaim from UNODC, the USG and the UK.⁷³ As with Nangarhar and Badghis, rising cultivation in Balkh and the governor's inability or unwillingness to act against it offers further evidence of a government with diminishing influence in the rural areas.

⁶⁹ UNODC. "Afghanistan Opium Survey 2016: Cultivation and Production."

⁷⁰ Fishstein, Paul, "Briefing note on fieldwork in Balkh Province, May 2015: Opium poppy and rural livelihoods." http://www. baag.org.uk/sites/www.baag.org.uk/files/resources/attachments/AREU%20Briefing%20note%20in%20Balkh%20Province-%20 Opium%20and%20the%20rural%20livelihoods.pdf. October 2015 (accessed on 20 August 2017), 7

⁷¹ http://www.tolonews.com/afghanistan/mass-arrival-%E2%80%98poppy-harvesters%E2%80%99-balkh-sparks-concern.

⁷² Thanks to the Regional Agricultural Development Program- North and Alcis Ltd for the use of GIS analysis and photographs for the analysis and photographs for Balkh.

⁷³ For a detailed analysis, see Mukhopadhyay, Dipali. *Warlords, Strongman Governors and the State in Afghanistan*. New York: Cambridge University Press, 2014.



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Figure 15: Poppy cultivated adjacent to an ANP base in Chemtal District, Balkh, April 2017

2.4 Only a Temporary Lull in the South and Southwest: Helmand and Farah

In contrast to the reports of rising levels of cultivation in the East, North and Northwest, opium poppy cultivation in the South and Southwest remained largely static between 2015 and 2016, thereby constraining the rate of the increase in cultivation that could occur at the national level. In some areas cultivation in the South and Southwest fell dramatically. For example, according to UNODC opium poppy cultivation dropped dramatically in the province of Farah between 2015 and 2016 from 21,106 to 9,101 hectares; in 2014 cultivation had been as high as 27,513 hectares.⁷⁴ In the district of Bakwa in Farah there was a reduction of 75 percent with the amount of land dedicated to poppy falling from 5,567 ha in 2015 to 1,503 ha in 2016; again down from a peak in 2014 of 12,651 hectares.⁷⁵ Further significant reductions could be seen in the district of Nad e Ali in the province of Helmand and in Maiwand in Kandahar. The result was large tracts of uncultivated land could be seen where in 2014 and 2015 the same area had been awash with opium poppy. Cultivation also fell in the Southwest provinces of Helmand as well as in Kandahar. In Helmand, cultivation dropped from 86,443 ha in 2015 to 80,263 ha in 2016, and down from a peak of 103,240 hectares in 2014. In Kandahar, the reductions were not as dramatic, but nevertheless cultivation still fell from 21,020 to 20,475 hectares (see Figure 16, 17, 18 and 19).⁷⁶

⁷⁴ UNODC. "Afghanistan Opium Survey 2016: Cultivation and Production."

⁷⁵ UNODC. "Afghanistan Opium Survey 2016: Cultivation and Production."

⁷⁶ UNODC. "Afghanistan Opium Survey 2016: Cultivation and Production."

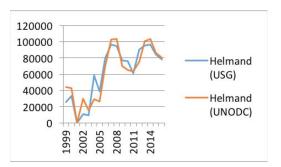


Figure 16: Poppy cultivation in Helmand, 1999-2016 (hectares)

Figure 17: Poppy cultivation in Kandahar, 1999-2016 (hectares)

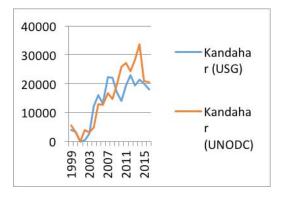


Figure 18: Poppy cultivation in Farah, 1999-2016 (hectares)

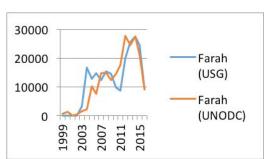
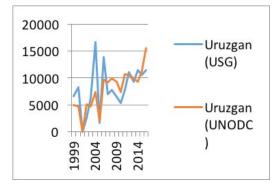


Figure 19: Poppy cultivation in Uruzgan, 1999-2016 (hectares)



Given the deteriorating security situation in these districts and provinces, it is hard to argue that these reductions are a function of crop destruction and "government commitment" - the explanations often claimed by drug control organisations as the primary reason for falling production.⁷⁷ For example, in December 2015 the district centre of Marjah was besieged by Anti Government Elements (AGE). Nad e Ali - another major opium producing district - also witnessed a marked increase in insurgent presence limiting the mobility of the Afghan National Defence Security Forces (ANDSF) and government officials. Yet despite these trends, cultivation fell in both districts. Nor is it possible to talk of the 'reversal of efforts' as stated by the current Executive Director of UNODC, Yury Fedotov given GIRoAs increasingly tenuous influence in rural areas in the South and the low priority that drugs and the illicit economy has been given by the National Unity Government.

A more convincing explanation for the falling levels of cultivation in the South is the impact falling yields had on levels of cultivation and how this impacted on the different population groups involved in production - especially in the recently settled desert areas North of the Boghra canal stretching from Helmand to Farah. As has been noted in previous AREU reports the South and Southwest regions have seen an unprecedented increase in the amount of land under agriculture in the last ten years, increasing from 151,962 hectares to 432,896 hectares between 2003 and 2013.⁷⁸ The vast majority of the new land brought under cultivation was formerly desert land - land that had previously been considered government land and unsuitable for agricultural production because of a lack of irrigation.

⁷⁷ VOA News. "UN: Afghan Opium Production Down 48%." https://www.voanews.com/a/un-afghan-opium-productiondown/3005243.html. 14 October 2015 (accessed 20 August 2017).

⁷⁸ Mansfield, David and Fishstein, Paul. "2016 Moving with the Times: How opium poppy cultivation has adapted to the changing environment." http://www.davidmansfield.org/home/docs/field/76.pdf. 2016 (accessed 20 August 2017), 8.

The settlement of this former desert land was largely financed by illegal opium production. Without the financial premium associated with the opium crop it is hard to see how this former rocky and barren land could have been made fertile. Capital was required for the investments in land clearance, fertiliser, and the establishment of shallow wells, and subsequently deep wells, required to make the land productive. Further finance was needed to build homes and purchase the means of transport required to access markets and services in such a remote and inhospitable terrain. Opium production was the primary source of capital, and ultimately paid for the transformation of these former desert areas across Kandahar, Helmand, Farah and Nimroz.

However, opium yields were particularly low in the former desert areas dating back to 2012. Salination, poor plant husbandry and monocropping are typically blamed for four consecutive years of crop failure. By 2015 opium yields were as low as 0.5 man per jerib in 2015 (the equivalent of 11.25kg/ha), down from 3 to 4 man (the equivalent of 67.5 to 90 kg/ha) in 2011. Yields were such that the amount of land under cultivation fell, falling in the area North of the Bohra Canal in Helmand from 40,845 hectares in 2015 to 34, 608 hectares of agricultural land in 2013, a fall of 6,000 hectares in just two years. Furthermore, the amount of land under wheat in 2016 surpassed the area cultivated with opium poppy for the first time since 2010, further supporting the reports of poor opium yields in the preceding years - with no eradication or military presence in the former desert land North of the Boghra there is no basis to attribute this reduction to 'government commitment' or counternarcotics efforts.

