The Helmand Food Zone:
The Illusion of Success

David Mansfield
November 2019
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In 2018, AREU was awarded Best International Social Think Tank by Prospect Magazine.
ABOUT THE AUTHOR

David Mansfield is a Senior Fellow at the London School of Economics. He has been conducting research on rural livelihoods and poppy cultivation in Afghanistan for twenty three consecutive growing seasons. He has a PhD in development studies from the School of Oriental and African Studies, London and is the author of A State Built on Sand: How opium undermined Afghanistan. David has worked for AREU since 2005.
ACKNOWLEDGMENT

Thanks go to Alcis Ltd for their analysis of high-resolution remote sensing imagery and to the Organisation for Sustainable Development and Research (OSDR) for their continued hard work on the ground. Thanks also go to Richard Brittan, Paul Fishstein, Mike Osman and two anonymous reviewers for their comments on an earlier draft.
FOREWORD

The Afghanistan Research and Evaluation Unit (AREU) is delighted to make available to its distinguished readers an in-depth synthesis paper by AREU consultant Dr David Mansfield titled, “The Helmand Food Zone: The Illusion of Success”. AREU would like to thank the European Union for the substantial financial support it provided under the EU funded project: Three-pronged research effort into essential areas of Natural Resources Management (NRM).

This paper documents how the Helmand Food Zone was developed, its origins and architects and the different stakeholders involved in its implementation and the subsequent challenges of the delivery. Making use of in-depth fieldwork and imagery collected before, during and after the HFZ was complete, the paper then goes on to discuss the divergence between the narrative of success that dominated the discourse on Helmand at the time and what actually happened on the ground, both inside and outside the programme’s boundaries.

At the heart of the research are household interviews conducted in a number of district research sites in central Helmand in the districts of Lashkar Gah, Marjah, Nad e Ali, Nahr e Seraj and Nawa Barakzai. For seven consecutive years, fieldwork was undertaken every six months, and from May 2011 to December 2013, fieldwork covered 28 to 30 distinct research sites, including eight in the desert area to the north of the Boghra canal. In total, 4,122 household interviews took place with farmers over an 11-year period in either all or some of the 28 research sites.

The most recent fieldwork, which is at the forefront of this particular paper, consists of 300 interviews conducted in May 2017 in 12 research sites within the HFZ and eight research sites to the north of Boghra canal. A final round of fieldwork was conducted in the spring of 2018 that consisted of 310 interviews in the same research sites, supplemented with a further 52 interviews with women who resided in former desert areas.

AREU is grateful to the Organization for Sustainable Development and Research for their significant field research, the anonymous peer reviewers for their meticulous comments and Dr Mansfield for his incessant commitment to carry out systematic research in this field and producing such high quality papers.

I hope this highly important synthesis paper is used as a resource to help policy makers with formulating policies and programmes focused on addressing opium poppy cultivation and its subsequent problems in Afghanistan.

Dr. Orzala Nemat
AREU Director
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADIDU</td>
<td>Afghan Drugs Interdepartmental Unit</td>
</tr>
<tr>
<td>AEF</td>
<td>Afghan Eradication Force</td>
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<tr>
<td>ANDSF</td>
<td>Afghan National Defence and Security Forces</td>
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<tr>
<td>ANP</td>
<td>Afghan National Police</td>
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<tr>
<td>ASI</td>
<td>Afghan Stability Initiative</td>
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<tr>
<td>ATV</td>
<td>All-Terrain Vehicle</td>
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<tr>
<td>AVIPA</td>
<td>Afghanistan Voucher for Increased Production in Agriculture</td>
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<tr>
<td>CERP</td>
<td>Commander’s Emergency Response Program</td>
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<td>CN</td>
<td>Counternarcotics</td>
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<tr>
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<td>DoD</td>
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<td>FCO</td>
<td>Foreign and Commonwealth Office</td>
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<tr>
<td>GIRoA</td>
<td>Government of the Islamic Republic of Afghanistan</td>
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<tr>
<td>GLE</td>
<td>Governor-Led Eradication</td>
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<tr>
<td>GPI</td>
<td>Good Performers Initiative</td>
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<tr>
<td>GPS</td>
<td>Global Position System</td>
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<tr>
<td>HFZ</td>
<td>Helmand Food Zone</td>
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<tr>
<td>HMG</td>
<td>Her Majesty’s Government (United Kingdom)</td>
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<tr>
<td>IFI</td>
<td>International Financial Institution</td>
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<tr>
<td>INCSR</td>
<td>International Narcotics Control Strategy Report</td>
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<td>INL</td>
<td>Bureau for International Narcotics and Legal Affairs</td>
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<td>IRD</td>
<td>International Relief and Development</td>
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<tr>
<td>ISAF</td>
<td>International Security Assistance Force</td>
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<tr>
<td>MAIL</td>
<td>Ministry of Agriculture, Irrigation and Livestock</td>
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<tr>
<td>MATTP</td>
<td>Marjah Accelerated Agricultural Transition Programme</td>
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<td>MCN</td>
<td>Ministry of Counternarcotics</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>MEB</td>
<td>Marine Expeditionary Brigade</td>
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<tr>
<td>MISFA</td>
<td>Microfinance Investment Support Facility for Afghanistan</td>
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<tr>
<td>MoD</td>
<td>Ministry of Defence</td>
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<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organisation</td>
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<td>NSP</td>
<td>National Solidarity Programme</td>
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<tr>
<td>PEF</td>
<td>Poppy Eradication Force</td>
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<tr>
<td>PRT</td>
<td>Provincial Reconstruction Team</td>
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<tr>
<td>RIAB</td>
<td>Radio In A Box</td>
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<tr>
<td>SSR</td>
<td>Security Sector Reform</td>
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<tr>
<td>UNODC</td>
<td>United Nations Office on Drugs and Crime</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>USG</td>
<td>United States Government</td>
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<tr>
<td>WHO</td>
<td>World Health Organisation</td>
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EXECUTIVE SUMMARY

According to the United Nations Office on Drugs and Crime's (UNODC) estimates, opium poppy cultivation in the province of Helmand in southern Afghanistan dropped dramatically during the first year of the Helmand Food Zone (HFZ), falling by 37 percent - from an estimated 103,590 hectares in 2008 to 69,833 hectares in 2009. In 2010, the amount of opium poppy cultivated fell again - this time only slightly - and remained at around 65,000 hectares. This achievement came at a time when there were few good news stories in counternarcotics and amidst a politically charged policy making environment where there were growing demands from western politicians and donors for measurable progress in the Afghan state building project. In fact, in time the HFZ was accredited for reducing poppy, improving governance and having a stabilising influence on the local population.

Regarding drug control, it was to argue with such dramatic reductions and there was widespread appeal to the uncomplicated logic of the intervention. The explanation of the HFZ's success was simple: a strong governor and a credible threat that the crop would be destroyed could dissuade farmers from growing poppy, particularly when an alternative - wheat - is provided. This was a rather transactional and state centric understanding of the world that offered western policy makers the hope that results could be achieved in Helmand and other parts of Afghanistan.

What underpinned the reduction in cultivation in the initial years of the HFZ, however, was a significant shift in the amount of wheat flour a farmer could purchase with the proceeds of their opium once harvested and sold. In other parts of Afghanistan, such as the central and northeast regions where opium yields are more marginal, this shift was such that a farmer could obtain as much wheat for his family growing it in on his own land than by growing poppy and using the proceeds to buy wheat flour. In Helmand, the shift in the relative prices of opium and wheat translated to roughly equal net returns; but far more important than profit was the overriding concern of food security, particularly at a time when global wheat prices were rising and growing violence in the southwest made it difficult for farmers and traders to purchase wheat in the market. The fact was, farmers had a preference to grow their own wheat and only needed a little encouragement to reduce the excess of opium poppy they had grown. Governor Mangal - for all his faults - with the support of the United States (US) and United Kingdom (UK) military assets provided that extra push.

What followed these fortuitous circumstances was a significant uplift in international and Afghan military presence in Helmand, and a dramatic ratcheting up of development spending by both the US and UK governments as they bedded into their counterinsurgency efforts in the province. Between 2009 and 2011, annual development expenditures far outweighed the amounts spent by the HFZ - by up to 20 fold - undermining the claim that reductions in opium poppy were directly attributable to the Food Zone. And with a growing security presence - “an ISAF base on every junction”1 - there was not only a greater risk to the farmer that the opium crop might be destroyed, but greater potential that their investments in high value crops, business, or even a trip to the bazaar in search of daily work would yield an economic return.

It did not take long for negative consequences of the HFZ to unfold. As early as 2009, there was already a growing sense that falling levels of cultivation within the HFZ were being offset by increases outside. By 2013, the scale of cultivation outside the HFZ in the desert areas to the north of the Boghra canal, but also to the roads north of the main highway in Nahre Seraj, outweighed any reduction in the HFZ. Moreover, the expansion in cultivation outside the HFZ could not be dismissed as an inevitable part of the “balloon effect” - where supply is squeezed in one area, it will increase in another, as long as demand remains static. After all, it was not just cultivation that had shifted to former desert areas where there had been little agricultural production before, it was those who had cultivated opium poppy in the HFZ - largely the land-poor who had rented or sharecropped land - that had moved to the former desert area to grow the crop. Dispossessed by an HFZ that did not understand how land relations work and solely targeted

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assistance to the landed, and a ban on opium production that led to poppy being abandoned in favour of less labour-intensive crops (wheat, in particular), these farmers found themselves without land, water, credit and shelter. They had little choice but to move into the former desert areas and cultivate opium poppy and, once there, were encouraged to grow even greater amounts of poppy by more unfavourable land tenure arrangements with the faint prospect that they, too, might be able to buy some desert land if only they had “a good year.”

In 2014, when international military forces departed Helmand, poppy began to return in greater amounts to the HFZ. The pace of the increase in cultivation might have been greater were it not for three consecutive years of poor opium yields. However, as yields recovered in 2016 and the Afghan National Defence and Security Forces (ANDSF) lost control over larger tracts of rural Helmand, farmers returned to poppy cultivation in ever greater numbers. So much so that by 2017, UNODC estimated that there were 144,000 hectares of opium poppy in Helmand as a whole; and the United States Government’s (USG) estimates of poppy cultivation for the HFZ indicated that there was even more poppy within its boundaries than when the programme began in 2009.

It was allegations of corruption that dominated local perceptions of the HFZ. It was a common belief that agricultural input provision (and eradication conducted under its name) favoured the governor, the rural elite and their patronage network. A vibrant black market in wheat seed and fertiliser developed in Lashkar Gah where inputs destined for farmers were sold by village elders and provincial officials. While some senior Afghan officials were arrested and imprisoned for their actions, these cases were viewed locally as the tip of the iceberg. Governor Mangal’s reliance on donor patronage from funds to transport and logistics - and his pursuit of an opium ban regardless of the impact on rural lives and livelihoods - increased the perception among farmers that he did not act in the interests of the local population, but of his foreign benefactors. As such, the HFZ served to further embed a growing sense of hostility to the provincial authorities and undermine the state building objectives proffered by the donors as a reason for supporting the intervention.

This study documents how the HFZ was developed, its origins and architects, as well as the different actors involved in implementation and the subsequent challenges of delivery. Drawing on in-depth fieldwork and imagery collected before, during and after the HFZ was complete, this study then goes on to discuss the divergence between the narrative of success that dominated the discourse on Helmand at the time and what actually happened on the ground, both inside and outside the programme’s boundaries. The study concludes that far from being a success, the HFZ helped create the conditions for unprecedented amounts of land to be brought under poppy cultivation than ever before, served to institutionalise forms of corruption that further alienated the rural population from the authorities and helped set in motion a process of agricultural intensification that is likely to lead to the displacement of at least half a million people in the next decade.
1. INTRODUCTION

Among officials there was an enthusiasm that surrounded the HFZ. The UNODC lauded the role the HFZ had played in reducing opium poppy cultivation in its annual poppy survey. The US Department of State’s International Narcotics Control Strategy Report (INCSR), talked of “the Governor of Helmand, Gulab Mangal, present[ing] a compelling example of the progress a provincial governor can achieve through a combination of public information, agricultural assistance and robust law enforcement.” The UK’s Department for International Development joined the chorus, releasing a video in 2011 commending the HFZ’s achievements.

The reductions that were achieved in Helmand led to accolades for the Governor and a further US$ 10 million allocated to the province under the Good Performers Initiative (GPI) by International Narcotics and Law Affairs Bureau of the US Department of State. The perceived success of the HFZ also resulted in calls for replication in other provinces. While there were plans for a further eight Food Zones, US$ 25 million in funding was given to the Kandahar Food Zone, a direct result of the canvassing of US Senator Dianne Feinstein by then Minister of Counternarcotics (MCN), Zarah Ahmad Moqbal Osmani, at the behest of the Bureau for International Narcotics and Legal Affairs (INL) of the Department of State.

At the time, there were those in the drug policy community who had no doubts that the dramatic reductions in cultivation in the Food Zone were directly attributable to the interventions provided by the HFZ programme: wheat seed and fertiliser, along with the effective leadership of the then Governor, Gulab Mangal, and a credible threat of eradication. As such, the term “Food Zone” became a brand for those in the world of drug control looking for a success to present in the media and official reports; much needed with the growing scepticism and lack of funds that alternative development had received from major bilateral development donors like the United States Agency for International Development (USAID) and the UK Department for International Development (DFID) and International Financial Institutions (IFIs) like the World Bank.

Yet, at the time, doubts also existed as to whether the reductions in poppy cultivation in Helmand were a result of the HFZ. For example, a series of reviews undertaken by the UK government - the primary funder of the HFZ - questioned the role the programme played in reducing opium poppy cultivation while, nevertheless, commending the programme’s contribution to governance and stabilisation. These reviews - conducted by a number of different UK government officials from different ministries - argued that the impact of the HFZ on poppy was negligible and external factors had precipitated the dramatic fall, including the sharp drop in the price of opium accompanied by a dramatic global rise in wheat prices, as well as the significant increase in troop numbers in Helmand and the accompanying uptick in development monies.

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This paper examines the results of the HFZ with the benefit of hindsight and away from the highly politicised stabilisation environment of the time. It draws on in-depth fieldwork conducted in rural Helmand prior to, during and after the HFZ, combining it with high-resolution satellite imagery and interviews with some of the main interlocutors in the UK, US and Afghan governments at the time. The paper examines the inception of the HFZ, its implementation, results and the enduring effects five years after the departure of international military forces from the area.

The paper is divided into seven further sections. The second section outlines the methodology, detailing how in-depth fieldwork in rural Helmand is combined with high-resolution satellite imagery to chart changes in the lives and livelihoods of those both within and outside the HFZ. The third section examines the origins of the HFZ; origins that lay more with the politics of the UK’s relationship with the US government and the growing concerns over the leadership it offered in the area of counternarcotics than with applying best practice in drug control efforts. The fourth section outlines the design of the HFZ; why it took the form it did and who the primary actors were. The fifth section focuses on the component parts of the programme and their implementation - the counternarcotics messages, the provision of wheat seed and fertiliser and the eradication effort - and how each of these changed over time. The sixth section analyses the results of the HFZ both within its boundaries and outside. It does this by looking at the impact of the programme against different criteria - not just the level of opium poppy cultivation - and how this varied over time, location, socio-economic group and, albeit limited, gender. Finally, the seventh section presents a conclusion and recommendations.
2. METHODOLOGY

This paper builds on in-depth fieldwork and high-resolution satellite imagery collected before, during and after the implementation of the HFZ (see Table 1). At the heart of the research are household interviews conducted in a number of distinct research sites in central Helmand in the districts of Lashkar Gah, Marjah, Nad e Ali, Nahr e Seraj and Nawa Barakzai. For seven consecutive years, fieldwork was undertaken every six months, and from May 2011 to December 2013, fieldwork covered 28 to 30 distinct research sites, including eight in the desert area to the north of the Boghra canal (see Table 1). In total, 4,122 household interviews were conducted with farmers over an 11-year period in either all or some of the 28 research sites.

<table>
<thead>
<tr>
<th>Year</th>
<th>Months</th>
<th>Research Sites (No)</th>
<th>Respondents (No)</th>
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<tr>
<td>2007</td>
<td>Nov/Dec</td>
<td>7</td>
<td>42</td>
</tr>
<tr>
<td>2008</td>
<td>Nov/Dec</td>
<td>10</td>
<td>99</td>
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<td>2009</td>
<td>Nov/Dec</td>
<td>11</td>
<td>112</td>
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<tr>
<td>2010</td>
<td>April/May</td>
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<tr>
<td></td>
<td>Nov/Dec</td>
<td>23</td>
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<tr>
<td>2011</td>
<td>April/May</td>
<td>28</td>
<td>447</td>
</tr>
<tr>
<td></td>
<td>Nov/Dec</td>
<td>28</td>
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<td>2012</td>
<td>April/May</td>
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<tr>
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<td>Nov/Dec</td>
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<td>2013</td>
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<td>Nov/Dec</td>
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<td>2017</td>
<td>April/May</td>
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<tr>
<td>2018</td>
<td>April/May</td>
<td>19</td>
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The most recent fieldwork, which is at the forefront of this particular report, consists of 300 interviews conducted in May 2017 in 12 research sites within the HFZ and eight research sites to the north of the Boghra canal. A final round of fieldwork was conducted in the spring of 2018 that consisted of 310 interviews in the same research sites, supplemented with a further 52 interviews with women who resided in former desert areas.

Between 2011 and 2018, up to 60 further interviews were conducted during each round of fieldwork. These interviews focused on those buying or selling goods and services to the communities in the research sites, including traders in herbicides, solar panels, diesel and labourers, as well as those purchasing wheat and vegetables. These interviews were conducted in Gereshk, Lashkar Gah and some of the smaller district bazaars in Helmand, such as Nad e Ali and were designed to verify and explore the information provided by farmers themselves.
2.1. RESEARCH SITE SELECTION

Research sites were selected based on a number of different criteria. Of particular importance was the boundary of the Food Zone and ensuring adequate coverage of the different population groups it contained, particularly as the boundary expanded (see Figure 1).

It was noted early on that the population within the HFZ was not homogeneous socio-economically and had differing access to irrigation, land, both agricultural and labour markets, infrastructure such as roads and diverse histories of poppy cultivation. For example, some areas within the HFZ, such as Bolan, have been settled for centuries, irrigation all year round and are close to the provincial centre of Lashkar Gah - with the advantages that this can bring with regard to access to salaried and wage income and functional agricultural markets, as well as government services such as education, health and development assistance. Other areas, such as Loy Bagh, Dashte Aynak, and Dashte Shershark are former desert areas with poor agricultural land and that rely on either tubewells or pumping water from the drainage system for irrigation. These areas have a small amount of land under agriculture in the summer season and as recent migrants, residents do not benefit from the patronage of influential tribal elders and government officials.

A further criterion for the selection of research sites was the nature of the intervention delivered by the HFZ. It would be inaccurate to assume that because a population fell within the boundaries of the HFZ it would receive each of the different interventions: agricultural inputs, eradication and counternarcotics information. For example, while the wider population of Helmand was aware of the counternarcotics position of the Afghan government and its allies, the risk of eradication varied from area to area with some research sites within the HFZ experiencing eradication year after year while others experienced no eradication at all. Over the course of the HFZ, the threat of eradication increased over time as the security footprint of international and Afghan military forces grew and the programme’s boundaries expanded.

Access to donor-supplied agricultural inputs, on the other hand, was more a function of local patronage systems with most of the inputs being received by wealthier members of the community. Those without land or a powerful relative or friend typically did not receive any direct development assistance under the HFZ. To account for these variations in eradication and the provision of agricultural inputs, both interventions were mapped (see Figures 2 and 3) and research sites were selected that would offer populations with experience of different combinations of these interventions over time, including some that were neither recipients of agricultural inputs or subject to eradication during the HFZ, such as Malgir, Dashte Ab Pashak, Shen Ghazai and Sra Kala.

It was recognised that as the research continued and the HFZ expanded, the original 11 research sites did not offer a sufficient coverage of those areas outside the HFZ. The more limited number of research sites only provided an account of how some parts of the population were responding to the HFZ and the expanding poppy ban by moving to the former desert areas north of the Boghra canal. Consequently, 12 further research sites were added in 2010 and another five research sites in 2011 to support a deeper analysis of the impact of the HFZ and better research the process of settlement into these former desert lands, as well as the role that the HFZ played in this encroachment and its overall impact on poppy cultivation.
Figure 1: Research sites in central Helmand
Figure 2: Eradication in central Helmand, 2006-2013
Figure 3: Wheat seed provision in central Helmand, 2009
2.2. FIELDWORK

Fieldwork was conducted by a local team with a deep knowledge of central Helmand and has worked closely with the lead researcher and author for more than a decade. To circumvent the inherent problems associated with researching an illegal or underground activity, the research focused on household livelihood strategies. Pressure on the Afghan government to act against opium cultivation and trade has made illicit drugs a more sensitive discussion topic with farmers and other stakeholders than was the case in the 1990s and early 2000s. However, the rural household remains the most accessible unit of analysis when looking at the national opium economy as it offers a basis for cross-referencing findings both with other work on rural livelihoods and with other research on the specific role of opium production in Afghanistan and elsewhere.

Male respondents were selected in situ. To capture socio-economic diversity within the research sites and the different experiences that households had of the HFZ, local researchers sought to interview a range of different land owning groups within each research site, where they existed: (i) the land-poor - those who were landless or had insufficient land to meet their families’ needs, so had to work as tenant farmers or sharecroppers on the land of others; (ii) owner cultivators - those with enough land to meet their families’ needs and (iii) landlords - those with land surplus to their requirements and employed others to work their land, either as tenants or sharecroppers.

Discussions with both male and female respondents focused on the direct experience of respondents and their households rather than on events or phenomena over a wider geographic area, where answers become increasingly speculative. Individual interviews with male respondents were conducted in the field as farmers tended their crops, since holding interviews in the household compound can become subject to interruptions and biases. Group discussions with farmers were avoided, as they tend to be dominated by community elites, are inappropriate for sensitive issues and increasingly represent a security threat to both respondents and researchers in rural Afghanistan, particularly in the south.

Female respondents were identified by a team consisting of related female and male researchers. Due to the challenges of even an accompanied educated female researcher travelling to the deeply conservative and insecure former desert areas, female respondents from north of the Boghra were interviewed when they returned to their original village in the canal irrigated part of central Helmand. These women had either returned on a seasonal basis, coming back to their village during the summer season when the desert land north of the Boghra is largely left idle, or permanently after living in the former desert area for some years. The male member of the team identified families that had returned to the area through discussions at the local mosque. He then asked the male of the household if the women would be willing to talk to his female relative. Upon receiving his permission, the female researcher conducted detailed interviews with the women in their homes.

Fieldwork was conducted during the planting and/or harvest season for opium when respondents are most aware of the agricultural and financial outcomes of the previous crop and when farmers are most actively engaged in deciding what to grow next. The visible presence of the opium crop in the ground also allows researchers to verify some of farmers’ responses and, if needed, prompt respondents where they are not being entirely candid with regard to the crops they are growing, as well as the extent.

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2.3. INTEGRATION OF IMAGERY

Another key element of the research method is the use of high-resolution, remote sensing imagery. As discussed above, geospatial data was used to identify research sites. However, this was not the only way in which remote sensing was used. Remote sensing imagery was also used to verify that fieldworkers had been to the identified sites and examine the primary data. Debriefings with the lead researcher would involve talking through each research site and the surrounding environment, drawing on both maps and historical imagery products showing change over time. This kind of imagery supported more detailed conversations on local phenomena, such as the impact of insecurity on planting, the identification of crops under cultivation, the extent of salination and new or damaged physical infrastructure. Imagery also allowed many of these phenomena to be measured.

Finally, geospatial analysis supported the extrapolation of research findings over a wider geographic range beyond the particular research sites themselves. For example, where particular phenomena were identified on the ground in a number of research sites, imagery could be used to assess the extent to which this was common across all research sites and the wider area. An example of this would be the mapping of solar powered tubewells. Supported by the identification of a unique signature of an accompanying reservoir and solar panels, this was a phenomena that could be easily spotted using high-resolution satellite imagery and an assessment of the frequency could be made over an area of almost 1,000 square kilometres.

2.4. INTERVIEWS WITH POLICY MAKERS AND PRACTITIONERS

A further component of the research was interviews with those involved in policy and operational decisions in Helmand itself. Many had worked in Afghanistan for a number of years, some in a number of different roles. These interviews included policy makers who held positions in the governments of Afghanistan, the US, the UK, as well as in international bodies such as the United Nations. This research was conducted by the lead researcher as part of his ongoing research on drugs policy in Afghanistan. Those interviewed spoke on the condition of anonymity and interviews focused on the policy process: how decisions were made, by whom and their perception of the motivations that underpinned them.

The results of these interviews were also cross-checked with some of the literature on the HFZ and drugs policy in Afghanistan. Some of this literature is grey and unpublished, but offers important insights into the policy making process and the views of this involved in decision making. The literature from governments also offers some useful comparisons, providing the official narrative and a sense of how policy makers portrayed the HFZ at the time.
The HFZ was borne from circumstance and agency; it was primarily driven by the increasing pressure the UK government came under from its counterparts in the US government, and from senior leadership in the UK government, in the wake of rising levels of opium poppy cultivation in the province of Helmand, where the UK also had the lead in the Provincial Reconstruction Team (PRT) and the G8 lead on counternarcotics. At the time, rising cultivation was seen as a signal of the UK’s failure in both counternarcotics and in stabilising what was perceived as a key province. Amidst a backdrop of growing concerns about the Afghan reconstruction effort and signs of a resurgent Taliban, the UK was compelled to act.

It was in 2006 that the Ministry of Defence (MoD), the Foreign and Commonwealth Office (FCO) and DFID found themselves in Helmand, the most prolific opium producing province in Afghanistan. With the province of Helmand typically growing as much as 50 percent of the total Afghan opium poppy crop in any given year, the UK’s decision to establish a PRT there, and its status as lead nation on counternarcotics, forced the UK government to take a more aggressive position on opium production. Surrounded by opium poppy and under the duress of the USG’s frustrations with what were seen as a lacklustre performance on counternarcotics, UK departments were compelled to respond to the yearly increases in the amount of opium poppy grown in the province.

This was not something that they had planned to do or took on willingly. The MoD had been sceptical of counternarcotics efforts ever since the UK had taken on the lead role for it in 2002.10 Indeed, one senior UK government official reported that “the military didn’t want anything to do with counternarcotics.”11 However, in 2008, the UK military found themselves on the back foot following their retreat from Basra in Iraq,12 and as a consequence of the failed peace deal they had brokered in Musa Qala, Helmand. The latter had provoked a particularly negative reaction from the US Department of Defence (DoD), especially when the deal collapsed and the Taliban took control of the northern district of Helmand in February 2007.13 Like many late converts, the UK military leadership in Helmand often showed great zeal in working to drive down cultivation during their respective deployments.14

The FCO and its Afghan Drugs Interdepartmental Unit (ADIDU), which held the lead (then partner) for counternarcotics efforts in Afghanistan under the Security Sector Reform (SSR) process, had since 2004 consistently resisted INL’s efforts to introduce aerial spraying in Afghanistan. This opposition became harder to defend politically in the wake of the rising levels of opium poppy under the UK’s nose in Helmand, particularly in 2007 when cultivation had fallen in the eastern region of Nangarhar - also a significant producer of opium - where the US military and civilian effort was focused. In Helmand, ADIDU and its teams in Kabul and Lashkar Gah felt compelled to present a more convincing lead, given that more of the levers were, or at least should have been, under their control there.

DFID had also been reluctant to engage on counternarcotics. It had been wary of earlier efforts by HMG at drug control, such as the compensated eradication campaign of 2002, and fearful that the objectives did not conform with the department’s legal mandate, the International Development Act of 2002, that development assistance is likely to contribute to a reduction in poverty”.15 DFID faced internal criticism for its lack of support for the UK lead on counternarcotics. Comparisons were made with USAID that, although equally doubtful of the impact of drug control efforts, was pressed to launch a number of large-scale Alternative Development programmes that allocated significant amounts of money to opium growing areas, including the southern region and the province of Helmand.16

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10 Personal communication, former senior UK Government official #1, August 2016.
11 Personal communication, former senior UK Government official #1, August 2016.
14 The author witnessed one senior military officer advocating for aerial spraying despite the UK position opposing it.
16 Interview with former DFID adviser, April 2016.
Furthermore, the level of opium poppy cultivation was increasingly seen as an indicator by which international, national and provincial actors could be judged. Falling levels of cultivation were perceived as a sign of success in leadership and interventions; it attracted plaudits and financial rewards. Governors of provinces where opium production fell were given the epithet “Good” and received additional development assistance. Rising levels of cultivation, on the other hand, led to opprobrium and criticism from UNODC, the USG, President Karzai and other ambassadors in Kabul. Heads of PRTs were even known to avow that “poppy cultivation will not go up on my watch,” conscious that were it to do so, they would be subject to criticisms and accusations of failure.17

Moreover, there was only so much criticism the UK could bear for its work in Helmand in light of its performance in Iraq and its work on counternarcotics in Afghanistan. It was also understood in Whitehall that the British Prime Minister, Tony Blair, who had been instrumental in both committing the UK to the counternarcotics agenda in Afghanistan as well as UK military forces to Helmand, was keen to see progress against opium poppy cultivation in the province. In particular, it was thought that the Prime Minister had sympathies for what many reported to be the pro-aerial spraying position of President George W. Bush. There were concerns that a failure to deliver a dramatic reduction in opium cultivation in Helmand would lead the Prime Minister to back the US President and press the Afghan government to adopt aerial spraying. As such, the conditions were in place for a more enthusiastic and coordinated effort on counternarcotics from UK government departments; it was better to pursue a bad policy to avoid an even worse one.

17 Personal experience of author during a number of visits to Kabul and Lashkar Gah and in discussions with a variety of senior officials.
4. THE HELMAND FOOD ZONE: ITS DESIGN AND AUTHORS

The actual design of the Helmand Food Zone lay with two expatriates. One sat in the Governor’s office as part of the US-funded Counternarcotics Team (CNAT). The other was located in the PRT. Both had military backgrounds, neither had worked in counternarcotics, agriculture or Afghanistan before. They were conscious of the clamour for something to be done about opium poppy in Helmand and took advantage of it. While the project proposal for the HFZ talked of “successful models of counternarcotics having been developed in Nangarhar and Laghman”18 in the eastern region with the potential for adapting them to Helmand, there was little evidence of this in practice. In fact, the premise on which the HFZ was built was simple: with sufficient coercion, farmers would abandon opium poppy in favour of another less lucrative crop, wheat.

The proposal developed by the two international advisers laid out a plan to inform farmers of an impending ban on opium poppy through an information operation campaign that would be conducted prior to the opium poppy planting season. Wheat seed and fertiliser would then be given to farmers to provide them with an alternative to opium poppy and a source of food in the absence of the income that they would have earned from the opium harvest. The plan also called for farmers to sign an agreement - a “Good Conduct Pledge” - that they would not grow opium poppy prior to receiving the wheat seed and fertiliser.19 Finally, an eradication campaign would be mounted in the spring to destroy the crop of any recalcitrant farmers who refused to heed the authorities’ warnings and did not refrain from planting opium poppy.

This was classic “crop substitution” - a model of drug control that had largely been abandoned by organisations like UNODC in the 1980s. Seen to focus unduly on simply replacing one crop with another, and not on the physical infrastructure, market support and social change required to help farmers transition from drug crop cultivation, crop substitution was replaced by a more comprehensive rural development known as Alternative Development in the 1990s.

The HFZ design compounded the inadequacies of the crop substitution model with a focus on wheat. Whereas other crop substitution programmes had looked to replace drug crops with high value horticultural crops, HFZ pressed farmers to replace opium poppy with a staple food crop: wheat. The problem was that wheat was not only primarily grown for consumption, but it also had wildly different input requirements, particularly much lower labour intensity. As later sections will show, this was to prove especially important with regard to the longer-term effects of the HFZ and its impact on patterns of poppy cultivation.

Drafted in English by two short-term advisers with little sense of the lessons of the past or rural livelihoods in Helmand, the HFZ was then translated into Dari and submitted to the Governor of Helmand for review. It came out of the Governor’s office unchanged and labelled as “the Governor’s Plan.”20 With Governor Mangal’s backing, the proposal, despite all its flaws, became almost impossible to resist.

The UK military in Helmand and the PRT were keen for an “Afghan face” on new initiatives, especially in the area of counternarcotics and the newly appointed Governor Gulab Mangal provided it.21 Governor Mangal was keen to make a quick impression.22 He had a reputation of being an accomplished administrator.23 University educated, former member of the People’s Democratic Party of Afghanistan, and colonel in the Afghan army, he had been accredited with being an effective leader in Paktika (2004 - 2006)

20 Personal communication, former senior UK Government official #46, August 2016.
21 Personal communication, former senior UK Government official #2, July 2016.
and Laghman (2006 - 2008) during his governorship there. The US believed he was a “superb governor in a dangerous role.”