The land-poor were particularly hard hit by the failure of the opium crop. For instance, a sharecropper working in the former desert area and receiving one quarter of the final yield of poppy received a net return of only US\$ 334 per jerib for their efforts in 2015; the equivalent of US\$ 0.91 per day and US\$ 0.09 income per family member per day. As such, they would have had to cultivate 12.6 jeribs of opium to meet the US\$ 1.25 per day that is considered the international measure of absolute poverty. In many parts of the South, low yields drove many of those sharecroppers receiving only one quarter of the final crop to reconsider their position, particularly those in the former desert areas. Some relocated looking for new land to cultivate poppy in the canal irrigated areas where they hoped for higher yields. Others pressed deeper into the desert hoping that reports of higher yields in area where the crop had not been grown so intensively were true. Many stayed where they were conscious of reports that yields were falling across the South and that there were few viable economic options elsewhere for the land poor.

For those cultivating land under what has been a more recent land tenure system - the "lekha" - that is particular to the desert areas in the South, low yields led to significant financial losses and the wholesale abandonment of land. In contrast to the more traditional land tenure arrangement in the Southern region where sharecroppers receive one quarter of the opium crop, the lekha system leaves the "sharecropper" with 5/6 or 6/7 of the final crop. The price the sharecropper pays for this more generous share of production is they to cover all of the recurrent costs of production - farm power, seed, fertiliser, diesel, herbicide and labour. Those receiving land under the more traditional system pay none of these costs, hence the smaller share of the final crop. While offering a smaller share of the final crop the lekha system allowed landowners to improve their land without incurring the high start-up costs and while retaining ownership.

The abandonment of land was particularly acute in the former desert areas of Bakwa in Farah and Delarem in Nimroz where lekha has become more common. Here the Noorzai dominate - in particular the tribes of Chalakzai and Bahadorzai. Originally these tribes lived in 12 villages irrigated by underground channels known as karez. Encroachment into the desert area around these villages began in the early 21st century after the failure of the karez following the drought in the late 1990s, and then the drop in ground water that fed the shallow wells, that had been dug to improve the water supply. It was the introduction of deep well technology - and the capacity to dig as deep as 100 to 120 metres - that allowed the exploitation of desert land by the Noorzai inhabitants.

Initially, the desert land surrounding each village was divided between those that owned land in the original village. This division of land was based on the percentage of the total agricultural land that they owned in the original karez irrigated village. In some cases, this led to land holdings in the former desert land of up to 20 hectares. Keen to retain ownership of the land, but short of the capital to invest and improve the soils, these landowners employed sharecrops based on the lekha system, recruiting as many as three to improve and work the land. With falling yields there was little interest in continuing these land tenure arrangements in 2016, and cultivation of the land and poppy fell dramatically.

As in Nangarhar, Badghis and Balkh, cultivation in the South and Southwest looked set to rise dramatically in 2017 - even in the former desert areas. While GIRoA presence in the former desert areas of Bakwa and Helmand had never been strong, its influence in the canal command areas of Central Helmand was greatly diminished. In fact, fieldwork in Central Helmand in April 2017 revealed cultivation in each of the research sites that AREU has been working in, even in Bolan and Qala Bost - areas no distance from the provincial centre of Lashkar Gah and where cultivation had been absent since 2008 (see Figure 20). Cultivation was found across the canal command area in the districts of Marjah, Nad e Ali, Lashkar Gah and Nahre Seraj, reaching as high as 25 percent of the agricultural land in some locations. In many areas opium poppy was replacing cash crops such as cotton, melon and water melon rather than wheat.

In the former desert areas, opium poppy was also on the rise. Not to the levels it reached in 2012 and 2013 when it was almost monocropped, but certainly in line with 2014 when wheat was the minority crop in the former desert areas North of the Boghra (see Figure 21). Furthermore, farmers reported good yields in the former desert areas of Helmand for the first time since 2011. Yields of 2 and 3 man of fresh opium per jerib (the equivalent of 45 to 67.6 kg per hectare) were not unheard of and prices remained high at between 60,000 to 80,000 PR per man, raising the possibility of further increases in cultivation in the 2017/18 growing season both North and South of the Boghra canal.

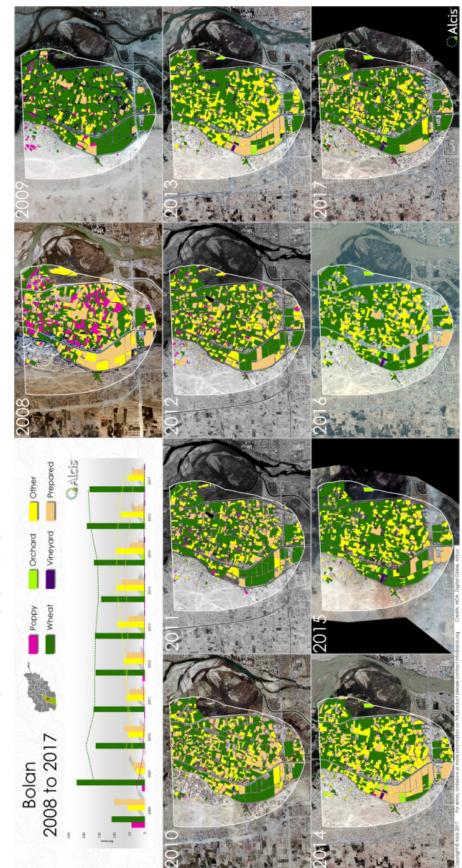


Figure 20: Changing cropping patterns in Bolan, Lashkar Gah District, Helmand, 2008-2017

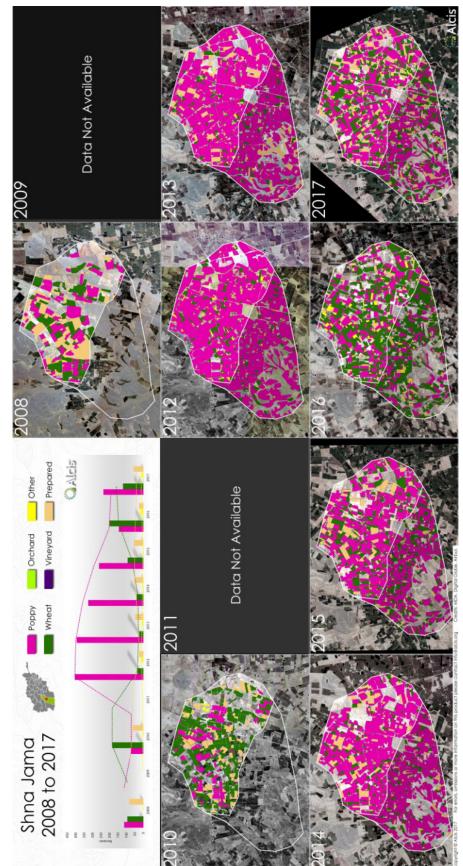


Figure 21: Changing cropping patterns in Shna Jama, Nad e Ali District, Helmand, 2008-2017

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In sum, when it comes to patterns of opium poppy cultivation and its re-emergence in parts of Helmand, Nangarhar and Balkh - where the crop had in some cases been absent for more than a decade - there is little evidence to support USFOR-A's measurements of government control and influence. Instead, what can be seen is a government very much on the wane, finding it increasingly difficult to assert its authority over the rural population. Government hegemony - control - is far from evident beyond the boundaries of many district centres in these and other provinces; and even government influence is far less apparent than it has been for many years, particularly in light of the scale of opium poppy cultivation surrounding the security infrastructure of the ANP and ANA. This is not to say that the insurgency is in a dominant position - as the next section will show the relationship between opium poppy cultivation and the Taliban is not as clear cut as the official narratives suggest - it does however indicate there are large swathes of the Afghan countryside that are more contested than current measures suggest.

3. Tax: What Does it Tell Us about Insurgent Influence?

The ability to raise revenue from a population through taxes or levies can say a lot about the control and influence of state and non-state actors, including insurgent groups. Much of the discussion around insurgent taxation focuses on coercion, conjuring up an image of the rural population being predated upon by men with guns. However, many scholars would argue that all taxation is to some extent coerced, in that "all taxation involves the actual or threatened exercise of state power: individual taxpayers are obliged to hand over money, with no firm guarantee of reciprocity, in situations where they are perceived to have little or no choice."⁷⁹ Some academics, such as Moore (2008), differentiate between coercive taxation characterised by a level of arbitrariness in assessing the level of payment and the absence of any real guarantee of reciprocity or service from those collecting; and revenue bargaining where there is "a more or less explicit exchange of tax revenue for services."⁸⁰ The former would seem to describe taxation in Afghanistan regardless of who is collecting, the government, or non-state actors, including insurgents.

In Afghanistan, the discussion on taxation and the insurgency centres on the opium economy and in particular the large amounts of revenue that UNODC estimates is generated by the Taliban through a farmgate tax on opium production.⁸¹ For example "UNODC estimated that non-State armed groups raised about US\$ 150 million in 2016 from the Afghan illicit opiate trade in the form of taxes on the cultivation of opium poppy and trafficking in opiates. The overall drug-related income, however, may be higher still. The Security Council Committee established pursuant to resolution 1988 (2011) estimated the overall annual income of the Taliban at about US\$ 400 million, half of which is likely to be derived from the illicit narcotics economy." Other forms of taxation are typically neglected in the discussions and calculations. This section draws on detailed longitudinal research in a number of districts and provinces in Afghanistan to highlight some of the "potentially faulty assumptions"⁸² that underlie the discussions on the revenues the Taliban earn from the taxation of production at the farmgate, but also to outline what the other forms of tax tell us about the presence and influence of insurgents in rural and urban areas.

3.1 The Insurgency, Drugs and Taxation

The debate over how much the insurgency and, in particular, the Taliban earns from illicit drugs has been protracted and is ongoing. Estimates of how much the insurgency earns from the drugs trade are unreliable. Estimates have ranged from US\$ 70 to as much as US \$500 million⁸³ and have been influenced as much by political interests and institutional mandates as by methodology. For example, it was Tony Blair who first publically linked the Taliban, Al Qaeda and drugs in his speech to the UK Parliament in October 2001, using it as part of his justification for the UK Government's support for the military effort in Afghanistan. The basis of this link was intelligence that at the time a senior UK official said "neither INL nor the UK Drugs and International Crime put much weight on".⁸⁴ In fact in the initial years of the Afghan mission, there were disagreements within the United States

⁷⁹ Moore, Mick. "Between coercion and contract: competing narratives on taxation and governance." In Taxation and Statebuilding in Developing Countries: Capacity and Consent, edited by Brautigam, Fjeldstad and Moore. New York: Cambridge University Press, 2008.

⁸⁰ Moore, Mick. "Between coercion and contract," 37

⁸¹ UNODC. "World Drug Report 2017: The Drug Problem and Organized Crime, Illicit Financial Flows, Corruption and Terrorism." https://www.unodc.org/wdr2017/field/Booklet_5_NEXUS.pdf. May 2017 (accessed 20 August 2017).

⁸² For a detailed critique of some of the statistics, assumptions and debate on revels and their revenue earning capacity see Hazen, Jennifer. *What Rebels Want: Resources and Supply Networks in Wartime*. Ithaca: Cornell University Press, 2013.

US Senate Committee on Foreign Relations. "Afghanistan's Narco War: Breaking the Link Between Drug Traffickers and Insurgents." https://fas.org/irp/congress/2009_rpt/afghan.pdf. 20 August 2009 (accessed 20 August 2017), GovernmentGovernment10; UNODC. "Afghanistan Opium Survey 2009: Addiction, Crime, and Insurgency: The transnational threat of Afghan opium." https://www.unodc.org/documents/data-and-analysis/Afghanistan/Afghan_Opium_Trade_2009_ web.pdf. 2009 (accessed 20 August 2017).

⁸⁴ Interview with UK official, July 2015.

Government with regard to the debate on Taliban and funding with claims that the US Department of Defense (DoD) and US Central Command (CENTCOM) were reluctant to admit the link between drugs and Taliban for fear that this would be used to press for an expansion of the DoD's role.

The link between drugs and Taliban funding became much more explicit in the public policy debates in 2006 and 2007 when Tom Schweich of the International Narcotics and Legal Affairs (INL) of the US Department of State and Antonio Maria Costa, the Executive Director of the UNODC,⁸⁵ directly linked the resurgent insurgency with rising levels of drug crop cultivation and the funding that the Taliban earned from the crop.⁸⁶ In a mark of revisionism from what UNODC had been writing at the time, and in contradiction to the World Bank's estimates⁸⁷ as well as those of respected scholar Dr. Barnett Rubin,⁸⁸ the Executive Director of UNODC even suggested that opium had been "the regimes sole source of foreign exchange" between 1996 and 2000.⁸⁹ These claims that the Taliban relied on opium for funding became an important part of the justification for aerial spraying that dominated the policy debates on counternarcotics in Afghanistan between 2004 and 2008.⁹⁰

This was to change with the Obama Administration and, by 2010, counternarcotics was no longer a policy priority of the USG in Afghanistan. Officials at that time argued that the Taliban's funding came from other sources. For example, Ambassador Holbrooke, the Special Representative on Afghanistan and Pakistan (SRAP), at the time cited a Central Intelligence Agency (CIA) study suggesting that the Taliban received most of its funds from illegal taxation and contributions from Pakistan and Persian Gulf nations, and not from illicit drugs.⁹¹ Kirk Meyer, former Director of the Afghan Threat Finance Cell (ATFC) also challenged the notion that narcotics formed the primary source of funding for the Taliban, arguing that "I personally never believed [drugs] was as big a funding source for the insurgency as a lot of people thought. It was a funding source, I am not denying that, but you used to hear these numbers all the time - a billion dollars and the like".⁹²

In March 2017, the claim that the Taliban generated most of its funds from the opium trade resurfaced once again. This time it was General Nicholson, the US Commander in charge of Resolute Support, who claimed that 60 percent of Taliban funding came from narcotics, once again raising the specter of the Taliban and opium production being synonymous and that the insurgents interests in opium poppy were primarily financial.⁹³ UNODC supported this claim arguing that the Taliban earning US\$ 47 million from taxing the production of opium production at the farmgate and US\$ 164 million from taxing the trade in opiates overall.⁹⁴ Of course, given the underground nature of the illicit economy, the opaque nature of the methodologies used to estimate the Taliban's revenue and the use of intelligence, it remains unclear to whether the Taliban's source of funding has changed, whether it is the methods used to calculate them that has altered or whether it is a shift in politics and the desire

94 UNODC. "Afghanistan Opium Survey 2016."

⁸⁵ At the time UNODC was known as the United Nations Drug Control Program (UNDCP).