US General Barno, a former coalition commander in Afghanistan said Mangal “was one of the most - if not the single most - effective governor in Afghanistan.”

His colleague US General Lawrence Nicholson is reported to have said, “This guy is my most valuable weapon against the Taliban.”

The UK held him in similar esteem through much of his governorship in Helmand and on numerous occasions, along with the US, actively solicited President Karzai to keep him in post.

The Governor was so popular with the international community that, in the words of the former British Ambassador Sherard Cowper-Coles, he became “the mascot of successive commanders of Task Force Helmand and successive heads of the PRT, and a figure in the British as well as the Afghan media.”

The Governor himself was keen to engage, recognising the need to gain favour with the primary military and civilian actors in the province, and conscious that one of his predecessors, Sher Mohammed Akhundzada, had been removed at the behest of the British as a precondition for their deployment to Helmand, following the discovery of nine metric tons of opium in the Governor’s compound.

A former UK senior official highlighted that the Helmand Governor had a number of reasons for supporting the HFZ. For one, the Governor believed narcotics funded his political opponents in Helmand, particularly those associated with previous administrations. Secondly, the Governor was conscious of his weak position with President Karzai. It was well known that the President favoured the return of Sher Mohammed Akhundzada and blamed his removal and the subsequent deterioration of security in Helmand on the UK. With a strong performance on counternarcotics, Governor Mangal anticipated that he could gain the favour of two major donors, the UK and the US, who would resist the President if he tried to sack the Governor.

Finally, the Governor saw that the HFZ provided the logistical and financial means for him to project himself politically both within the province and wider afield. While the use of Coalition military assets allowed the Governor to travel around the province and project his power and influence among his allies and opponents, the funds the HFZ provided gave him the means to offer patronage to those that supported him - and if the rumours about corruption were true - to feather his own nest. Moreover, as an ambitious man with eyes on a ministerial portfolio, Governor Mangal, like Governor Gul Agha Sherzai in Nangarhar, also believed that a strong performance in reducing opium poppy would gain the backing of the US and the UK for a post in the Afghan cabinet. Without Governor Mangal the HFZ would never have lasted so long, but without the UK military and civilian assets it probably would not have happened in the first place.

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26 Chandrasekaran, R., Little America the War within the War for Afghanistan, (New York, 2012), page 79.


5. THE HELMAND FOOD ZONE: ITS COMPONENTS, IMPLEMENTATION AND THOSE INVOLVED

Delivery of the HFZ involved multiple stakeholders in the UK, US and Afghan governments. And within each of these governments there were differing views about how things should work on the ground. The goal should have been relatively clear: to dramatically reduce opium poppy cultivation. How to do it and, in particular, the appropriate balance between the pace of reduction and its impact on local security and the economic welfare of farmers was far less obvious. Thoughts on this varied considerably across the different civilian and military institutions and governments involved over time. As with many policies, the final outcome was a function of a messy process of negotiation, compromise and, sometimes, brinkmanship.

Despite the rhetoric that this was Afghan-led and the HFZ was the Governor’s counternarcotics programme, the HFZ morphed over time. Repeated reviews by the UK came to recognise that the HFZ was contributing more to governance and stabilisation efforts and its effects on counternarcotics were negligible. As the international military expanded its footprint in central and northern Helmand, the boundaries of the HFZ increased so that more district officials could be tasked with delivering agricultural inputs to an ever increasing number of farmers in increasingly far-flung districts as part of the PRT’s stabilisation and governance programmes (see Figure 4). The HFZ became a mechanism by which the Afghan government could be seen to be delivering to its population; the only problem was it asked much of them when requiring that farmers should abandon the crop or risk eradication - with the concomitant problems that this could entail.

5.1. JUST WORDS? THE INFORMATION OPERATION CAMPAIGN

The first key element of the HFZ was the information campaign aimed at persuading farmers to refrain from planting opium poppy in the first place. Governor Mangal was an enthusiastic proponent of this effort and used it as an opportunity to travel to different parts of the province in the summer and autumn prior to each planting season. These visits were presented as a message of an Afghan government that was present and could deliver development assistance, albeit in return for the abandonment of opium poppy.

The information campaign consisted of a number of different components. The most significant were the large meetings, or shuras, in Lashkar Gah and district centres where Governor Mangal was typically the keynote speaker. Elders would be invited to these events and told of the societal ills associated with opium poppy and the risk of eradication if they cultivated the crop. They would be encouraged to return to their respective district centres or villages and disseminate these same messages to local elders and farmers.

The main shura in Lashkar Gah would involve as many as 500 guests and occur prior to each planting season, typically in July. It would be followed up with an additional event at the beginning of the eradication campaign in the January of each year. As security improved in Helmand and the HFZ was rolled out over a larger number of districts, the Governor would travel further afield to hold shura meetings, although he was often provided transport by the UK military.

A further component of the information campaign component was the use of posters, leaflets and other printed media to disseminate the same messages as part of a mass media public information campaign. This also involved radio, and even television broadcasts. In the latter years of the HFZ, the mass media

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34 Defence Visual Information Distribution Service “Helmand government officials conduct Food Zone shura,” 17 October 2010. https://www.youtube.com/watch?v=cJbQtOeHv4A
Figure 4: The changing boundaries of the Helmand Food Zone, 2009-2011.
campaign became more sophisticated and included phone-in radio shows offering agricultural advice to those looking to grow licit crops. Over the course of the HFZ, commercial radio and television coverage and use increased and a concept known as “Radio In A Box” (RIAB) provided radios to rural areas that would otherwise have limited access.

While the coverage of the public information campaign increased over the course of the HFZ, there were a variety of presentational challenges associated with it. Some of these challenges related to the media and the challenges of reaching a largely illiterate rural population, which to some extent were countered by using a variety of different media. However, other challenges were a function of the nature of the messages, the author and how these messages were delivered.

Some of the print media campaign simply missed the mark. For example, posters were printed that informed farmers: “Grow wheat, feed your family.” This was a simple message that sought to support the replacement of poppy by wheat. But for many farmers, particularly the land-poor, this message created confusion, if not mistrust. Were this group to grow only wheat, they would not have sufficient output to meet their family food requirements - their family would go hungry. Farmers cultivated poppy precisely because when grown, opium could be sold for cash. This cash would purchase a greater amount of wheat flour than were the farmer to cultivate wheat on the same unit of land; these farmers recognised that if they grew wheat, they and their families would go hungry.

The issue of who and how messages were delivered is perhaps best summed up by a UK official responsible for parts of the campaign. They suggested that “the impact of these products and activities will be closely connected to the respective reputations of GIRoA, Mangal and the Food Zone producing mixed results.”

The problem was that, over time, none of these entities were held in high esteem.

In particular, Governor Mangal became increasingly associated with corruption, not just with regard to the HFZ, but other interventions in Helmand. His close association with the UK and the sense among the local population that the primary audience for his efforts was the international community and not the Afghan population earned him the nickname “the son of the British.” Even the use of UK military to transport Governor Mangal to shura meetings in the district centres gave the impression that he relied on the security of foreigners to keep himself safe and that he was somehow “un-Afghan,” or foreign himself - including the unfounded accusation that he was not really a Muslim. Other components of the HFZ only made matters worse, not least the idea that wheat was somehow a credible alternative to opium poppy, but also the challenges associated with the delivery of eradication in what were often deeply insecure areas (see Section 3.3); giving the impression that the governor did not understand the lives and livelihoods of the local population, or care about them.

There was also a problem in that the information campaign was not aligned with other components of the HFZ. By its nature, the information campaign, particularly with a mass media component, reached a far larger proportion of the population of Helmand than either the agricultural inputs or the eradication components of the HFZ. Both eradication and agricultural inputs were constrained by security - where both UK and Afghan military forces could secure access (see Figure 2) - and the ubiquitous constraint of funding. This was not the case for the information campaign that had provincial wide outreach, backed up with further messages from a national information campaign that involved Afghan government ministers and the ulema.

The result was the overall message that farmers would receive assistance and experience a heightened risk of crop losses through eradication was not tailored to those who would see these risks and benefits - who were, after all, a minority of the population. Many farmers, particularly during the first two years of the HFZ, saw neither inputs nor eradication undermining the information campaign and the Afghan government and creating the impression that the campaign was background noise, or, as some farmers put it, “just farting.”

35 Personal communications with UK PRT official, 10 March 2011.
36 A government-funded, autonomous body of religious leaders.
5.2. REAP WHAT YOU SOW? THE DISTRIBUTION OF AGRICULTURAL INPUTS

The second, and most expensive component of the HFZ, was the provision of agricultural inputs as an alternative livelihood to opium poppy. A logistical nightmare, this element of the HFZ absorbed much of the direct funding and a considerable amount of time of those within the PRT and the UK military in Helmand, to the point that in March 2010 it was described “as stretching the team [in the PRT] almost to breaking point.”

The provision of inputs to support the cultivation of another crop and the replacement of poppy was justified on the basis that something had to be offered to reduce the potential for widespread resistance from farmers - something that was feared by both civilian and military leadership in the PRT and the Afghan authorities in Helmand. Initial conversations within the PRT, particularly with DFID and USAID advisers, focused on offering a range of different agricultural alternatives including the possibility of providing seeds and saplings of high value horticultural crops. However, these conversations proved short-lived in the bid to respond to the pending opium poppy planting season in late October 2008.

While the provision of wheat seed and fertiliser (a package of urea and Diammonium Phosphate (DAP)) was seen as a short-term strategy - the official title of the HFZ when it was drafted in July 2008 was the “short-term provincial counternarcotics plan” - the programme became increasingly wedded to wheat as a substitute for poppy. This was despite deeply held reservations by officials within the UK in London and Kabul, as well as from development experts. As early as the summer of 2009 it was recommended that a future program for 2009/2010 would “focus on diversification rather than solely substitution.” Then again in March 2010, the debate continued with various voices in the PRT and the UK questioning the wisdom of distributing wheat seeds on such a large scale to central Helmand “and how best to get out of the distribution of this product.” Despite these concerns being raised once again, the HFZ continued to focus mainly on wheat seed distribution until the end of the programme.

Those in the development community saw the provision of subsidised wheat seed “as market distorting in the long term, and in any event not giving as much counternarcotics effect as cash crops.” In the first year, farmers made only a nominal contribution - around seven percent - to the cost of the wheat seed and fertiliser. A review in the summer of 2009 called for moving away from “giveaways” and for “planning in a multi-annual basis.” By the fall of 2010 - the beginning of the third year of the HFZ - co-payments were in line with the national policy of the Ministry of Agriculture Irrigation and Livestock (MAIL) and were 35 percent of value. While creating a further logistical challenge for the PRT with regard to what to do with the cash collected - the reduction in the subsidy was welcome and seen as contributing to an exit strategy and part of a move to “a more diversified portfolio of support, under an agricultural strategy.” Nevertheless, the HFZ continued its wheat seed and fertiliser focus, including only small elements of spring and summer cultivars during later phases, and relied on other development programmes as they came on stream to support agricultural and income diversification.

42 In the fall of 2010, eight mail bags of used Afghanis, Pakistani Rupees and US dollars with an estimated value of US$ 1.5 million were found in a room in the PRT in Bastion. After some time, this money was deposited in a bank account in Lashkar Gah (personal communication, former UK government official, July 2015).
In the summer of 2010, it was anticipated that there would be no further wheat seed distributed under the auspices of the HFZ. A report commissioned by the PRT had concluded that the HFZ had “provided 100 percent of the five year requirement of wheat seed and did not need to be repeated.”44 It went on to argue that “the amount of development expenditure committed to Helmand is well in excess of the amount where a separate wheat seed programme will have any CN or economic impact”.45 Without consulting the Governor, the PRT approved a budget that set aside only US$ one million for counternarcotics, rejecting an option that costed US$ 12 million for a further year of wheat seed distribution.46 The PRT leadership had failed to recognise the economic benefits and political patronage that the governor and his allies drew from the programme. In the fall of 2010, the Governor insisted that the wheat seed programme should run again. Reluctant as they were,47 USAID stepped in at the last minute, contributing US$ 4.21 million48 to make up some of the funding shortfall and ensure Governor Mangal got his wheat seed programme for a third consecutive season.

<table>
<thead>
<tr>
<th>Year</th>
<th>Package</th>
<th>Number of beneficiaries</th>
<th>Locations</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/09</td>
<td>100 kg Wheat 100 kg DAP 200 kg Urea</td>
<td>32,850(^1)</td>
<td>6 districts</td>
<td>US$ 12 million</td>
</tr>
<tr>
<td>2009/10</td>
<td>100 kg Wheat 100 kg DAP 200 kg Urea</td>
<td>39,640</td>
<td>7 districts</td>
<td>US$ 12.9 million</td>
</tr>
<tr>
<td>2010/11</td>
<td>100 kg Wheat 100 kg DAP 200 kg Urea</td>
<td>46,534</td>
<td>10 districts</td>
<td>US$ 18 million</td>
</tr>
</tbody>
</table>

1 This included 19,150 who received inputs form USAID Chemonics and 13,700 from the Governor’s seed only programme. Ryder, M. & Read, C. (2009, August). Review of the Helmand CN Plan. Unpublished document for the Afghan Drugs Interdepartmental Unit

While the plan to provide wheat seed and fertiliser to farmers in return for a commitment to abandon poppy sounded simple, implementing it in a conflict zone was fraught with problems. The most acute was the security situation that remained challenging over the duration of the HFZ, even if there were marked improvements over time.

In the initial year of the HFZ, levels of violence were such that the distribution of wheat seed and fertiliser was a military exercise. In the fall of 2008, inputs were delivered by the UK military to district centres in Lashkar Gah, Gereshk, Sangin, Musa Qala, Kajaki and Garmsir. With a growing military footprint, the security situation improved and it became possible to increase coverage. By the fall of 2010, agricultural inputs were distributed from 20 distribution sites in 10 districts, with military support only required for the movement into Nahre Seraj, and parts of Nad e Ali and Marjah. The security situation was such that all the other areas were covered by a haulage company hired for the task, but that would draw on military convoys where required. Yet, despite these improvements, it was still necessary for the ISAF to fly the teams responsible for handing out the wheat seed and fertiliser to each of the distribution centres.

47 Personal communications with UK PRT official #46, 10 March 2011.
Once the inputs were delivered to the distribution centres, farmers would travel from the surrounding villages to collect their seed and fertiliser. This is where many of the problems arose and where allegations of corruption beset the HFZ from the start. 49 Most of these allegations were associated with the Governor and other officials insisting on compiling beneficiary lists rather than allowing farmers to register individually, as is best practice. There was widespread reporting that seed and fertiliser meant for distribution was kept by officials and elders, and then sold in the market in Helmand. There were also consistent reports of lists of fictitious names being produced, allowing officials and elders to further siphon off inputs, or of farmers having to pay elders in order for their names to be put on the list. 50 Further allegations of corruption focused on the quality of seed distributed and the claims that the quality seed purchased by the PRT and intended for the farmers was replaced. 51 These allegations persisted throughout the HFZ and led to arrests of officials, including Governor Mangal’s own adviser.

Further problems with the wheat seed distribution arose as a consequence of the security situation, particularly in the early years. Timely delivery was a major challenge. The planting season for wheat is limited and can vary due to temperature and amount of precipitation. Late delivery, 52 such as in the fall of 2008 when an unusually cold spell led to early planting, resulted in farmers complaining that they had not received the seed in time. 53 Insecurity also led to delays even after inputs had been distributed in the districts centres. For example, those farmers residing in areas where the Taliban held sway were reticent about returning from the district centres with seeds provided by the government. Some would repackage the seeds into plain bags that did not display where the seeds were from, delaying their return to their land. Other farmers would sell the seeds they received under the HFZ in the district or provincial bazaar rather than be seen by the Taliban to be a recipient of government assistance. A vibrant market developed for the wheat seed and fertiliser distributed by the HFZ.

There was also resentment from those who did not receive assistance, and with remote sensing analysis documenting around 125,000 domestic compounds within the boundaries of the HFZ, it was the majority of farmers that went without each year. 54 The fact that some of the more influential village members were beneficiaries of agricultural inputs every year supported the local narrative of a government in Helmand whose officials were guilty of corruption and patronage. The perception of the government deteriorated further when the eradication campaign was also considered; the prevailing view was that it was those who were poor and without links to patronage networks that were the most likely to have their opium crop destroyed, but the least likely to receive any development assistance. This was something that has had an overriding effect on attitudes toward the government both inside and outside the HFZ, as latter sections will show.