⁸⁶ UNODC. "Afghanistan Opium Survey 2007." https://www.unodc.org/documents/crop-monitoring/Afghanistan-Opium-Survey-2007.pdf. October 2007 (accessed 20 August 2017), iii-v.

⁸⁷ Naqvi, Z.F. Afghanistan-Pakistan Trade Relations. Islamabad: World Bank Press, 1999.

⁸⁸ Rubin, Barnett. The Fragmentation of Afghanistan: State Collapse in the International System. New Haven: Yale University Press, 2002, xxiii-xxiv

⁸⁹ UNODC. "Afghanistan Opium Survey 2007," iv.

⁹⁰ In January 2008 ISAF Commanding General Dan McNeill also publicly stated "When I see a poppy field, I see it turning into money and then into IEDs [Improvised Explosive Devices], AKs [assault rifles], and RPGs [Rocket Propelled Grenades Reuters News. "ISAF Chief sees Afghan drug trade rising in 2008." http://www.reuters.com/article/us-afghan-mcneill-idUSSP4364920080102. 2 January 2008 (accessed on 20 August 2017).

⁹¹ Cited in Chandrasekhan, Rajiv. *Little America: The war within the war for Afghanistan*. New York: Alfred A Knopf, 2012, 63.

⁹² Global Ecco. "Interview: Kirk Meyer, Former Director of the Afghan Threat Finance Cell." https://globalecco.org/en_GB/ kirk-meyer-former-director-of-the-afghan-threat-finance-cell. 2 April 2014 (accessed on 20 August 2017).

⁹³ US Department of Defense. "News Transcript: Department of Defense Press Briefing by General Nicholson in the Pentagon Briefing Room." https://www.defense.gov/News/Transcripts/Transcript-View/Article/1019029/department-of-defensepress-briefing-by-general-nicholson-in-the-pentagon-brief. 2 December 2016 (accessed 20 August 2017).

to place Afghanistan and the insurgency in a more central position in US foreign policy, that has led to the change in the language and estimates with regard to the Taliban's financial dependency on the opium economy.

3.2 It Just Don't Add Up

Where there is a degree of transparency in the estimates around Taliban financing there are significant methodological weaknesses, particularly with regard to the amount of money earned at the farmgate. For example, it has often been claimed that the Taliban collect a percentage of the totally crop, typically 10 percent in the form of "ushr," a traditional Islamic tithe on agricultural production. This assessment is based on data collected by UNODC. However, there are a number of methodological weaknesses associated with the way that UNODC collect this data. The primary problem has been one of translation and the assumptions that underlie the interpretation of the answers that respondents give. For example, until 2016 UNODC asked whether farmers paid tax to the Taliban, using the generic word for tax - ushr. UNODC then assumed that if a farmer answered yes, they were paying 10 percent of the total crop - in accordance with the meaning of ushr in Islamic law. It was not until 2016 that UNODC actually sought to identify what percentage of the crop farmers paid and reported different rates of payment across different regions as opposed to a standard rate imposed across the country as a whole.

While somewhat improved, this attempt to disaggregate data - by both region and rates of payment - is not without its problems. For one, the data is still not disaggregated enough. Regions in Afghanistan comprise of a number of different provinces, each of which is made up of many districts, which in turn comprise of multiple villages many of which have different histories of engagement with the Afghan State, the insurgency and opium. It is not possible to simply aggregate these experiences, as well as traditions and systems of payments - or taxes - to rural institutions across entire regions.

Payments to the Taliban have been found to vary by village within the same districts; a function of a community's economic prosperity in a given year, the degree to which the insurgency has consolidated its position, as well as preexisting histories and systems of taxation.⁹⁵ As such, UNODC's claims that farmers in the Southern region paid on average 11 percent of their opium crop sales to the Taliban are not only inaccurate but inadequate analytically when we consider the diversity in payments across districts, provinces and regions but also when we consider the changing nature of payments and the basis on which they are made.

However, there is also the problem that UNODC's primary source of data at the village level continues to be the rural elite - what UNODC refers to as the "village headman". This title may refer to the malik - a formal title given by the government to an individual responsible for acting as a representative between the Afghan State and the community. There is a challenge in that in areas where the Taliban dominate, this position does not exist as there is little to no government to engage with and carrying this formal title subjects the individual to punitive action by insurgents. Indeed, many of those members of the rural elite with formal links to the government in insecure provinces like Helmand only return to the village when the insurgency has been cleared and will repeatedly abandon their villages and move to Lashkar Gah if the insurgency once again gains ground in the area. In the absence of these village headmen, who is it that UNODC are actually interviewing and how knowledgeable are they of the area and the tax system?

There are challenges of bias associated with interviewing the wealthiest members of the rural community. Data is skewed by a focus on this group, not just in relation to its relative wealth, but also subjectivity bias - the tendency to answer questions in a way that the respondent believes the interviewer wants to hear. Wealthier members of rural communities in Afghanistan are well-versed

⁹⁵ Mansfield, David. "From Bad They Made it Worse: The concentration of opium poppy in areas of conflict in the Provinces of Helmand and Nangarhar." https://areu.org.af/wp-content/uploads/2016/02/E-NRM-CS6-ver-2-2.pdf. May 2014 (accessed 20 August 2017).

in positioning themselves and their community in a way that they can gain favour in the form of development assistance and/or political kudos; they are political actors. In the case of researching the amount paid to the Taliban, the subjectivity bias is further reinforced in the way that questions are asked: the question over insurgent funding does not ask on what basis are payments made - for example, on land, water and/or crops including, but not exclusive to opium - but pursued a line of questioning that specifically ties payments to sales on opium⁹⁶ despite the prevalence of many others forms of tax in these rural settings.

There is a further problem in the degree of access that UNODC and their surveyors have in the more insecure parts of the South. It has certainly been the case in the past that their surveyors - and certainly the MCN surveyors that they are reported to work with - have not been able to access the former desert areas North of the Boghra Canal, even as early as 2010. Is it likely that they have better access now to areas where the insurgency has significant influence given the growing insecurity in many parts of Helmand, Farah, Uruzgan and Kandahar over the last two years? Perhaps the issue of access is explained in UNODC's report that as few as 58 percent of "village headmen" report paying taxes to non-state actors on opium when the Taliban's penetration into rural areas reaches right across Central Helmand, even in Bolan, no distance from Lashkar Gah.

3.3 A Tax Based On More Than Opium

Given the methodological challenges with UNODC's estimates it is perhaps not surprising that their findings run contrary to in-depth longitudinal fieldwork conducted by AREU over the last decade. AREU found that farmgate payments vary considerably both within provinces and districts not only in amounts, but also the basis for payments and how payments are made. There are also temporal shifts in the amount paid, a function of insurgent influence in the area and the state of the rural economy. There is, of course, also room for negotiation based on patronage and poverty.