49 Note, DFID project officer, 23 June 2009.
52 Personal Communication with UK official in the Provincial Reconstruction Team in Lashkar Gah, February 2009.
54 Alcis data, 9 August 2017.
5.3. LIKE A THIEF IN THE NIGHT? ERADICATING THE CROP

Formally, the final component of HFZ was law enforcement and eradication. In reality, this element only included crop destruction; the responsibility for interdiction sat with law enforcement officials within the Afghan government, the US and the UK, and was not tied to the other components of the HFZ and largely took place in Barmachah on the Pakistan border, some 240 kilometres from the “Food Zone.”

Eradication consistently proved to be the most controversial element of the HFZ, (and of counternarcotics in Afghanistan) particularly given its history in the province. An eradication campaign had been conducted in Helmand in one form or another every year since 2000. These included small amounts of crop destruction under the Taliban during the 2000/2001 growing season, as well as the compensated eradication campaign supported by the British in early 2002. In Helmand, eradication had typically involved tractors and, with the establishment of the Afghan Eradication Force (AEF), All Terrain Vehicles (ATVs). Teams of men wielding sticks had also been used in the 2002/2003 growing season and in 2003/2004 when Sher Mohammed Akhundzada was governor.

After 2006, eradication in Helmand became more institutionalised. It was conducted through two distinct operations, both of which undertook their campaigns in the spring. The first operation, Governor-Led Eradication (GLE), used a large number of tractors (see Figure 5). It was protected by the Afghan National Police (ANP) and directed by the Governor of Helmand’s Eradication Committee.

The second operation, the Afghan Eradication Force (AEF) - later renamed the Poppy Eradication Force (PEF) - consisted of a mix of tractors and ATVs. It was backed by a sizeable security force and logistical support (see Figures 6 and 7). This latter operation was funded by the USG to the tune of around US$ 60 million a year and implemented by a private contractor, Dyncorp. The AEF/PEF operated between 2005 and 2009 until funding ceased under the Obama administration. Although it was deployed from Kabul and theoretically could operate anywhere in the country, this force spent much of its time in Helmand during the eradication season; more than 90 percent of the PEF’s eradication was delivered between 2007 and 2009 (see Figure 8).

Figure 6: PEF/AEF operating with ATVs and ANP support, Helmand
Figure 7: PEF/AEF Base Camp in desert area north of Boghra, Helmand
Both GLE and the AEF/PEF were subject to many violent attacks over the years resulting in the loss of life of personnel. Numerous allegations of corruption were levelled at both forces, with reports that farmers could elude eradication in return for payments. Assessing the level of crop destruction by both operations was highly problematic, particularly given the prevailing levels of insecurity.

Initially, UNODC had been reluctant to engage in eradication verification, concerned about the security of their staff and the potential effect of verification assessments on the implementation of their annual survey. Despite UNODC’s reservations, they were persuaded to conduct eradication verification and given funds to do so by the UK and the US. UNODC adopted a method that initially relied on visits to rural areas after the eradication campaign had been completed, but growing concerns over exaggerated figures in 2006 and 2007 led to greater use of remote sensing imagery, drawing on technical support from Cranfield University. The eradication figures in other provinces were equally unreliable.

The methodological and security challenges associated with eradication verification were exacerbated by the politics of eradication, most notably the fact that eradication was often used as a metric by which to judge performance against counternarcotics objectives related to state building as well as to institutional and individual accomplishments. This led to over-reporting by Afghan nationals and also resulted in a

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57 This project began in 2004/2005 and was known as the “Support to the Verification Process of Opium Poppy Eradication” and implemented together with the MCN and the MoI and focused on verifying GLE. Prior to this, there was no independent monitoring of the eradication effort and serious concerns that a number of provinces, including Helmand, were overreporting the scale of eradication. For example, in the 2002/2003 growing season the Afghan authorities reported that 21,430 hectares of opium were eradicated. UNODC cited these figures in their annual survey, but commented that “the Afghanistan Opium Survey 2003 neither monitored, nor assessed the effectiveness of the eradication campaign” (see “Afghan Opium Survey 2003,” UNODC: Kabul, 2003, page 53). In 2004, UNODC did not report any eradication figures (see “Afghan Opium Survey 2004,” UNODC: Kabul, 2004, page 77).

58 Concerns over the veracity of the figures were most pronounced in 2006 and 2007 when the total amount of crop destroyed was reported at 15,300 hectares and 19,510 hectares, respectively (UNODC 2010: 42). These figures were markedly higher than levels of eradication before or since. An account of the challenges associated with the eradication verification process during these initial years and an outline of the methodology can be found in the Afghanistan Opium Poppy Survey 2006 (2006, 64-65).

preference for inflated figures among internationals. It became particularly evident with the level of over-reporting by the AEF/PEF in the spring of 2007 that culminated in a review and subsequent reduction in the figures reported.60

GLE estimates suffered from the same problems and had little credibility prior to 2008, not least because the US and UK governments provided generous compensation for each hectare destroyed,61 creating further incentives for over-reporting and further allegations of corruption levelled at Governor Mangal himself.62 Due to the intense interest in higher eradication figures, the ground verifiers working for UNODC found themselves under considerable duress to exaggerate their reports of the amount of crop destroyed. The pressure placed on verifiers - coupled with the realisation that fields that were not eradicated properly could recover if irrigated and fertilised - meant that there was often a need for closer scrutiny of the eradication figures than took place.

In the final year of the HFZ, following the closure of the AEF, monitoring of GLE increased. Tractors were fitted with Global Position System (GPS) tracking devices allowing daily reviews of their movements.63 With the Obama administration’s emphasis on counterinsurgency (e.g., “the people are the prize”) and the appointment of Richard Holbrooke, a vocal opponent of eradication, the USG agreed to a more targeted approach to eradication in Helmand and crop destruction became concentrated in the more productive canal command area. Consequently, in contrast to the GLE campaign in the 2007/2008 and 2008/2009 growing seasons - when more marginal communities in less productive land were targeted for crop destruction and the AEF/PEF focused on the former desert areas to the north of the Boghra - 95 percent of the crop destruction in the 2009/2010 growing season took place in the more productive agricultural land where wheat seed and fertiliser had been distributed. This accorded with the initial intention of the HFZ.64 Moreover, with the significant increase in the number of ANDSF and international military forces in central Helmand, farmers found that there was less scope for bribing the eradication team and avoiding crop destruction. By the 2009/2010 growing season, eradication was seen as more resolute in the canal command area; farmers claimed that crop destruction was more comprehensive than in earlier campaigns and that fewer fields were spared. Even attempts to bribe the eradication teams were reportedly spurned as the eradication team became conscious that it was under closer scrutiny. 65

The fact was that the uptick in international and Afghan military forces also led to less crop destruction in central Helmand, as more farmers were deterred from planting opium poppy in the first place. While even in 2008 and 2009 when farmers had referred to eradication campaigns as acting “as a thief in the night,” criticising the intervention as short term - a raid - and the absence of any lingering state presence or delivery, by late 2010 there was a growing sense of a permanent military presence in the canal irrigated areas of Nad e Ali, Bawa Barakzai and Lashkar Gah. Conscious of what Martin (2014) refers to as an “ISAF base on every road junction”66 many farmers in these central areas perceived there to be a high risk of eradication and were conscious of the opportunity cost of allocating land, significant amounts of labour, water and fertiliser to a crop that had a high chance of being destroyed later in the season.

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**Notes:**

60 Cranfield used AEF reporting and satellite imagery taken both before and after the 2006/2007 eradication campaign to illustrate the extent of over reporting and crop recovery.

61 This was initially a payment of US$ 120 per hectares of opium poppy destroyed before being increased to US$ 135 per hectare in 2009 and then US$ 250 in 2010. Between 2011 and 2012, the USG made payments only for the areas destroyed within the eradication target area. In 2013, the US reverted back to paying governors compensation regardless of the location, including those areas outside the Helmand Food Zone.

62 Personal communication, senior official UK PRT #73, June 2011.


At this stage in the HFZ, it was not just the risk of eradication that farmers feared in the areas where the Afghan government and NATO had increased their writ, it was also arrest and imprisonment. In the fall of 2010, under a scheme of Governor Mangal’s making, farmers who planted poppy could be arrested and imprisoned until their families guaranteed the crop had been destroyed and paid a fine. This was the kind of “self-eradication” that had been successfully deployed in Nangarhar in 2005. In late 2010, the prisons of Helmand were becoming particularly overcrowded and there were growing concerns within the PRT over the conditions and the human rights of the prisoners. There were also complaints that the payments extracted for release were just bribes and were further alienating rural communities from their government.

For farmers themselves, arrest and imprisonment posed significant problems. It took them away from their seasonal agricultural tasks; tasks that were time-bound and could not be done at a later date when temperatures were colder, there was less irrigation or when other on farm activities would require effort. Imprisonment could also leave the wife and children of the household without an adult male for days on end and, as such, unprotected and vulnerable to assault, burglary and other forms of violence. Finally, the prisoners themselves feared assault and harsh treatment during their internment and incurred significant costs to secure their release.

In the spring of 2010, the situation in Helmand was further complicated by a further “self-eradication” effort, this one mounted by the US Marine Expeditionary Brigade (MEB), as part of their efforts to drive the Taliban out of the central district of Marjah, formerly part of Nad e Ai. It was undertaken during Operation Moshtarak, and, although officially known as the Marjah Accelerated Agricultural Transition Programme (MATTP), this initiative launched in late April 2010 called for farmers to destroy their own crop in return for a payment of US$ 300 per hectare.

MAATP was a rather ill-considered effort that followed press coverage showing US marines walking through swathes of poppy fields in flower and significant criticism that nothing was being done. Aware of the criticism that had followed the UK’s compensated eradication campaign in Helmand during the spring of 2002, MAATP sought to recast its compensation mechanism and offered payments to clear their opium fields and plant an early summer crop, such as vegetables or cotton. It was compensated eradication by any other name and provoked considerable criticism from the PRT, INL, Governor Mangal, and the Ministry of Counternarcotics in Kabul.

69 Personal communication, former PRT official #46, July 2015.
73 PRT, “PRT recommended alternative for ISAF-MEB CERP Marjah Micro Credit Grant Program,” 2010.
The criticism was justified. With disease affecting the crop in the spring of 2010, the harvest was complete by the beginning of the third week of April. A failure to promptly verify that farmers had destroyed their opium crop led to payments being made after the crop had been harvested. Furthermore, MAATP contradicted earlier messages that had been disseminated through tribal elders and maliks prior to the launch of Moshtarak. This advised farmers that their crop would not be eradicated were the population to support the government’s effort to clear the area of insurgents. The change in policy and the request that farmers destroy their crop once the military had gained ground undermined this position and alienated the local population.

In sum, it proved impossible to develop a coherent eradication policy among the multiple parties involved in Helmand, even within what was intended to be a single programme like the HFZ. Crop destruction just proved too attractive an option for those officials looking to achieve short term targets in their particular area of interest and control. The perception that falling levels of poppy cultivation were synonymous with increased control and “good performance” - be that of a PRT, a military task force or brigade or governor - further exacerbated the drive to expand the area in which eradication was conducted, regardless of conditions or existing policy statements.

Consequently, efforts to target eradication within the boundaries of the HFZ proved challenging. As long as the PEF/AEF was operational, INL wanted it to maximise the hectares destroyed - even to the point where estimates were found to be significantly exaggerated. This often meant INL pressed for the PEF to stray north of the Boghra canal into the former desert areas outside the HFZ where poppy was concentrated, logistics were easier and where communities had less political influence with Kabul and Lashkar Gah. These were also areas where the population was more economically marginal and who were not in receipt of development assistance.

Over time, Governor Mangal also wanted to cross the canal and destroy the crop in the former desert areas as a way of projecting his authority over these areas and the population. Typically, to try and square this circle, the boundaries of the HFZ were expanded to incorporate areas where the population had no alternatives to poppy, who were not entitled to assistance due to their occupation of what was viewed as government land, and who, as the next section will show, had fled to the area, in large part, due to the poppy ban in the canal irrigated area and the lack of development assistance they had received there. The push into these areas and the resistance that ensued reinforced the belief of farmers in the canal area that the only way to protect their crop was to mount violent resistance, if needed with the support of the insurgency.

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75 A tribal chieftain.
MAATP was a further example of inconsistent and incoherent eradication policy over the course of the HFZ. After messaging that the opium crop would not be destroyed, the Marines performed a volte-face, undermining the Afghan government officials and elders who had told farmers their crop would be safe prior to the launch of Operation Moshtarak. Moreover, the MEB launched a campaign of compensated eradication that had repeatedly proven counterproductive in Afghanistan. There was no way to restrain this initiative despite the criticism of INL, the British Embassy in Kabul and Governor Mangal; and it was the view of those in Washington, DC that it was not their job “to try and manage the situation in Marjah with a 8,000 mile screwdriver.” One UK interlocutor claimed with regard to MAATP that “it was generally [understood] that it would not work, but no one could stop the Marines - not even [General] Petraeus.”

The result was not just an HFZ with an incoherent eradication policy, but an incoherent HFZ. After all, the purpose of the HFZ was to align development assistance, eradication and counternarcotics messaging over a common area and population. This did not occur. While everyone within and outside the HFZ knew of the Afghan government’s policy position on opium production, and may have even heard Governor Mangal or his surrogates deliver a similar message in their district to the population, the threat of eradication varied considerably over both space and time and was rarely consistent with the more limited population that actually received the agricultural inputs distributed under the HFZ. It was this inconsistency that led a UK government review in 2009 to conclude that “without alternatives in place, or undertaken in a predatory fashion, [eradication] has damaging impacts,” 77 and a further review in 2010 to describe eradication as “a blunt instrument” that “could turn people against the government.” 78 Yet, despite these assessments and the problems that had already begun to emerge, the HFZ continued, producing contrasting - and often contradictory - results, as the next section will outline in detail.

76 Personal communication, former UK official #10, May 2016.


6. THE HELMAND FOOD ZONE: THE RESULTS

The HFZ occurred alongside a number of different initiatives in Helmand, each of which needs to be considered when assessing the overall effects of the HFZ both during and after its implementation. Most notable was the response to the growing insurgency across Afghanistan, but particularly in the south, and the significant uptick in the national and international military forces in the province between 2009 and 2011 - what became known as “the surge.”

In 2008, even prior to the launch of the HFZ and the official start of “the surge,” the deteriorating security situation in Helmand led to the deployment of a battalion of US Marines to Garmsir, in the southern part of the province. At the same time, a further battalion of US Marines was divided between Gereshk in central Helmand and Musa Qala and Nowzad in the north. In the summer of 2008, British forces were sent north of Gereshk as part of Operation Eagle’s Eye, and to secure the route for over 4,000 British, US, Canadian, Australian and Danish soldiers tasked with transporting a turbine to the dam in Kajaki in the fall of the same year. A further operation - Red Dagger - occurred in December of 2008, involving over 1,500 British soldiers with the aim of clearing the Taliban from Nad e Ali.

In 2009, there was a rapid succession of military operations during the spring and summer: Blue Sword, Zafar, Panther’s Claw and then Khanjar. These resulted in almost 4,000 British, Danish and Estonian soldiers, and 11,000 US Marines being deployed in the central districts of Nad e Ali and Marjah with the task of clearing the insurgency from the area. Finally, there was Operation Moshtarak launched in February 2010, which involved 15,000 US, Danish, British and Afghan forces tasked with clearing Marjah. The cumulative impact of these operations was to, over time, establish a resolute military presence in the area where the HFZ was implemented; what Mike Martin, a military adviser in Helmand at the time and subsequent author, described as “an ISAF base on every road junction” (See Figures 9).

Expansion of Shawqat Base
Nad Ali, Helmand Province, Afghanistan
2008 - 2010

Figure 9: Shawqat base. Nad e Ali, Helmand 2008-2010
These military operations were accompanied by a roll-out of wider development investments, which far outweighed the HFZ both in financial terms and in terms of development and psychological effect. Much of the money was spent on infrastructure, particularly roads, but there were also investments in education and health, with the building of schools and clinics. For example, aside from DoD Commander’s Emergency Response Program (CERP), a source of significant funding for infrastructural programs, USAID’s Afghan Stability Initiative (ASI) was expanded to include the southern region with a further US$ 159.6 million over three years. The UK also announced a US$ 45 million infrastructural programme in 2010. Investments included over US$ 11.8 million on the Bost Airfield by USAID and a further $10.64 million on both the airfield and an agro-industrial park by DFID (see Figures 10 and 11). These and other infrastructural projects had an effect on unskilled daily wage labour rates in Lashkar Gah, driving them up from US$ 4 in 2008 to more than US$ 6 in 2011.