For instance, in the canal area of Central Helmand a land tax is imposed by the Taliban in 2017, highlighting the significant influence they have gained in the area once again. This is the same system that prevailed in Central Helmand until the dramatic uptick in international and national military forces - the surge - that began in Central Helmand in 2009. This system is based on the amount of land that was originally distributed to farmers by the government during the settlement of the area in the 1960s, 70s and 80s. The exact amount of land given to farmers varied over the course of the settlement and according to the quality of land allocated. ⁹⁷ Consequently, some farmers were given as much as six to seven hectares of land during the initial settlement under King Zahir, while others received two hectares or less during the land reforms of the People's Democratic Party of Afghanistan (PDPA) ⁹⁸ and subsequently the Mujahiddin.⁹⁹ These initial allocations became known as "forma", thought to be as a result of the official form that farmers signed when they received the land.¹⁰⁰

Over time, these original plots of land were subdivided by the generations that followed. Despite the parceling-off of the land, farmers, and those responsible for water management - the mirabs - remain aware of the original forma their individual unit of land belongs to. While the amount to

^{96 &}quot;In 2016 village headmen were asked if farmers pay some taxes on their opium sales, to whom they are paid and what percentage of earnings were collected?" cited in UNODC (2017) Sustainable Development in an opium production environment: UNODC. "Afghanistan Opium Survey 2016," 78.

⁹⁷ In Nad e Ali, many settlers were originally allocated a plot of land or *forma* of 30 *jeribs* (Ghulam Farouq, "Socio-economic aspects of land settlement in Helmand valley, Afghanistan," thesis submitted to the American University of Beirut, June 1975, 71).

⁹⁸ See Swedish Committee for Afghanistan. "The Agricultural Survey of Afghanistan: Farming Systems of Nad Ali District, Helmand Province." http://scottshelmandvalleyarchives.org/docs/fes-92-06.pdf. August 1992 (accessed on 20 August 2017), 11.

⁹⁹ The mujaheddin also distributed government land in Helmand in the 1980s. At this point a forma was 6 jeribs, the equivalent of 1.2 hectares.

¹⁰⁰ The term "forma" is allegedly derived from the form on which the land title deed was written. See Swedish Committee for Afghanistan. "The Agricultural Survey of Afghanistan: Farming Systems of Nad Ali District, Helmand Province," 11.

be paid under this particular tax system is not based on opium, it is affected by the changes in the economy in a given year. Consequently, in 2008, when opium poppy was grown extensively, the land tax announced by the Taliban was set at 12,000 Pakistani Rupees (PR) per forma, compared to 8,000 PR in 2009, 6,000 PR in 2010 and only 2,000 PR in 2011.¹⁰¹ In 2016, the tax on land was 2,000 Afghanis per forma. It is notable that in the absence of the Taliban between 2012 and 2015 the government did not collect land taxes in these areas.

However, the land tax is not the only source of revenue the Taliban earn from Central Helmand; they also receive payments on both opium and wheat. With regard to payments on crops, the generalised system in Helmand is that of 2 khord¹⁰² per jerib of opium (the equivalent of 1.125 kg/ha) whether the farm is in the canal command area or the former desert areas. With regard to wheat, payments were 300 Afghanis per jerib for the canal command area and 200 Afghanis per jerib in the former desert areas, recognising the difference in yields and the costs associated with irrigation in the former desert areas. It is notable that in 2017 these payments were payable in Afghanis, whereas in the past taxes on wheat were in Pakistani Rupee.

Of course, while a generalised system is in place there is, as ever, room for manoeuvre. For example, a farmer cultivating six hectares of opium in the desert area North of the Boghra was asked how much opium he was growing by the local Taliban commander when constructing the list of what each farmer should pay. Upon being told by the farmer that he was cultivating only 3.2 hectares of poppy, the Taliban commander said he would report only 1.2 hectares. Thus, the farmer paid only 1.8 kg of opium instead of the 6.75 kg of opium that was due. With a yield of 45 kg of opium per hectare and a total yield of 270 kg, this particular farmer paid only 0.7 percent of his total crop, considerably less than the 10 percent "ushr" that is commonly reported.

Table 2 shows the revenues the Taliban would be expected to earn from the districts of Nad e Ali and Marjah, offering a contrast with UNODC's reports of an 11 percent tax on opium paid by only 58 percent of those interviewed. AREU's calculations indicate taxes of US\$ 3.7 million from these two districts in 2016 of which US\$ 2.5 million was the tax on opium, two thirds of the total taxes payable. In contrast, UNODC report a tax of US\$ 3 million in opium taxes alone, assuming that only 58 percent of the population paid these taxes, and US\$ 5.3 million were taxes paid by all those in Nad e Ali and Marjah - a more informed assumption, given both the scale of opium poppy and Taliban presence in these two districts. As such, UNODC's estimate of the amount of tax payable on the opium crop is twice that of AREU's and significantly over estimates the tax generated by the Taliban on the opium crop at the farmgate.

¹⁰¹ Mansfield, David. "Between a Rock and a Hard Place: Counter-narctics efforts and their effects in Nangarhar and Helmand in the 2010-11 growing season." https://areu.org.af/wp-content/uploads/2016/02/1128E-Between-a-Rock-and-a-Hard-Place-CS-2011.pdf. February 2016 (accessed on 20 August 2017).

¹⁰² In Helmand there are 40 khord in one man. In Helmand one man is the equivalent of 4.5 kg, therefore, one khord is the equivalent of 112.5 grams.

Type of Tax	Rate	Types of ¹ Forma (Jeribs)	Percentage of total land (%)	Number of Forma (Type)	Tax (Afs)		Total Tax (USD)	% of Total Taxes
Land	2000 Afs/ Forma	30 jeribs	60	4,150	8,300,000		122,059	
		15 Jeribs	30	4,150	8,300,000		122,059	
		10 jeribs	10	2,075	4,150,000		61,029	
						Sub Total	305,147	8.2
Opium	Rate	Poppy (jeribs) ²	Amount paid (Kg)	Opium price (USD/kg)				
	2 khord/ Jerib	62,145	13,982	176			2,460,942	
						Sub Total	2,460,942	66.5
	Rate	Proportion of land wheat (%)	Total Area under wheat					
Wheat (Desert)	200 Afs/ jerib	55	177,925		35,585,000		523,309	
Wheat (canal)	300 Afs/ jerib	45	93,375		28,012,500		411,949	
						Sub Total	935,257	25.3
						TOTAL	3,701,346	100
UNODC	Rate	Hectares ³	Yield (kg/ ha)	Total Production	Amount payable (kg)	Price (USD/ kg)	Total Tax (USD)	
	11% of opium production	12,429	22	273,438	30,078	176	5,293,760	
						lf 58% of total	3,070,381	

Table 2: Revenue generated by the Taliban in the Districts of Nad e Ali and Marjah, ¹⁰³ Helmand, 2016

1 The estimate of the proportion of land under each type of forma is based on Mansfield, David. "Between a Rock and a Hard Place: Counter-narcotics efforts and their effects in Nangarhar and Helmand in the 2010-11 growing season," District 11.

2 Were the same rate applied to the USG estimate of the level of opium poppy cultivation in Nad e Ali and Marjah of 14,700 a tax of US\$ 2.9 million would have been earned.

3 Were the same rate applied to the USG estimate of the level of opium poppy cultivation in Nad e Ali and Marjah of 14,700 a tax of US\$ 3.6 million would have been earned on 11 percent of the crop being paid by 58 percent of the population, or US\$ 6.3 million if all those cultivating opium poppy paid 11 percent of the final crop.

¹⁰³ GIS analysis indicates that there are 415 square kilometers of land under agriculture in the canal command area of these two districts in 2016, and 647 square kilometers of land under agriculture in the former desert lands (this includes the area North of the Boghra Canal, as well as the former desert land to the west of Lashkar Gah and in Trek Nawa).