Secondly, there was a range of investments in agriculture, including perennial and annual horticultural crops. For instance in 2009, USAID enhanced an existing US$ 60 million national programme distributing agricultural inputs - the Afghanistan Voucher for Increased Production in Agriculture (AVIPA-Plus), implemented by International Relief and Development (IRD) - to include Helmand and Kandahar, adding another US$ 250 million over two years for these two provinces alone. Meanwhile, DFID’s Helmand Agriculture and Rural Development Programme (US$ 30 million) was supplemented by a US$ 21 million Helmand Growth Programme, of which investments in infrastructure and private-sector development were aimed at promoting economic growth. Development expenditures were such that RAND estimated the international community spent in excess of US$ 200 million in Helmand in 2009-2010 alone, while Upper Quartile estimated that development expenditure was just short of US$ 650 million between 2009 and 2011, of which almost US$ 300 million was spent in the two districts of Lashkar Gah and Nad e Ali. In the context of an environment in which multiple agencies, and considerable amounts of development funds were being disbursed amid the deployment of increasing numbers of soldiers, it is hard to see the HFZ as much more than a poppy ban, akin to the kind of prohibitions that had been imposed in Afghanistan in the past. In fact, a number of reviews commissioned by the UK government concluded that the HFZ had a negligible impact on poppy cultivation. For example, in 2009, Cranfield University used high-resolution satellite imagery to assess changes in opium poppy cultivation within and outside the HFZ and concluded that “the seed and fertiliser distribution programme had little or no influence on increasing cereal cultivation compared to other factors causing the province wide increase.” What became known as the Ryder and Read review (2010) argued that “the dominant driving factor behind changes in [opium poppy] cultivation patterns was the high relative price of wheat in 2008, with farmers aiming to minimise food costs” and in March 2010, a reviewer working for the stabilisation unit concluded that “the [HFZ] had a small, but non-negligible impact on overall levels and patterns of poppy cultivation.”

Figure 11: Bost Industrial Park, 2008-2014
As such, it is more important to examine the HFZ in terms of a catalyst aimed at deterring cultivation over an expanding area within Helmand; a political intervention, not a development one, per se. The development of viable economic alternatives to opium poppy were outside its remit, and where they arose they would be the product of the other programmes of investment occurring at the time, along with any improvements in governance and security. It is, however, possible to look at the effects of the poppy ban that the HFZ supported; and how the population responded both inside and outside the HFZ. It is particularly important to understand what farmers did in the absence of opium poppy, for example: did they move onto other sources of livelihood? Did these changes endure firstly after the HFZ finished in 2012 and then after international military forces had withdrawn in 2014? A further area of interest is the wider effects of the poppy ban, how it impacted farmers attitudes toward the Afghan government, the international intervention and the subsequent loss of territory to the insurgency.

6.1. INSIDE THE HFZ

6.1.1. FROM POPPY TO WHEAT

In 2009, wheat cultivation expanded dramatically both within the HFZ and outside (see Table 3). A global shortage of cereals, combined with the Government of Pakistan imposing controls on the movement of wheat to Khyber Pakhtunkhwa (the North-West Frontier Province until 2010) to limit the amount of wheat smuggled into Afghanistan, led to dramatic rises in wheat prices across Afghanistan. In mid-2008, the price of wheat was US$ 0.70 per kilogram in southern Afghanistan, up from US$ 0.25 at the same time in 2007. Concurrently, opium poppy prices had fallen dramatically following years of excess cultivation in response to the high prices that had arisen in response to the Taliban’s successful prohibition of opium in the 2000/2001 growing season. By mid 2008, prior to the launch of the HFZ, opium prices were as low as US$ 70 per kilogram, down from US$ 120 per kilogram a year prior and around US$ 500 per kilogram in 2001 when the Taliban fell.

Table 3: Cultivated area inside and outside the Food Zone 2007-2009 (hectares)

<table>
<thead>
<tr>
<th></th>
<th>2007 (ha)</th>
<th>2008 (ha)</th>
<th>2009 (ha)</th>
<th>Change 2008 to 2009 (ha)</th>
<th>Change 2008-2009 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inside the Food Zone</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opium Poppy</td>
<td>38,235</td>
<td>33,937</td>
<td>21,452</td>
<td>-12,485</td>
<td>-37%</td>
</tr>
<tr>
<td>Cereal</td>
<td>15,924</td>
<td>18,603</td>
<td>36,591</td>
<td>17,987</td>
<td>97%</td>
</tr>
<tr>
<td>Other</td>
<td>40,488</td>
<td>45,514</td>
<td>36,685</td>
<td>-6,829</td>
<td>-15%</td>
</tr>
<tr>
<td>Active agricultural land</td>
<td>94,646</td>
<td>98,054</td>
<td>96,728</td>
<td>-1,326</td>
<td>-1%</td>
</tr>
<tr>
<td><strong>Outside the Food Zone</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opium Poppy</td>
<td>50,418</td>
<td>49,872</td>
<td>53,624</td>
<td>3,752</td>
<td>8%</td>
</tr>
<tr>
<td>Cereal</td>
<td>23,339</td>
<td>24,689</td>
<td>48,902</td>
<td>24,213</td>
<td>98%</td>
</tr>
<tr>
<td>Other</td>
<td>111,105</td>
<td>114,557</td>
<td>107,962</td>
<td>-6,596</td>
<td>-6%</td>
</tr>
<tr>
<td>Active agricultural land</td>
<td>184,681</td>
<td>189,118</td>
<td>210,488</td>
<td>21,370</td>
<td>11%</td>
</tr>
</tbody>
</table>

This shift in the terms of trade between wheat and poppy had a significant effect on cultivation patterns. In other parts of Afghanistan, such as the central and northeastern regions where opium yields are more marginal, a farmer could obtain as much wheat for his family growing it on his own land as by growing poppy and using the proceeds to buy wheat flour. In Helmand, the input intensive nature of the opium crop meant the shift in the relative prices of opium and wheat translated to a parity in the net returns. Far more important than profit was the overriding concern over food security, particularly at a time when wheat prices were rising and growing violence in the southwest made it difficult for farmers and traders to purchase wheat in the market. At the time, farmers in central Helmand reported the challenges of purchasing wheat in the market and from neighbours.90 There were even examples of violent confrontations between landowners and sharecroppers due to arguments over their respective share of wheat yields. 91

Crop mapping supports this claim of a dramatic move to wheat within the HFZ and outside. For example, imagery analysis of 23 of the research sites showed the amount of land dedicated to wheat doubled between 2008 and 2009 regardless of circumstance and whether farmers had received wheat seed or faced the threat of eradication. 92

In much of Nad e Ali, Nawa Barakzai and Nahre Seraj, farmers perceived there was little threat of eradication in 2009 and, in many areas, there was little evidence of crop destruction in either the 2008 or 2009 eradication campaigns.93 Despite the fact that they did not fear

90 “In 2007/2008, I cultivated my land with six jeribs of poppy and only one jerib of wheat. It was not enough wheat for my family. At harvest time I asked my neighbours to sell their wheat to us, as the price of wheat in the city [Lashkar Gah] was too high. At that time we did not have enough money to buy wheat in the city as our opium was still fresh and we would have received a low price. But my neighbours refused. I had to borrow money from another person to buy wheat flour in Lashkar Gah. In 2008/2009, I decided to grow three jeribs of poppy and four jeribs of wheat so I would never face this problem again. I have cultivated the same this year [2009/10].” (#4 Nad e Ali, Helmand, 2010)


93 This included the Governor Led Eradication (GLE) and the centrally managed Poppy Eradication Force (PEF).
eradication, farmers reduced the amount of land that they had cultivated with opium poppy between the 2007/2008 and 2008/2009 growing seasons and cultivated more wheat. Even in November 2009, there were farmers in the less secure parts of Nad e Ali and Nahre Seraj, where the government’s writ was limited, who had never had their crop destroyed and had nothing to fear from eradication, yet still cultivated wheat at the expense of lower levels of opium production (see Figures 12 and 13).

Concerns over the rising price of wheat were such that even areas within the HFZ that had historically cultivated lower levels of opium poppy, places like Bolan and Mohajerin in the district of Lashkar Gah, extended their wheat crop in 2009 (see Figure 14). With less land under poppy, farmers in these areas did so at the expense of spring cultivars, including high value horticulture. As such, the interventions of the HFZ had a negligible impact on levels of poppy cultivation in the initial year; farmers were already moving out of poppy and into wheat due to concerns over food security, in some cases even at the expense of licit high value crops, such as vegetables and fruit.

6.1.2. NECESSARY, BUT NOT SUFFICIENT

As a response to concerns over food security, the uptick in wheat cultivation neither denoted economic growth or enduring transition out of opium poppy within the HFZ. As annual wheat could easily be replaced by poppy in later years, there was always the risk that poppy would return. Furthermore, as a staple food crop rather than a cash crop, high wheat prices typically did not lead to higher profits, just a higher food bill for the household. Only those farmers who could produce a surplus of wheat - a function of land size, land tenure and the number of family members - would profit from rising wheat prices. Even in those circumstances margins were low, given the competition from Pakistan and then Kazakhstan, countries that both produce a quality milled flour, often at subsidized rates.

For farmers to make an enduring shift from opium poppy cultivation that did not require the kind of continued military presence that the surge brought in 2009, or the levels of coercion that might aid an insurgency, a viable economic alternative is required. In the context of Helmand, this means either a cash crop with high returns and/or non-farm income. It is in this regard that more limited effects which rendered the HFZ unsustainable can be seen. For example, both fieldwork and high-resolution satellite imagery highlight the geographic and temporal limits
Figure 14: Cropping patterns in Bolan, Nad e Ali, Helmand, 2008-2018
of the uptake of other high value crops (see Annex). While there is clear evidence of those areas nearer the provincial centre of Lashkar Gah, locations such as Qala Bost and Bolan diversifying into high value horticulture following the fall in wheat prices and the ban on opium poppy, there is less evidence within the boundaries of the HFZ when investigated further afield or in drier areas that were once desert land.

For those areas further away from Lashkar Gah, there were none of the market advantages of Bolan and Qala Bost. Transport costs are higher - particularly during periods of insecurity - soils are thinner and there is extensive salination. Demand for high value horticulture in these areas is also constrained by the size of the population in Lashkar Gah and, to some extent, Gereshk, and the prevalence of horticultural production in the environs - in places like Qala Bost and Bolan. The former desert areas - such as Loy Bagh, Dasht Shershahrak and Dasht Aynak - are not irrigated from the canals, but by water pumps from the drainage system or by deep wells sunk up to 90 metres below the surface. As such, the cost of agricultural production in these former desert areas is high and, in the absence of poppy or another crop that can generate a reasonable and secure net return, land is often left idle as farmers are unable to meet the cost of irrigation.

In both these types of areas, the movement out of poppy was temporary and unsustainable. In these areas, poppy was typically replaced by a combination of increased wheat cultivation during the winter growing season, followed by an extended crop of cotton or melon/watermelon in the spring. In the summer, maize and mung bean would be grown (see Figure 15). As opposed to research sites like Bolan and Qala Bost that had the advantage of proximity to Lashkar Gah, there was very little uptake of high value annual horticulture in either the spring or summer seasons in areas further away both during the HFZ programme and following its closure. Some farmers planted perennials, in particular fruit such as pomegranates and grapes, but this was not widespread and was restricted to landowners.

A cropping pattern of wheat in the winter months, with some land left idle for cotton and or melon/watermelon, followed by maize and mung bean in the spring is one shaped by risk, not the high returns. All of these crops except melon/watermelon, have relatively low prices, but a high use value within the household. They can be stored for sale at a later date and the timing of irrigation and harvest is not as sensitive as for most horticultural crops, allowing farmers to delay important agricultural activities in the wake of fighting or other insecurity.
They do not, however, provide sufficient income for a household to meet their basic needs (see Table 4).

**Table 4: Gross income of household in HFZ that did not diversify their cropping system.**

<table>
<thead>
<tr>
<th>Crops</th>
<th>Land (Jeribs)</th>
<th>Yield (Man/ jerib)</th>
<th>Sold (Man)</th>
<th>Price (USD)</th>
<th>Returns (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>6</td>
<td>215</td>
<td>900</td>
<td>1.36</td>
<td>1224</td>
</tr>
<tr>
<td>Cotton</td>
<td>3</td>
<td>170</td>
<td>510</td>
<td>3</td>
<td>1530</td>
</tr>
<tr>
<td>Alfafa</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Summer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maize</td>
<td>4</td>
<td>160</td>
<td>600</td>
<td>0.86</td>
<td>516</td>
</tr>
<tr>
<td>Mung Bean</td>
<td>2</td>
<td>25</td>
<td>50</td>
<td>2.55</td>
<td>127.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.397.5</td>
</tr>
<tr>
<td>Gross income/day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.31</td>
</tr>
<tr>
<td>Gross income/person/day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.93</td>
</tr>
</tbody>
</table>

While the uptake in high value horticulture is less obvious across much of the HFZ, there are areas where a dramatic shift did occur. Bolan, in particular, became a vibrant source of spring and summer vegetable crops which continued in 2018, with little evidence of a return of poppy. (see Figure 16) Instead, farmers in this area talk of the benefits of the government and the economic opportunities that security brings. As one farmer noted in Qala Bost, near Lashkar Gah, “because of this government we have a good life and economy.”94 - a sentiment shared across Bolan.

The wide range of crops grown in these areas in winter, spring and summer seasons was notable. Many of these farmers cultivated as many as six to eight vegetable crops, alongside a small amount of wheat, if any wheat at all. In contrast to drier and more distant locations within the HFZ, maize and mung bean was rarely grown in these areas; preference was given to summer vegetables such as carrots, tomatoes, turnips, cauliflower and radishes, each of which would earn a minimum gross return of US$ 220 per jerib95, even in 2018 when there was not the same kind of inflationary pressure in Helmand that was evident up to the withdrawal of NATO forces in 2014.

The returns on winter and spring cultivars were typically higher. Okra, onion and tomatoes, for example, might yield a gross return of up to US$ 765 per jerib at their peak in 2013.96 With the potential for four cropping seasons and the use of polytunnels and off-season cultivation - a practice aided by both development assistance (AVIPA) and the private sector - incomes were further increased. Moreover, Lashkar Gah - the primary market for these agricultural goods - close by, there were none of the challenges of transport and spoilage that were common in other parts of the HFZ, especially during periods of intense fighting when a delay in getting goods to harvest could lead to significant losses to the farmer. These were areas that had the potential to prosper even in the absence of opium poppy due to the prevailing socio-economic, political and environmental conditions and, in particular, their proximity to the primary market in Lashkar Gah.

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94 Qala Bost #3.
95 Unit of land measurement, similar to an acre or hectare.
96 David Mansfield, “From the ground up: Where does the population of rural Helmand stand after over a decade of ‘statebuilding’,” Unpublished report for Afghan Drugs Interdepartmental Unit, 21 May 2014.
Figure 16: Polytunnels in Bolan, Lashkar Gah, Helmand, 2014
6.1.3. THE IMPORTANCE OF NON-FARM INCOME

The fact is, even with a move to the kind of complex - and relatively remunerative - cropping systems that can be seen in places like Bolan and Qala Bost, most households need a further addition to their salaries if they are to attain a level of income that not only satisfies their basic needs, but also provides further income so that the household can save for life events, such as engagements and marriages (which can cost from US$ 6,600 to US $8,800), and be able to cope with shocks such as serious illness or death, as well as have sufficient funds for investment in potentially productive enterprises, such as purchasing land, small businesses, livestock or sending children on to higher education.

This is where additional advantages for those populations located in close proximity to Lashkar Gah and the disadvantages of those located further away are noted. For example, there are very few households in Bolan and Qala Bost that do not have at least one family member with a non-farm income. Even if it is a sole family member working as an unskilled labourer in Lashkar Gah, it is an additional US$ 4.30 per day income in 2018, albeit down from US$ 5.50 per day in 2012, and a valuable contribution to the households’ overall income. Often, a second family member has a ziranj 97 (US$ 4.50 - $11 per day), rents out a tractor (US$730 - US$910 per season), owns a shop (US$ 150 - US$ 360 per month) or has a government job (US$ 255 per month) leading to further increases in household income.

It is also important to note that to a family the benefits of non-farm income were not simply monetary; the totality of the income that a specific family member earned from their job. Those with a family member working in the bazaar - no matter what kind of job they did - referred to their increased consumption of food items such as meat and fruit; items that had once been luxuries, eaten only when a family member needed to travel to the market, incurring transport costs, possibly having to pay bribes and risking physical harm, particularly in the peak of the conflict. In 2013 things were so much easier with a son or brother in the bazaar who ‘at the end of each day brings meat and sometimes fruit from the market.’98

However, beyond the environs of Lashkar Gah, these opportunities were less frequent and the incomes earned were lower. Also, the same exposure to the kind of physical and social infrastructure that those nearer the city could take advantage of and improve their quality of life does not exist. Furthermore, Lashkar Gah tended to be described in the context of geographic and cultural distance in many of the discussions with farmers in these areas, even for those populations living only 10 kilometres away; it is a place where the population talks of tribal elders, maliks, and even the ANDSF “escaping to” or where officials “hide.” It is somewhere that family members go to receive treatment when they have an illness to or wealthier households send their children to for further and higher education. It is not “familiar.” The people who govern the city and, thereby the province, are seen as having little in common with those who farm further afield and, as levels of violence increased with renewed efforts by the ANDSF to reclaim territory in 2017 and 2018, Lashkar Gah became all the more remote. The sense of distance between farmers in districts like Marjah, Nad e Ali and Nahre Serah and the government and its values further widened.

97 A type of taxi vehicle.
98 Zarghun Kalay #11.
6.1.4. A RESURGENCE IN POPPY CULTIVATION

Levels of poppy cultivation in Helmand, even within the boundaries of the HFZ, are a function of a variety of different factors. Between 2008 and 2011, the HFZ was associated with lower levels of poppy cultivation, largely a function of the factors described above. By 2012, cultivation began to increase within the boundaries of the original HFZ once again (see Figure 17), only to stabilise due to three consecutive years of particularly poor yields in Helmand and the south. In 2017, five years after the end of the HFZ and three years after the departure of foreign military forces, levels of cultivation increased again - this time dramatically.

Figure 17: Poppy cultivation in Helmand and the HFZ, 1999-2018

Unfortunately, high-resolution satellite imagery analysis was not available for all the research sites for the years 2013 to 2016 to support a disaggregated picture of the return of opium poppy by each location. Fieldwork between these years does, however, fill in some of the gaps.

What can be seen and is supported by the crop mapping for Marjah Block 2 A (see Figure 18), as well as far more detailed imagery of the area around the district centre (Figure 19), is an initial foray into poppy cultivation as early as 2013 and 2014, as farmers further away from the roads and main canals tested the waters, cultivating a small amount of poppy to see if it would be destroyed. In these early years the ANDSF largely held the ground itself or through proxies in the form of Afghan Local Police.99 Cultivation was deterred by particularly low yields between 2013 and 2015 that even limited planting in the former desert areas north of the Boghra where there were no government restraints on opium poppy cultivation. By 2017 poppy cultivation was much more widely cultivated in Marjah. It was nothing like the poppy crop in 2010 – the year of Operation Moshtarak - when as much as 60 percent of the agricultural land was dedicated to poppy, but it was significantly more than the six percent of land that was allocated to the crop once the MEB were embedded the following season.

99 David Mansfield, “From the ground up: Where does the population of rural Helmand stand after over a decade of ‘statebuilding’?,” Unpublished report for Afghan Drugs Interdepartmental Unit, 21 May 2014.
While ongoing fighting did limit the scale of cultivation in Block 2A in both 2017 and 2018 and a number of other research sites, there were few restraints on extensive poppy cultivation across much of the HFZ. The departure of the ANDSF and the return of the Taliban, in particular, was said to have aided a return to more widespread opium poppy cultivation in the area. As one farmer in Marjah F4D5, on the border of Nad e Ali district said: “The Taliban is better than the government; they don’t ban opium, they just ask for tax from poppy.”

The return of cultivation was such that by 2017, the USG estimated that poppy cultivation in the HFZ, based on 2009 boundaries, was 63,500 hectares up from 35,000 hectares in 2009. In all, except Bolan, widespread poppy cultivation was evident in all the research sites within the HFZ in 2017. And even in Bolan there were complaints about security, a consequence of Taliban incursions into the area in February 2017. In Koshal Kalay, Shin Kalay and Loy Bagh, as well as both research sites in Marjah, security had taken a dramatic turn for the worse in 2017. Large areas of land had been left abandoned during the harvest period due to fighting between the government and Taliban forces and there was a significant number of reports of injuries and deaths in both 2017 and 2018. Much of the acrimony was targeted at the government; in part they were not capable of holding the area and maintaining security, but also there were rumours that Afghan local forces had abandoned their bases in return for payments from the Taliban. This was another case of what was perceived as endemic corruption not dissimilar to prior examples cited, including the provision of wheat seed and eradication, that undermined rural support for the Afghan government.

As such, five years after the formal withdrawal of NATO forces from Helmand and seven years after the end of the HFZ, poppy had returned to the area in abundance. The rapid reduction in cultivation in the HFZ that was seen in 2009, and sustained for some years after, had been replaced by a rebound, not just within the boundaries of the HFZ, but, as the next section will show to dramatic effect, outside as well.
Figure 18: Cropping patterns in Marjah Block 2A, Nad e Ali, Helmand, 2008-2018
Figure 19: The resurgence in poppy cultivation around the “district centre” Marjah 2A, Nad e Ali, Helmand, 2013-2018
6.2. OUTSIDE THE HFZ

While dramatic reductions in levels of poppy cultivation were achieved inside the HFZ during the initial years of the programme, it did not take time for those to be offset by a rapid rise in opium production in the former desert areas north of the Boghra. This could be dismissed as an inevitable consequence of prohibition, or what is known as the balloon effect: the results of squeezing supply in one area only to see it rise in another due to demand remaining the same. However, it can be seen that the HFZ played a much more direct role in the increase in cultivation in the former desert areas. It not only led to the relocation of production, but of the people whose livelihoods were dependent on cultivating the crop. In so doing, it created the conditions for the subsequent entrenchment of cultivation in these new lands, an exponential rise in opium production and, along with it, a range of second and third order effects, some of which are yet to fully play out.

6.2.1. INCREASED POPULATION AND POPPY DENSITIES

The population in the area north of the Boghra was already increasing prior to the HFZ. However, the programme set in place a number of factors that not only led to an increasing rate of settlement of the former desert areas, but larger parts of the area being brought under agriculture and into more intensive opium production. By 2018, there were as many as 600,000 people living on almost 60,000 hectares of agricultural land, which was a marked step up from the 882 hectares grown in 2002 and occupied by less than 10,000 people.

Initially, settlement of the former desert areas was slow and largely driven by a process of land grabs by powerful actors associated with the Governorship of Sher Mohammed Akhunzada (2002-2005) and the Karzai Government. These individuals - many holding positions and who had informal relations with the central or provincial government at the time - resided in villages to the south of the desert area in the canal and claimed traditional rights over the desert land. Land was first captured by these individuals and gifted to their supporters and villagers, then initially sold at relatively low prices. In the absence of any meaningful response from the authorities, more of the land was taken and both the sale and price of land increased.

The HFZ drove the land-poor into the former desert areas north of the Boghra canal where they began to cultivate ever increasing levels of opium poppy (see Figure 20). In particular, the expanding ban on poppy in the HFZ led to a greater number of landed households in the canal irrigated area to abandon poppy and turn to less labour-intensive crops, such as wheat, in particular. This meant that many landowning households did not need to employ tenant farmers or sharecroppers to work their land. Consequently, the land-poor had to find land elsewhere, not only so they could derive an income from agricultural production, but also so they could have shelter, water and grow food for their own consumption. These were the same farmers who were the least likely to receive the development assistance that was available in the HFZ; land-poor found themselves excluded by a plan that gave assistance to the landed and worked through delivery mechanisms that did the same through patronage and corruption.

Without targeted assistance and with less land available for sharecropping or lease within the canal irrigated areas of the HFZ, the land-poor moved to the area north of the Boghra canal in search of land they could cultivate (see Figure 21). Those who owned land in this area were responsive to this inflow of cheap and relatively skilled labour. At this point, much of the land north of the Boghra canal had been already captured and distributed through gifting or by sale at a rather nominal price, yet significant amounts of remained idle. The HFZ helped create a bountiful supply of labour in need of land and a viable income creating the conditions for greater amounts of poppy to be grown.
Figure 20: Area under agriculture north of the Boghra, 2002-2018
Figure 21: Year of settlement in area north of the Boghra, by land tenure, 1994-2018

Upon moving north of the Boghra canal, the land-poor found quite different sharing cropping arrangements in place; arrangements that compelled them to cultivate more poppy than they had grown before. Whereas the land-poor were typically paid one-third of the final opium crop in the canal irrigated areas of Nad e Ali, Marjah and Lashkar Gah, they received only one fifth of the crop in the former desert areas. As a result, once in the former desert areas sharecropping households were compelled to cultivate more land with poppy just to maintain the same standard of living as they had in the HFZ.

The fact is, once they had relocated north of the Boghra, sharecropping households were inspired to grow even higher levels of opium poppy in the hope that they too might be able to purchase land there. While land prices in the irrigated parts of the HFZ could reach as much as US$ 10,000 per jerib between 2008 and 2011, prices in the former desert areas varied from US$ 190 to US$ 375 per jerib. Hopeful of “a good year” — both high yields and prices — that would allow them to purchase some desert land, the amount of land dedicated to opium poppy steadily increased as greater numbers of sharecroppers moved to the former desert areas and grew ever more opium poppy (see Figure 22).

Even after the HFZ had closed in late 2011, farmers continued to move to the former desert areas. The model of encroachment and settlement proved effective and there was little to prevent more farmers from moving there despite the harsh conditions they found on arrival. In fact, even successive years of low opium yields between 2013 and 2015 did not fully deter migration to the former desert area, albeit in smaller amounts.

By 2018, there were almost 60,000 hectares of land under agriculture in the former desert, which was a dramatic increase from 882 hectares in 2002 and 15,143 hectares when the HFZ began. Since 2014, it has largely been the upswing in fighting that has driven households north of the Boghra, aided by a recovery of opium yields in 2016. However, there continues to be some farmers that complain about GIRoA’s continued efforts to ban opium poppy and force them to look for land in the former desert areas. In 2018, most of these farmers came from areas like Luy Bagh and Shin Kalay where the ANDSF had launched renewed efforts to drive the Taliban from the area; an operation that led to the disruption of the fall planting season and the forcible relocation of parts of the population (see Figure 23). As such, the former desert area continued to be seen as a sanctuary for those looking to flee the policies of the GIRoA and seek economic opportunity, just as it was during the HFZ.

101 “I have no interest in this government because we escaped this government to come here,” (Shna Jama #6; left Zarghun Kalay in 2016 due to fighting); “Because of this government I escaped to the desert. They are not a good government. They create the problems for the people,” (Dashte Nawabad Shaval #10, left Nawabad Shaval in 2018 due to fighting).
Figure 22: Increased density of opium poppy cultivation in the former desert areas north of the Boghra in Shna Jama, Nad e Ali.
Figure 23: Land abandoned between 2017 and 2018 due to fighting in Luy Bagh, Nad-e-Ali.
6.2.2. ECONOMIC GROWTH AND AGRICULTURAL INNOVATION

As the population in the area north of the Boghra became more settled and there was no resistance to increasing levels of encroachment, the area also saw greater investment. By 2012, permanent markets were established in a number of areas that replaced the weekly temporary markets or melas. This increased the availability of goods and services in the former desert area and reduced the need to travel to the bazaars in the district centres and Lashkar Gah. Some of these markets are large and consist of 80 to 100 shops, such as the Kazam and Tariyak bazaars in the former desert areas of Nad e Ali and are illustrative of a population that has set down roots (See Figure 24 and 25).

Economic growth is also evident from the rise in land prices in the former desert areas. Land prices have risen exponentially since the former area was first settled. In 2003, it was possible to purchase a jerib of land for around US$ 85. In 2016, prices had reached as high as US$ 1,525 per jerib in those areas nearest to the canal, such as Dashte Nawabad Shawal and Dashte Loy Manda. Even some distance from the canal in Shna Jama, land sold for as much as US$ 1,249 per jerib in the same year.

It is important to note that much of this land has been improved and is not the bare desert that it was when settlers first arrived. Land has been cleared of stones, levelled for irrigation and deep wells sunk. In some cases, new buyers are purchasing a basic house and compound along with the land. Nevertheless, those who were given the land or captured it, or even those who purchased the land in the early years of settlement, made a good return on their investments. They possibly earned as much as US$ 8,400 on the sale of ten jeribs of land, or US$ 840 per jerib.102

102 This assumes the cost of a building a simple house, and sinking a well of 325,000 Pakistani Rupees and land having been gifted or captured, and a sale price of 160,000 Pakistani Rupees per jerib.
The next phase of land sales may attract even higher prices, largely due to the widespread adoption of solar technology, which not only requires further investment in the land, but has reinforced the perceived success of the economic model in the former desert areas – at least in the short to medium term (see Figure 26). In part, the investment in this technology was prompted by falling opium yields and lower profits between 2013 and 2015. The cost of diesel (particularly in 2013) and the high cost of repairs alongside low yields led to many farmers incurring losses on their opium crop during this period (in particular, tenant farmers and those landlords who relied on hired labour during the harvest).103

Solar technology, while expensive in the initial year with an instalment cost of around US$ 5,000, eliminated the recurrent costs of diesel and many of the repair costs - which were largely associated with the widespread use of adulterated diesel - and, once again, allowed farmers to make a net gain on opium poppy.104 Farmers incurred further costs of installing a solar powered tubewell, largely associated with establishing a reservoir in which to pump and hold the groundwater they pumped to the surface before irrigating their crops. However, these were largely costs in-kind.

103 Mansfield, D. “From Bad they Made it Worse: The concentration of opium poppy in areas of conflict in the provinces of Helmand and Nangarhar,” AREU Case Study Series. (Kabul: AREU, 2014).

What were noted as a few isolated examples of farmers investing in solar technology through fieldwork and high-resolution satellite imagery soon became far more common. For example, in 2014, only one solar powered tubewell was noted in the research site Shna Jama, to the north of the former desert area. By 2015, the number had increased to 48. By 2016, the number had reached 98. In 2018, there were a total of 217 solar powered tubewells in this one research site alone. Across the southwest region as a whole, the number of solar powered tubewells increased from less than 14,266 in 2016 to 50,360 in 2018 (see Figure 27).
Figure 27: The number of reservoirs (and associated solar powered tubewells) in SW Afghanistan, 2016-2018
6.2.3. ENVIRONMENTAL IMPACTS

There are growing concerns over the impact intensive cultivation of the former desert areas and, in particular, the widespread growth that poppy will have on the environment and human health north of the Boghra and, possibly, further afield.

The most obvious environmental effect is the impact on the groundwater north of the Boghra. Currently, little is known about the aquifer in this area. However, farmers themselves express concerns about the uptake of solar powered tubewells and the effects they will have on the water table in the area. While farmers report that the water table was falling from one half of a metre to one metre per year when diesel was the primary method for pumping ground water, they now report the water table is falling by two to three metres per year. There is little doubt in the area that this is a direct function of the significant uptick in the number of farmers using solar powered technology and concerns that the water will eventually run out.

Solar power has created a common perception that “water is free” and there are few incentives to avoid wasteful practices. The reservoirs that are associated with solar powered tubewells can be as large as 1,200 square metres. They are not lined and water losses are high, due to seepage (albeit back into the water table) and evaporation. Farmers will often run their solar powered tubewells continually through the day to fill their reservoirs. Some farmers will supplement their solar powered tubewell by running a diesel pump during the night. Concerns were such that in 2018 it was claimed the Taliban imposed a ban on running diesel powered pumps at night in the area north of the Boghra, thereby limiting the amount of groundwater that could be extracted.

Aside from the falling water table, there is also evidence that the ground water is contaminated. For example, chemical testing of the ground water in the former desert area indicates nitrate levels exceed the World Health Organisation’s (WHO) recommended rate of 50 milligrams per litre - some by more than twice the recommended amount - greatly increasing the risk of “blue baby syndrome.” The condition, known as methemoglobinemia, is closely associated with the use of agricultural fertilisers and can lead to death if untreated.

Further, environmental risks lie with the extensive use of herbicides in the cultivation of opium poppy. While the use of herbicides and pesticides is not necessarily directly linked to the HFZ and the poppy ban in the canal irrigated area, fieldwork does indicate that their use was earlier and far more widespread in the former desert areas than in the HFZ. In part, this may be a function of the extent of cultivation in the former desert area. Instead of weeding the crop three times by hand, herbicides are applied only once. Consequently, herbicides have reduced the demand for hired labour during the busy weeding season and thereby the costs of growing greater amount of opium poppy.

Fieldwork indicates that farmers use a wide range of herbicides on their opium poppy crop, some of which are repackaged, thereby making the chemical components and their associated toxicity hard to identify. However, it does appear as if some of the non-selective herbicides initially used on opium poppy, such as paraquat, have now been largely replaced by selective herbicides that are less time consuming to apply and potentially less harmful to human health. Nevertheless, farmers have a negligible understanding of the health risks associated with these agrochemicals and wear only minimal cover when applying them, exposing both adults and children during their application (see Figure 28).