3.4 An Evolving Tax Base

While the capacity to impose taxes indicates insurgent influence in an area, the type of tax, and the basis of payment, can mark the degree of influence the insurgency has gained. For example, 150 km to the Northwest of the former desert areas of Helmand in the district of Bakwa in Farah - which is locally regarded as the "same desert" - payments to insurgents not only differ from Helmand but have changed in the last three years. In this former desert area, farmers are no longer requested to pay two khord per jerib of opium as they did in the past, and they continue to do pay in Helmand. Instead, payments in Bakwa were based on the deepwells that farmers use to irrigate their land.

When this change in the tax system arose in 2016, farmers were initially required to pay 2,000 Afghanis for a tubewell irrigated by a diesel power generator and 3,000 Afghanis for solar. In the spring of 2017, farmers were subsequently asked to pay 3,000 Afghanis for each deepwell powered by a diesel generator and 5,000 Afghanis for those using solar power. A deepwell - particularly a solar powered tubewell - can irrigate up to eight hectares of land but may cultivate only 3 hectares, depending on climate and cropping decisions.

Type of Tax							
	Number of Tubewells						
lf 3 hectares	22,333						
lf 8 hectares	8,375						
lf 3 hectares:	Number of Tubewells	Rate (Afs)	Tax (Afs)	Tax (USD)			
Solar	14,889	2,000	29,777,778	437,909			
Tubewell	7, 444	3,000	22,333,333	328,431			
			52,111,111	766,340			
lf 8 hectares	Number of Tubewells	Rate (Afs)	Tax (Afs)	Tax (USD)			
Solar	5,583	2,000	11,166,667	164,216			
Tubewell	2,792	3,000	8,375,000	123,162			
			19,541,667	287,378			
UNODC	Rate	Hectares	Yield (kg/ ha)	Total Production	Amount payable (kg)	Price (USD/kg)	Total Tax (USD)
	11% of opium production	1,503	22	33,066	3,637	176	640,158
						lf 58% of total	371,292
		6,000	22	132,000	14,520	176	2,555,520
						lf 58% of total	1,482,202

⁵ GIS analysis indicates there were Bakwa 335,000 jeribs of agricultural land in Bakwa in 2016, the equivalent of 67,000 hectares.

¹⁰⁴ GIS analysis indicates there were Bakwa 335,000 jeribs of agricultural land in Bakwa in 2016, the equivalent of 67,000 hectares.

While in 2016, the amount of taxes paid to the Taliban in Bakwa in 2016 would have been similar using either method of calculation, it is not the case when the level of opium poppy cultivation fluctuates (see Table 3). For example, were cultivation in Bakwa to return to the kind of levels produced in the last few years, (e.g. 6,000 hectares), the Taliban would theoretically be due a windfall of US\$ 2.6 million according to UNODC's calculations. In contrast, a tax system based on the number and type of tubewells farmers owned, would yield the same regardless of a fluctuation in levels of cultivation at between US\$ 287,000 and US\$ 766,000. While perhaps not as financially beneficial, in a "good year" a taxation system based on land is much easier to police than a system based on crops and is likely to indicate a further consolidation of the Taliban's position within the area.

There are further contrasts with the reports of UNODC with regard to the taxation systems and rates in operation in other parts of Afghanistan, not just the South and Southwest. In Nangarhar for instance, payments were found to vary from village to village within a district as insurgents have gained influence in an area and then strengthened their position. In fact, fieldwork in 2013 revealed a myriad of different taxations systems and rates in the districts of Achin and Khogiani, where some villages paid cash to Anti Government Elements (AGE) via the local mosque - the amount determined by what people could afford (qud ay was) at the end of each growing season - and other households, only a short distance away in another village, were required to pay a fixed amount of opium, determined by the total amount of land cultivated, with most paying around one paw (430 grams) of opium. In other villages, respondents referred to paying ushr, without specifying a rate, to both "the poor" and "the Taliban" and it was far from clear how this payment was divided between the two. ¹⁰⁵As in many localities, those farmers who had direct relationships or mitigating circumstances could negotiate their payments, with some paying as little as one or two qatoos (the equivalent of 25 to 50 grams).¹⁰⁶

Further fieldwork in the same research sites in 2014 and 2015 revealed an evolving tax base that could be drawn upon by local insurgent groups who had penetrated an ever-expanding area, moving closer to the lower areas situated along the Kabul river and the main Highway. By 2015 the agricultural tithe - "ushr" - was typically between 1,000 and 3,000 PR per household in districts like Achin, Khogiani and upper Shinwar during the winter season regardless of the crop grown. Payments in-cash were requested rather than in-kind despite the potential for opium to acquire higher value over the course of the season.

In some areas such as Shinwar, farmers reported receiving a written note referencing their name, land holdings and corresponding payment. In other districts such as Khogiani and Achin, notification was via the local mosque where notice would be posted referencing how much farmers in that area should pay. Payments were typically in-cash not in-kind and those farmers who cultivated opium and marijuana reported paying little more in taxes than those that who had grown cereals, vegetables and fruit. Payments were considerably less than the 10 percent "ushr" reported by UNODC at less than one percent of the value of their agricultural crops.

What was also apparent in 2015 was the other taxes that became available to the Taliban even before an agricultural tithe could be collected. For example, the Taliban was able to collect the money from the sale of animal hides after Eid al Adha¹⁰⁷ in upper and lower Shinwar some years before they collected an agricultural tithe from farmers in these areas. ¹⁰⁸ While this system raised a relatively

¹⁰⁵ While payments are often assumed that payments to be at a rate of ten percent of the agricultural yield, detailed fieldwork in other parts of Afghanistan has shown that payments rarely exceed three percent of the final yield of the crops grown. See Mansfield, David. "Briefing Paper 7: Taxation in Southern Afghanistan." http://www.davidmansfield.org/home/ docs/field/56.pdf. March 2013 (accessed on 20 August 2017).

¹⁰⁶ One seer (1.2kg) contains 48 qatoos.

¹⁰⁷ This is the practice of qurbanee which involves slaughtering an animal as an offering to Allah.

¹⁰⁸ This tax dates back to the early part of the Taliban movement in 1994. See Aishar Seemi Ahmad, "Between the mosque and the market: An economic explanation of state failure and state formation in the modern Muslim world," (Montreal, McGill University dissertation, July 2012).

small amount of around 5,000 to 8,000 PKR for each mosque of a round one hundred households it symbolised Taliban presence in an area. Extortion was another form of tax that did not require either a permanent presence by the insurgents or the State to absent. Nevertheless, it raised payments of up to 100,000 PR from wealthy traders or those with links to the government or family members in the ANDSF.

Other taxes in Nangarhar also denote insurgent influence even though a permanent presence had yet been established. For example, in upper Surkhrud the local Taliban commander closed the canal intake in Barinah, near Kakrak, in August 2015 demanding payments of 1,000 PR for each jerib of land under cultivation. Timed just after the summer crop had been planted and facing the risk of widespread crop failure, rural communities such as Baghwanay, Kheyrabad and even parts of upper Sultunpur relented and paid as requested.

Subsequent field work in the spring of 2017 reflected the insurgency's consolidation in the lower areas near the main Torkham to Jalalabad Highway such as the canal irrigated area of Shinwar and in Bati Kot. Here, as in other areas where the Taliban had established a more permanent presence, more detail on the landholdings and the crops grown were collected and used for the calculation of taxes. As one farmer explained: "The Taliban are stronger each year; this is their government".