105 Farmers’ knowledge of the depth of their groundwater was attributed to the maintenance work they did on their deepwells. For example, respondents reported having to replace their water pumps and raise them from the well to do so. They also referred to the need to lengthen the pipes they used to draw water from the well.
106 These results were from 11 of the 20 samples taken during fieldwork.
109 Mansfield, D. “From Bad they Made it Worse: The concentration of opium poppy in areas of conflict in the provinces of Helmand and Nangarhar,” AREU Case Study Series. (Kabul: AREU, 2014), page 64.
Figure 28: Farmer and son spraying poppy crop with herbicides in area north of the Boghra, Helmand, March 2019
6.2.4. THE POLITICAL AND SOCIAL RAMIFICATIONS OF RELOCATION

The HFZ had a lasting effect on those who perceive they have suffered most at the hands of the opium poppy ban, the majority of whom argue they have been compelled to move to the desert areas north of the Boghra. In fact, most farmers in these former desert areas perceive themselves as having been driven out of the canal irrigated area by the actions of the Afghan government and its foreign backers. In particular, they see the government as weak and unable to resist pressure from the policy positions of foreign powers - such as the banning of opium poppy or the bombing of heroin laboratories - but also too weak to secure the area against a resurgent Taliban. Typically, farmers north of the canal express antipathy towards the government - sometimes in the most vitriolic terms - and a support for the insurgency. This should not be a surprise, as many were ineligible to receive development assistance and the least likely to benefit from aid due to the corrupt patronage system that governed distribution and had the most to lose when an opium ban was imposed. They were the land-poor excluded from the kind of development provided by the government in Helmand and its international donors.

The women of the households were particularly affected by the move to the former desert areas. While the men north of the Boghra had a rather functionalist approach to life, looking upon most of their problems as being resolved after living in the former desert areas for a number of years, women saw their problems persisting. Once the land was cleared, a deep well sunk, a house built and some trees grown for protection from the harsh desert sun, most men north of the Boghra talked of life being “fine.” But men are not restricted by the same social and cultural mores as women. Men can travel, visit the bazaar or local market, call on neighbours and friends in the area and travel to the canal irrigated area and to the cities of Lashkar Gah and Gereshk. For women, life in the former desert areas is much more restrictive and once the initial challenges of having shelter and viable agricultural land are resolved, the problem of mobility and the burden of work remains.

In fact, women in these former desert areas see their lives as much more difficult than when they lived in the canal irrigated areas of the HFZ largely due to climate, the increase in workload and the particularities of Pashtunwali and how the policy of seclusion manifest itself once a household no longer resides alongside its wider family members. In particular, they complained that their movements were severely restricted. A visit to the local mela or bazaar was unheard of, calling on neighbours who were not family or possibly not even from the same tribe was unlikely, as was travel to the canal irrigated area to visit close family and relatives. Women mentioned being unable to attend the funerals of close family members, including fathers, due to limited communication, travel restrictions and insufficient spare time.

Some women compared the restrictions on their mobility to “being in a prison.” Others talked of isolation, loneliness and of having “an individual life, but no social life.” There were women who talked of “too much sadness,” as well as their own depression and that of others. There were even

110 “The government are slaves of the US. They don’t have freedom; they always accept their orders.” (Dashte Koshal Kalay #6).
111 “I f*** their mother. If [the government] are strong, they would capture the districts and bring security to the people, but all the districts are in the control of the Taliban.” (Dashte Shin Kalay #3).
112 “F*** the wife of these dowus people [in the government]. Don’t mention their name. Here is Taliban and we are free from these people [in government].” (Dashte Shin Kalay # 14).
113 F#34
114 F#1
115 F#1
116 “We were most alone there.” F#4
117 F#3
118 F#47
119 F#10
120 “There is more depression among the people.” F#6; “I know there are some women in the desert who have depression.” F#26.
reports of suicide.\textsuperscript{121} The absence of clinics or hospitals north of the Boghra canal meant there was little in the way of treatment for any health conditions without recourse to travelling to Gereshk or Lashkar Gah, with all the challenges that these journeys represent. One woman described her move to the desert: “When we arrived in the desert I was under a lot of pressure. Life is never easy there. If you become sick you stay at home, there is nothing for that.”\textsuperscript{122} Another stated that “life is not good. We don’t have access to anyone. We can’t go to the doctor.”\textsuperscript{123}

Aside from their lack of mobility, women also talked of how difficult life is in the former desert areas, particularly during the initial years of settling there. As one woman exclaimed: “When you got to the desert there is no proper house, no trees; it is a hot burning desert. But it is our obligation.”\textsuperscript{124} Others spoke of the bleak environment and the hardships it imposes: “In the desert you will see wind and dust and nothing more.”\textsuperscript{125} Many women complained of the amount of work required of them in the former desert areas (in particular, work on the land). The level of effort was seen as a notable increase compared to their previous lives in the canal command area. Most of this work was related to looking after livestock and collecting firewood, but also weeding opium poppy and preparing the food for the labourers employed during the poppy harvest. Some women did not work on the land when they lived in the canal command area of Helmand and found the move to the desert area to be quite a shock: “[In the dasht] (desert) we work on the farm. In the watan (irrigated area) we do not work.”\textsuperscript{126}

Those who were from households that owned land in the former desert area referred to how tiring the work was, but recognised the economic advantages that farming in the desert could bring. As one woman noted: “When we went to the desert, life was changed for the better; but my life is not good as I work too hard on the land.”\textsuperscript{127} Most women just talked of a “better life” and “improved food” while discussing the hardships they faced during their time in the desert\textsuperscript{128} and the absence of any real alternative: “If we had a choice of life in any other location we would not go to the desert. Because there is no choice we accept this life; it is better than when we had no land at all”.\textsuperscript{129} It is notable that there were only a few isolated cases of women from households who reported acquiring significant assets during their time in the desert lands. For example, one woman from Musa Qala referred to the fact that her family had acquired 27 jeribs of land: “Our life has improved and now we have a sharecropper.”\textsuperscript{130}

For the landless, there was little difference between farming in the canal command area and farming in the former desert areas. As a mother in a household previously from Koshal Kalay in Nad Ali, now sharecropping nine jeribs of land in the desert, exclaimed: “We are very poor. We hoped that we would find a good life in the desert, but there was no change. We are always busy in the farm, wherever we are.”\textsuperscript{131}

Regardless of their landholdings and wealth, for these women the return to the canal command area was like being at a “picnic,” or on “holiday.” They could once again travel to visit family and friends and even go shopping in Lashkar Gah. They could escape the intense desert heat of the summer months and, even though the vast majority of the women had no land and rented properties in the environs of Lashkar Gah during the summer while the men in their family looked for wage labour opportunities in the city, they

\textsuperscript{121} There was a report of a suicide in the former deserts of Nad Ali. It was claimed that a woman there had eaten opium in order to end her life.

\textsuperscript{122} F#13

\textsuperscript{123} F#27

\textsuperscript{124} F#2

\textsuperscript{125} F#12

\textsuperscript{126} F#1

\textsuperscript{127} F#12

\textsuperscript{128} F#26

\textsuperscript{129} F#49

\textsuperscript{130} F#24

\textsuperscript{131} F#23
were happy to be back in the canal command area. As one woman, originally from Garamsir but who
had lived in the former desert areas for seven years, explained: “Now we are in the watan everything is
available here.” These women enjoyed their temporary release, conscious of the fact that they would
return to the desert in the fall: “Because of our poverty we accept all the problems of the dasht.”

In sum, for both men and women, the move to the desert has been far from ideal. They have been compelled
to relocate out of necessity: a function of poverty, violence and the absence of viable livelihoods in the
canal irrigated area in which the government once dominated. They have been marginalised by the ban
on poppy associated with the HFZ, the type of development assistance offered and the way in which it
was distributed. They have little love for the government that they perceive as being responsible. While
the former desert areas offer some economic respite - for some a home and land they never had - there is
the risk that the groundwater is being overexploited with the shift to solar technology and contaminated
by the fertilisers used in agricultural production and, in particular, opium poppy cultivation.

A failure of the agricultural system in these former desert areas would have devastating socio-economic,
political and environmental effects. The area north of the Boghra alone has as many as 600,000 people,
while the desert beyond has a further 1.8 million. Were the ground water to falter and farmers not be
able to irrigate their poppy, they would have little choice but to leave the area. The question is: where
would they go? It is unlikely that a population that believes it was forced out of the centrally irrigated
areas of Helmand by government actions would return in good spirit. The least they would look to do is to
take up opium poppy cultivation in the canal irrigated area, assuming sufficient land were available. The
likelihood that they return with the kind of resentment they show to the government and support for the
Taliban is high. In banning opium in the absence of a viable alternative, the HFZ may simply have reduced
opium poppy cultivation in the short term only to fuel much higher levels of opium production, as well as
violent resistance and rebellion in the future.

132 “When we returned, we are happy here. We have access to a clinic; the children have access to schools. Here we can find
good food for the family.” F#4.
133 F#6
134 F#23
In retrospect it is hard to believe that the HFZ was initially greeted with such celebration. If we look beyond the reductions in opium poppy that occurred in Helmand at the time - but that could not be directly attributed to the HFZ - we see a programme that was, in fact, an aberration in terms of drug control, development and governance.

From a drug control point of view, the HFZ took the form of a crop substitution programme - the kind of intervention that had been abandoned in the 1980s due to a systemic failure to address the wider market and infrastructural and social factors that led to widespread drug crop cultivation. The HFZ even sought to replace opium (a cash crop) with wheat (a food crop), something that even crop substitution programmes in other countries with all their flaws had not done for years, knowing full well the errors of doing so.

In the context of development, the HFZ targeted the landed and ignored the land-poor. In doing so, it created the conditions by which the more marginal in Helmand - those who sharecropped poppy and food crops on the land of others - were dispossessed. Consequently, the land-poor lost access to land, shelter and the means by which to meet their basic needs. In the absence of opium poppy and targeted assistance, these farmers had little choice but to relocate to new lands where they would inevitably do what they knew best, poppy cultivation, and in so doing, intensify agricultural production in the desert lands with all the environmental risks that this demands.

From a governance perspective, the HFZ worked through and consolidated existing systems of power and patronage. It empowered the governor, officials and village elders to solicit favours from farmers in exchange for development assistance or to avoid eradication. It turned a blind eye to repeated reports of corruption with regard to the distribution of wheat seed and fertilisers and continued to support the production of unverifiable village lists by district officials and elders with all the problems that this entailed. By doing so, the HFZ helped institutionalise forms of corruption and fuelled the frustration and anger that many rural household’s felt toward the government and its representatives. By operating through mechanisms that siphoned off support to the wealthy, the HFZ helped undermine the very goal that it set out to achieve - the idea that the governor and the government could deliver services to the population.

In this context, the current situation in Helmand comes as no surprise with regard to the unprecedented levels of opium poppy cultivation and increasing instability and violence. As a programme shaped primarily by the politics of the time and the competing demands of multiple actors with different and sometimes contradictory agendas, the HFZ did not conform with any kind of “best practice” and certainly did not articulate its role in a possible longer term strategy for the province.

The HFZ was a short-term plan that was extended again and again by officials whose tenure was often no longer in length and who had little concern for longer term effects and sustainability. The longer-term implications of the HFZ were never considered or, if they were, were largely brushed aside in favour of “more of the same.” Moreover, once the HFZ had been branded a success and there were calls for its replication into a further eight provinces, there was even less room for critique and the inclusion of mitigating actions to contain the programme’s worst excesses. The combination of an intense pressure to act compounded by an intense pressure to be a reporting success do not make for the best decisions.

136 As a USAID review concluded: “The heavy focus on basic grains (wheat) as the major alternatives to poppy reflects a focus on short term substitution with poor competitiveness vis-à-vis poppy. The strategy of focusing primarily on substituting basic grains for illicit crops has failed at the international level on a consistent basis.” USAID Afghanistan, “Afghanistan Alternative Development Options Assessment, Final Report,” March 2016, page 43.
Perhaps, this is the reality of policy making in highly unstable environments like Helmand. If so, the following recommendations are made in the hope that even in largely politicised environments, decision making can be informed by the lessons learned from the results of the HFZ and other counternarcotics interventions in Afghanistan:

7.1. PROGRAMME LEVEL

Look beyond simple and outdated models of crop substitution.

Evidence suggests that rural communities transition out of opium production when they can realise broader development goals. These goals do not pertain only to the diversification of on-farm, off-farm and non-farm income, so that households can better manage risk and improve their economic situation; they also give rural communities access to a wider basket of goods: improved security and greater service delivery, such as through schools and health services, that denote a growing social compact with the state. Increased non-farm income has been a critical element in building household resilience to shocks such as crop failure and opium bans in different parts of Afghanistan. The livestock sector has also supported a shift in cropping patterns, as well as improved income and social protection. Greater investment is required in these areas and others if reductions in cultivation are not simply to result in a relocation of cultivation to former desert lands and other areas out of reach of the state. In fact, greater value-added agribusiness and increased trade in higher-value licit products that are part of the country’s overall development strategy would contribute to this process.

Recognise that interventions that raise the opportunity cost of labour would have the greatest development impact on opium production.

Among such interventions are improved non-farm income opportunities (including small business loans), livestock production, diversified cropping systems and agro-processing for agricultural labourers. Opium production remains vulnerable to diminishing net returns, particularly for the land-poor who provide a relatively cheap and skilled labour force for the opium economy. The crop is particularly labour-intensive and highly susceptible to rising labour costs, especially at a time when yields and/or prices are falling. Moreover, targeting interventions at the land-poor would satisfy the pro-poor mandates of development donors while also addressing one of the key vulnerabilities of opium production.

Focus development investments in those rural areas where investments will both deliver realistic outcomes and be practicable.

The National Priority Programmes often appear geographically blind. Other than the discussion of “economic corridors” and provincial-level investments, there is little sense of the geographic priorities of the government within provinces, or of how investments in these areas might support state stability, equitable economic growth, and efforts to support farmers’ transition out of opium poppy cultivation. There is a need to set geographic priorities within the context of the likely scenarios within provinces for security. The ANDSF is already under strain and is being pushed back to areas where the state has a history of control. There are likely to be areas around the main highways and provincial centres where the ANDSF can dominate, continued development investments will be possible and opium poppy cultivation is least likely to return. However, there will also be areas within many provinces where development investments will yield little or where such investments may even be impracticable given the likelihood of a contraction in the areas under central state control. The challenge will be greatest in the intermediate areas within a province where the central state does not have direct control but maintains influence through local powerbrokers whose interests are not always perfectly aligned with Kabul’s. Decisions will have to be made about the appropriate mechanisms for delivery of assistance under these sub-optimal conditions, the development outcomes
that can be expected and the response to enduring opium poppy cultivation in these areas, at least in the medium term. Policy makers will need to learn to work within this challenging political terrain if the government is not to find itself hemmed into the cities, towns and lower valleys.

**Effective independent monitoring and evaluation is critical for programming in conflict affected environments.**

Political pressure, military imperatives and short-term staff assignments prevail in stabilisation settings. These often lead to suboptimal programme design where insufficient consideration is given to the prevailing socio-economic, political and environmental factors that impact outcomes. The politically charged nature of stabilisation, the “need to do something” and the pressure to report success deters more systematic evaluation of programme implementation. Donors will lean toward more limited “annual reviews” often conducted by internal staff and that draw heavily on information from participants directly involved in program implementation and that are therefore subject to significant bias. More systematic independent impact monitoring is required that gives greater weight to the experiences of, and effects on primary stakeholders, drawing on research on the ground and high-resolution satellite imagery in order that programmes can be realigned where possible, or even cancelled where they are failing and leading to costs that far outweigh the benefits.

**Use performance measurement to prioritize the assessment of crop and income diversification.**

Empirical research shows that replacing opium poppy with wheat or other staples is typically a household’s short-term response to coercion, and that farmers will soon thereafter resume opium production. Experience demonstrates that enduring reductions in cultivation are a function of livelihood diversification, of movement into high-value horticultural crops (which allow reductions in staples like wheat and maize) and of the availability of non-farm income. There is a need to move away from measuring the success and failure of counternarcotics efforts based on the annual counting of hectares of opium poppy grown. It has not proven to be helpful and has distorted policy discussions.
7.2. NATIONAL LEVEL

Assess all national, multilateral and bilateral development programmes for their impact on the production, trade and use of opium and of its derivatives.