What can we conclude from the different forms and levels of tax documented in this section and the empirical data on how these taxes evolve over time? Firstly, it is clear that the insurgency has influence even in areas where the government may occupy the more dominant position. In some cases, this influence is subtle and unlikely to be captured by the current measures used by USFOR-A. The insurgent's initial movement into an area may take on a less predatory face as it looks to win over the wider rural population. For example, the language that is used to describe payments to the insurgency during this early phase is one of komak' (assistance) or 'khairat' (charity) and contrast markedly with the descriptions of those from those in the government demanding payments, which are typically referred to as rishwat (bribes)" or 'zahar' (poison).¹⁰⁹ At this early stage, the insurgency may also be more responsive to local demands. In parts of Nangarhar, for example, support for boys' education has led to the Taliban putting pressure on teachers and pupils in government schools to improve their attendance, even fining teachers for the days they fail to report to work.¹¹⁰ Taxation rates are also adjusted based on agricultural yields and the state of the wider economy, as well as the bargaining of individuals.¹¹¹ As the insurgency strengthens its position in an area we see a move to regularise taxation, based on landholdings rather than crops, even building on former government systems of tax collection, such as in the canal command area of Helmand.

Secondly, the purported relationship between the Taliban and the farmgate production of opium is not as simple or as direct as UNODC and others tend to report. Taxation rates of less than one percent rather than 10 percent of the opium crop, payments in-cash rather than kind, and the move to land-based taxes do not reflect a tax collection strategy designed to maximise revenue or coerce farmers to plant. In this context, claims of the Taliban coercing the population to cultivate opium are overstated and the reasons for encouraging production may be more related to a strategy of provoking the government to destroy the crop and thereby antagonise the rural population, rather than a financial gain from collecting the agricultural tithe. None of this is to say that the Taliban do not derive financial benefit from the drugs trade; it is to say that the amounts earned at the farmgate would appear to be exaggerated due to the weak methodology UNODC use to collect data.

¹⁰⁹ Mansfield, David. "Briefing Paper 7: Taxation in Southern Afghanistan."

¹¹⁰ Mansfield, David. "The Devil is in the Details," 12.

¹¹¹ Mansfield, David. "Briefing Paper 7: Taxation in Southern Afghanistan."

Thirdly, while coerced the taxes imposed on the rural population are not necessarily punitive. This is perhaps surprising given how we have come to understand the insurgency and the levels of violence found in Afghanistan. Moore (2008) refers to three economic and political factors that enable coercive taxation. The first is "a ruling elite unrestrained by their subjects or alternative sources of power and have no compelling reason to seek broader support". The second he argues is "a poor, rural agrarian subsistence economy" and the third "a revenue source controlled by potential taxpayers who faced with high taxes in relation to services provided by the State, cannot credibly threaten to exit by moving elsewhere or reducing their level of economic activity". These factors would all appear to be prevalent in rural Afghanistan, yet the taxes imposed by the Taliban at the farmgate are relatively low. This may suggest that the insurgent's priority is to maintain a level of taxation that does not alienate the rural population, a mistake made by previous governments in Afghanistan, such as Amanullah Khan. It could also indicate that the Taliban have others forms of revenue that they can draw upon, these might include taxation of the drugs trade itself but also contributions from other states and individuals.

4. A Better Way of Measuring the Influence of the State's in Afghanistan?

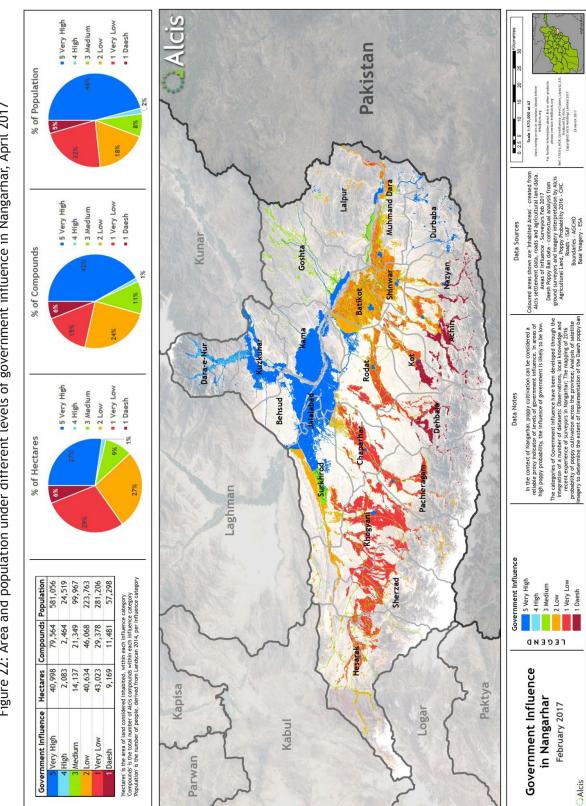
The previous two sections used in-depth fieldwork to highlight how changes in both opium poppy cultivation and taxation can be used to better understand the influence of the Afghan State. To illustrate how these indicators could be used to map the writ of the Afghan State a pilot study was developed for Nangarhar drawing on fieldwork by AREU and GIS analysis from Alcis, the maps for which are provided below (Figures 22, 23 and 24). This methodology discarded the concept of 'control" used by USFOR-A and instead categorised different levels of government influence, from very high to very low.

In the case of Nangarhar - a province with a history of opium poppy cultivation - the methodology used poppy probability data generated by the US Government for 2016 as a way of mapping areas where government influence was low or very low, drawing on the analysis in Section 2. The inclusion of a separate category of "low" for Daesh reflects the poppy ban that can be seen using satellite data in the territories where they dominate (see Figure 23). As poppy probability data is not confined to district boundaries, it allows a greater understanding of government influence at a subdistrict level. In light of the analysis in section 3, data on the types of taxation system were also been built into the methodology, differentiating between those areas paying "raidable taxes" where insurgent influence was less prevalent, and those where taxes were based on agricultural tithe and landholdings where the insurgency had established a permanent presence.

In terms of further detailing and mapping subdistrict level data, buffers were drawn around district centres, security bases (where they were known or could be identified using imagery) and along the main highways. These buffers varied from 100 to 200 metres depending on local conditions. Whereas government influence in and around district centres and security bases was rated as very high, government influence over main roads varies according to the road and degree of influence the government had over the surrounding area. For example, government influence over the Jalalabad to Torkham road and the buffer zone was rated very high, but in many cases government influence over a main road might vary along the route. A military convoy may be able to move relatively easily through much of upper Surkhrud where government influence in 2017 had fallen, but would find greater resistance when it comes to the area of Fatehabad (as evident from the concentrated poppy and vehicle checkpoints after dusk) and onwards into Khogiani and beyond where government influence 5) (see Figure 24).

Once the areas of influence were mapped, it was then possible to use GIS analysis to estimate the population and territory that falls under each category of influence for each of the districts and for the province as whole (see Figure 22). These calculations cut across district boundaries in contrast to the USFOR-A methodology. Population estimates were based on the number of households as measured by the Alcis household compound dataset and by Landscan population data. Territory was measured by active agriculture as this seen to better reflect the areas of inhabitance in Afghanistan as well as the productive resources that state or non-state actors can draw upon.

Drawing on the data on poppy cultivation and taxes, this methodology estimated that as of April 2017 43 percent of household compounds, or 51 percent of the population of Nangarhar, were located in areas where the government had a very high or high influence. This constituted only 28 percent of productive agricultural land. The methodology shows just how limited the influence of the Afghan State is, even in areas no distance from the provincial centre of Jalalabad. Unfortunately, it is not possible to compare this estimate with USFOR-A's estimate for Nangarhar as this is not currently publically available.



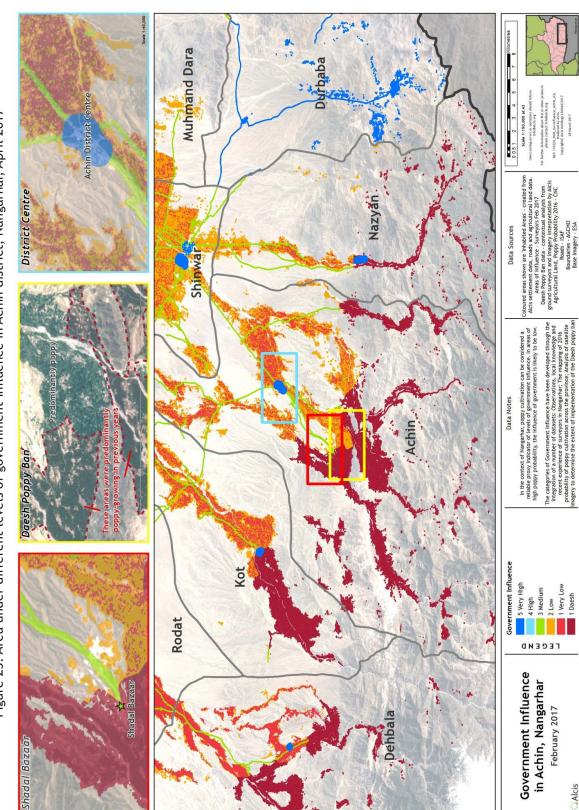
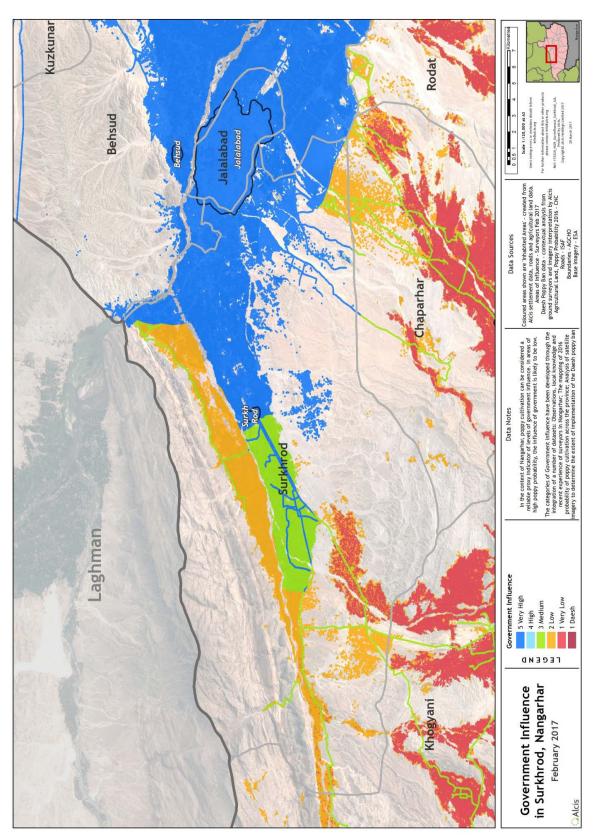


Figure 23: Area under different levels of government influence in Achin district, Nangarhar, April 2017



5. Conclusion

This report has highlighted the challenges of assessing the control and influence state and nonstate actors have over the population and territory of Afghanistan. It has described the limits of the current approach adopted by USFOR-A within the confines of what is currently known about the methodology. It has shown that the concept of state or insurgent "control" over a population or area jars not only with historical understandings of the State in Afghanistan, but also contemporary events across large swathes of the country. In doing so, this report has also illustrated how the categories adopted by USFOR-A - "state influence," "insurgent influence" and "contested" - are not mutually exclusive and cannot be treated as such. Finally, this report argued that districtwide assessments do not offer sufficient granular detail to understand how the insurgency gains influence in an area, strengthens its position in rural communities before consolidating its position and encircling a District or provincial centre. A reporting system that fails to offer this kind of diagnostic quality could be seen as blunt and offering little sense of the changing threat to GIRoA in light of goals the government and NATO have identified for 2019.

The second and third sections of this report provided detailed empirical data on shifting patterns of opium poppy cultivation and insurgent taxes. As the second section showed, widespread opium poppy cultivation in particular lends itself to mapping Government influence in that it has proven to be very visible evidence of the waning influence of the Afghan State. The crops return to: the canal command area of Helmand, after the initial reductions associated with the Helmand Food Zone and the surge in military forces; the lower areas of Nangarhar following ending a decade without cultivation in some areas: and the dramatic rise in parts of Balkh, reflect the loss of influence in areas where the Afghan State once held sway. The presence of opium poppy cultivation around major infrastructure, including at the gates of ANDSF military bases is seen locally as an indicator of state weakness. There are of course some areas where opium poppy cultivation is not present but where GIRoA's influence has diminished. Kunduz for example, and some of the provinces in the East such as Paktika, Paktiya and Ghazni, have never had a history of opium poppy cultivation and therefore it is not the case that the absence of opium poppy can necessarily be interpreted as a symbol state strength. In these provinces other indicators would be required.¹¹²

The third section of the report offered another potential indicator of state and non-state influence in the form of taxation. This section initially focused on what proved to be "faulty assumptions that underlie common beliefs"¹¹³ about the Taliban and the taxation of opium production at the farmgate. It provided detailed empirical data drawn from a number of districts in the provinces of Farah, Helmand and Nangarhar to show how current estimates of the revenue generated by the Taliban on the production of opium are inaccurate and based on a flawed methodology. This section then documented the different systems of taxation that were in place in these three provinces and how they evolved over time; the move from what might be seen as "raidable taxes", that do not require a permanent presence by insurgent groups, to an agricultural tithe and then land-based taxes that represent an increasing level of insurgent influence and engagement with the population in a given area.

The fourth section used data on both poppy and insurgent revenue collection and mapped it to offer an alternative to USFOR-A's assessment. It discarded the notion of control and mapped influence using spatial data on poppy probability and a typography of taxes. This methodology offered a less sanguine estimate of the territory and population located in areas where the government had a very high or high influence.

¹¹² These might include the access ANDSF have to areas ranging from whether and how they can patrol a given area, to whether soldiers can return to their home villages - a common complaint in many parts of the Southern districts of Nangarhar. It might also include the status of government schools, be that whether both boys' and girls' schools are open, and the monitoring of pupil and teacher attendance by the Taliban.

¹¹³ Hazen, Jennifer. What Rebels Want."

To conclude, while just a pilot study, and still relatively crude, there would seem to be a number of advantages to a methodology that merges well focused field research and GIS analysis to assess government influence. First, it draws on locally defined indicators of the influence of state and nonstate actors rather than the perceptions, judgments and interests of western officials who might be biased by the need to achieve predetermined targets. Second, some of the indicators, such as opium poppy, are clearly identifiable using satellite imagery allowing a greater level of objectivity. Third, data on many of the other indicators, including the types of tax collected, can be collected relatively easily across a wide geographic area. Finally, GIS analysis and mapping offers a greater level of disaggregation and does not confine both the analysis and results to rather arbitrary district boundaries that ultimately distort our understanding of the governments influence over both terrain and population.

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