These counternarcotics assessments should be a mandatory feature of the approval process for financial and technical assistance that lies with the Ministry of Finance. The format for these assessments should draw on the guidelines that were developed by the World Bank for counternarcotics mainstreaming in 2007 but have been largely ignored (see Annex 2).

Conduct a comprehensive counternarcotics review of the National Priority Programmes.

This review will ensure that those responsible for these programmes understand the impact they might have on the illicit drug problem, and take steps to maximise positive impacts when conducting such activities. In particular, there is a need to build the synergies between different sectoral interventions through area-based planning in order to maximize both development and counternarcotics outcomes.

Strengthen the technical and strategic capacity of the line ministries so that they are better placed to integrate the causes of poppy cultivation into the design and implementation of their development programmes.

In the past, the Ministry of Counternarcotics had the responsibility to support line ministries in developing a better understanding of how their programmes would impact opium poppy cultivation, but failed to deliver. Responsibility to ensure that development programmes at least do not encourage poppy cultivation - such as was the case with the HFZ - should now lie with the line ministries. They will require technical support to do this.

From an analytical perspective, abandon the crop comparisons that have dominated the descriptions of opium production in the literature of UNODC.

A comparison of the gross returns on wheat and opium is especially unhelpful and has contributed to distorted policy options. A comparison of different cropping systems and livelihood portfolios is more useful in understanding how rural households and communities live and the multifunctional role that opium plays in the rural economy of different socioeconomic groups. It is an approach that helps identify who benefits most and least from production and how different interventions will deter cultivation, while others may actually encourage it.
ANNEXES

ANNEX 1: CROP MAPPING, 2008-2018
ANNEX 2: GUIDELINE NOTE TO TREATING THE OPIUM PROBLEM IN WORLD BANK OPERATIONS IN AFGHANISTAN

A. Strategic Approach

The opium problem

Reducing opium production is one of the greatest challenges facing Afghanistan. Opium is central to the macroeconomy, contributing one-third of the GDP and significant support for aggregate demand and the balance of payments. In the rural economy, opium is a key livelihoods coping strategy for as many as 350,000 farm families, most of them poor. In the area of security, opium is fuelling warlordism and terrorism and in governance the illegal economy is capturing or undermining state building efforts at all levels.

Government strategy

The government’s strategy to reduce and ultimately eliminate opium from the Afghan economy comprises essentially three elements. The first is to improve governance and the rule of law, thereby strengthening public institutions and mechanisms to control drugs together with the development of responsible governance structures and the “social contract” at all levels from the community up. The second element is to raise the general level of economic activity and services, improving living standards and providing social protection. The third element is to emphasise specific components in development programmes that can have a significant impact on farmer behaviour with a focus on poorer farmers, laborers and more vulnerable areas.

World Bank approach

With this background, the World Bank’s working approach to the opium problem is:

▪ to factor considerations of the opium problem into analysis and dialogue at all levels, including the macroeconomic dimension;
▪ to support and engage in analytical work on the development dimensions of the drug problem in Afghanistan and associated options for addressing it;
▪ to help support the development elements of the government’s strategy through World Bank-financed programs as appropriate;
▪ to ensure that the activities supported by the World Bank do not inadvertently contribute in any way to the opium economy.

Screening

Under this approach, the World Bank proposes to screen all its activities in Afghanistan, both operations and analytical and advisory work, to ensure that counternarcotics aspects are treated consistently and in a way that can make the maximum contribution to the national effort against drugs. The screening process will demonstrate to what extent the operation or activity:

▪ contributes to the governance agenda;
▪ maximises synergies to deliver broad livelihoods impacts at the community and household level;
▪ maximises more specific counternarcotics impacts by geographical area coverage and by addressing the poorer target groups, with components which strengthen and diversify legal livelihoods;
▪ identifies risks and develops an approach to ensure that the World Bank support “does no harm” and does not create risks to the World Bank’s reputation;
▪ contains a monitoring and reporting capability that can effectively track outcomes related to the opium economy.
B. Understanding the Role of Opium in Livelihood Strategies and Devising Appropriate Development Responses

Reasons for the “success” of poppy cultivation in Afghanistan

In Afghanistan’s current economic and political climate there are many advantages to cultivating opium poppy. It is a high-value, low-weight, durable commodity, for which there is strong demand. There are sufficient returns at each stage of the value chain and well-developed market linkages in terms of credit, purchase, transport and processing, all of which function well and flexibly despite Afghanistan’s fractured infrastructure. Traders are willing to purchase at the farm gate for cash, often in advance of the harvest.

Opium poppy can be cultivated almost anywhere in the country, although it grows best in free draining sandy loam soils. It is so well-suited to Afghanistan’s agro-climatic conditions that it produces higher than the global average yields of raw opium and morphine and maximises returns to scarce irrigation water. This latter attribute and its marketability have proven crucial to farmers with small landholdings and large families, particularly in remote areas where opium poppy cultivation is becoming increasingly concentrated. For small marginal farmers there is no other crop under current conditions that can provide the same returns. When opium declines in those areas, the opportunities for farm income for such households will also decline, driving people off the land.

With these characteristics - and despite law enforcement efforts - opium poppy is a relatively low risk crop in many areas in what is generally a high-risk environment - for both farmers and traders. The traditional credit system known as salaam, that provides an advance payment on an agreed amount of a future crop, has increasingly favoured opium poppy cultivation over other crops. In areas in which opium poppy has become entrenched, access to credit has become dependent on a farmer’s willingness to cultivate this crop. This willingness and the possession of the requisite skills to cultivate opium poppy have increasingly determined sharecroppers’ access to land. The rental value of land also has become determined by potential opium yields rather than by wheat productivity.

Uneven distribution of the considerable benefits of opium production

The economic advantages associated with cultivating opium poppy differ according to the assets that farmers have at their disposal. For the relatively few large landowners, opium poppy represents a high-value crop that can accrue even greater value if it is not sold immediately after the harvest season, but rather later on, when prices rise. As larger farmers have other income streams and liquid assets, they can realize higher prices by selling later in the year. Moreover, landlords who make sharecropping arrangements for opium production can do even better: some inequitable sharecropping arrangements allow the landowner to take two thirds of the final opium yield, despite contributing only 20 percent of the total costs of production. Landlords may also make advance purchases of opium at rates considerably less than the harvest price, generating further considerable profits on the opium crop. These profits can then be reinvested in further diversifying assets and income sources or in the opium trade itself - an ascending spiral of wealth accumulation for the larger landowner.

The position for the land-poor is quite different. For this group, opium poppy is not just a source of income. Opium poppy cultivation increases the opportunity to obtain land on a sharecropping or tenancy basis and draws on the labour supply of the household. It provides access to both cash income from opium poppy and, in the typical mixed cropping system practised in Afghanistan even among poppy growers, to the means of producing food crops for household consumption. Without opium poppy cultivation, the opportunity to access land diminishes considerably, as happened in the province of Nangarhar in 2004/2005.

Opium poppy cultivation also creates a demand for itinerant labour to assist in the weeding and harvesting of the crop. Based on UNODC’s estimate that 104,000 hectares of opium poppy were cultivated in the 2004/2005 growing season, the crop would have generated approximately 36.4 million days of employment, of which one-third would have been daily wage labour opportunities. Where a household has more than
one male able to follow the staggered weeding and harvesting seasons, the off-farm income generated from opium poppy can last up to five months and is typically higher than the on-farm income earned from cultivating the crop as a sharecropper.

Opium poppy also provides an important source of credit for the resource-poor. In areas where opium cultivation is entrenched, it defines the “creditworthiness” of the land-poor. Without it, access to basic food items, agricultural inputs, and funds for health care becomes severely constrained.

In addition to the above direct benefits, the cultivation and trade of opium has considerable multiplier effects in the rural economy. Some estimates even suggest that for every hectare of opium poppy cultivated, as many as five to six jobs are created in the rural non-farm economy.

**Typology of opium farmers**

For the purposes of this Guideline, rural households involved in the opium economy have been classified as (1) “better off” and not dependent; (2) less affluent, but not dependent; and (3) poor and highly dependent. As a general rule, Class (1) “better off” farmers have more diversified livelihood strategies. They reside in areas in close proximity to provincial or district centres, they cultivate a variety of crops including high-value horticulture and they have better access to land and irrigation, as well as commodity and labour markets. They are not dependent on opium for a decent living and could be considered to be “opportunist producers,” for whom application of the law is the primary instrument of drug control. More marginal farmers (Class 2) and the poor (Class 3), are typically landless or have very small landholdings and considered to be the target group for development programmes that aim at contributing to the reduction of drug production. As such, poverty reduction and opium poppy reduction strategies are closely entwined. The characteristics of these three classes are summarised in Table 1.

**Appropriate development responses**

Opium poppy cultivating households are diverse and dynamic, and their decision as to how much land to dedicate to opium is influenced by a range of different factors - not just price. Policies and programmes that treat opium poppy farmers as homogenous will not only be ineffective, they could prove counterproductive. It is necessary to work with the diversity that exists among opium poppy cultivators. Understanding the contribution of the different socio-economic groups involved in opium poppy cultivation and the multiple benefits (for example: social, economic and political) they derive from their involvement are critical to identifying the entry points in developing effective strategies for the sustainable elimination of the crop in Afghanistan.
<table>
<thead>
<tr>
<th>Access to markets/services/governance</th>
<th>Class 1 Not Dependent</th>
<th>Class 2 Dependent</th>
<th>Class 3 Highly Dependent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Close to district and provincial centres</td>
<td>Accessible, but limited physical infrastructure</td>
<td>Remote Government presence and service delivery limited Government finds it difficult to impose will beyond district centre</td>
</tr>
<tr>
<td></td>
<td>Government can impose will with minimum reaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land cultivated (winter + summer)</td>
<td>Larger cultivable land (&gt;15 jeribs)</td>
<td>Medium sized cultivable land (&gt;7.5 &lt;15 jeribs)</td>
<td>Smaller cultivable land (&lt;7.5 jeribs)</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Canal or main river</td>
<td>Canal and river, but also karez and mountain spring</td>
<td>Karez and mountain spring</td>
</tr>
<tr>
<td>Land tenure</td>
<td>Landlord</td>
<td>Owner cultivator</td>
<td>Owner cultivator Sharecropper</td>
</tr>
<tr>
<td></td>
<td>Owner cultivator</td>
<td>Tenant</td>
<td></td>
</tr>
<tr>
<td>No. of Crops</td>
<td>Double crop</td>
<td>Double crop, but limited in summer</td>
<td>Single crop</td>
</tr>
<tr>
<td>Cropping</td>
<td>Diversified</td>
<td>Poppy 50%+ Wheat Vegetables -some for sale Fruits/nuts -some for sale</td>
<td>Poppy 70%+ Wheat 20-30% Vegetables solely for consumption</td>
</tr>
<tr>
<td></td>
<td>Poppy 30%-50% Wheat Vegetables for sale Fruits/nuts for sale</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wheat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vegetables for sale</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fruits/nuts for sale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population density</td>
<td>1 -1.5 per jerib</td>
<td>2 -3 per jerib</td>
<td>3.5 to 5 per jerib</td>
</tr>
<tr>
<td>Livestock</td>
<td>Sale of dairy products and cattle</td>
<td>Some sale of dairy products</td>
<td>Goats/sheep Dairy cow for milk products for household</td>
</tr>
<tr>
<td>Off farm</td>
<td>Limited</td>
<td>Daily wage labour - poppy during harvest</td>
<td>Daily wage labour - mainly poppy throughout season</td>
</tr>
<tr>
<td>Non-farm</td>
<td>Salaried (NGO, government), trade, transport</td>
<td>Construction Semi-skilled</td>
<td>Limited</td>
</tr>
<tr>
<td>Credit</td>
<td>Accumulated debt marginal Variety of sources of credit Gives loans</td>
<td>Some accumulated debts Variety of sources</td>
<td>Accumulated debts significant as proportion of total income Opium only source of loans</td>
</tr>
<tr>
<td>Opium sales</td>
<td>Sometime after harvest</td>
<td>Pre-harvest, but some surplus</td>
<td>Pre-harvest</td>
</tr>
</tbody>
</table>
Development programmes that offer farmers real livelihoods alternatives would need to have as many characteristics as possible that “mimic” the attractions of the opium economy, particularly for smaller and poorer farmers and labourers (Classes 2 and 3), for whom choices are very limited at present. Programmes need to avoid adopting a strategy of simply attempting to replace the relatively high level of income from opium as derived by the resource-rich (Class 1 farmers). Interventions are needed that improve the access of smaller farmers (Class 2 and 3) to those assets that they currently have access to only through their willingness to produce opium poppy. Improving access to credit, land, and off-farm and non-farm income opportunities to the poor should be a priority. Table 2 lists some of the development responses that should be emphasised to address the situation of these Class 2 and 3 farmers. For those farmers who are not economically reliant on opium poppy cultivation (i.e. Class 1 farmers), greater emphasis should be given to applying social and legal pressure.

Table 2: Development Responses to Counterbalance the Advantages of Opium for the Rural Economy

<table>
<thead>
<tr>
<th>Asset</th>
<th>Advantages of the opium economy</th>
<th>Development responses</th>
</tr>
</thead>
</table>
| Land  | • Preferential access to land for sharecroppers with experience of poppy cultivation  
       • Only poppy can pay the high land rents: in areas where poppy is concentrated, the rentable value of land is inflated to such a point that farmers cultivating legal crops would not be able to meet their rent  
       • High returns per unit of land; preferred crop for those with limited land holdings | • Increase agricultural land under irrigation (winter and summer seasons)  
• Promote high-value horticulture and cottage level agro-processing to provide value added  
• Increase income from livestock and by-products  
• Develop non-farm income opportunities (for example: through skills development and development of market linkages) |
| Water | • High return per unit of water, poppy (particularly attractive in single crop areas)  
       • One of the few crops to meet capital and recurrent costs of tubewells | • Increase agricultural land under irrigation (summer and winter)  
• Integrated approach to improving value added in farming through water efficient techniques/technologies and high value-added production packages |
| Credit| • Advance payment on future crop facilitates purchase of agricultural inputs  
       • Those who cultivate opium poppy, particularly the resource poor, are considered “creditworthy.” They can access credit, including consumption credit, and are able to repay both seasonal and outstanding loans | • Advance payments on other crops (orchards, onions, cumin) are sometimes available, promote market linkages  
• Contract growing, including provision of agricultural inputs  
• Improve credit opportunities for consumption and investment through MISFA |
| Labour| • Labour-intensive crop, significant labour opportunities created during weeding and harvesting periods  
       • Maximises use of unremunerated family labour, including women  
       • Sharecroppers receive greater share of final crop when they cultivate opium than they do for legal crops  
       • Food provided for those harvesting opium poppy | • Develop labour-intensive agro-processing opportunities such as in dried fruit  
• Raise opportunity cost of family labour through expanding potential income earning opportunities for women (including livestock, poultry, dairy, agro-processing, etc.)  
• Develop non-farm income opportunities  
• “Cash For Work” during periods of peak labour demand in areas where strong law enforcement against cultivation is occurring  
• Improve access to agricultural inputs for sharecroppers to allow greater share of larger final yield of legal crops |
In addition to the development responses that may directly offer income earning opportunities to poor farm families, much might be done to improve governance and so develop responsible reciprocity between rural communities and the state. The spread of efficient and responsive delivery of services like health and education and the development of counterpart community structures like parent-teacher associations increase respect for the Government’s development capability, build responsible local community social capital, and open paths for dialogue on the drugs issue. In addition, specific programmes like education, health, and the National Solidarity Program (NSP) may offer multiple entry points for education and dialogue, as well as the building of trust and good governance. The problem of opium is thus a consideration that may be factored in across a whole range of development activities in rural areas.

Finally, institutional development at the broader level - for example: strengthening the central and local administration or improving institutions and mechanisms in specific sectors bearing on the opium economy, such as financial services (e.g. anti-money laundering actions) - can support the Government strategy to improve governance and thereby control drugs. Many aspects of governance and institutional development at the broader level can thus have an impact on the opium economy.

C. Implementing counter-narcotics screening for World Bank activities

This section sets out a checklist for screening World Bank activities, assesses the benefits to be gained and discusses institutional responsibilities for implementation.

The checklist

The following eight questions provide an analytic framework for screening World Bank activities. The questions are designed to highlight how activities may contribute to the counternarcotics effort, and also to underline any risks that need to be managed.

1. How does the activity touch the target population or areas? Review the activity description and assess the “interface” with the opium economy in terms of the target population, the causes of cultivation, the type of actions envisaged and the targeting, timing and geographical location in relation to opium production.

2. Does the activity promote governance and institution building? Do governance and institution-building under the activity create the possibility at some stage of development of responsible interaction between the state and the population on the subject of drugs? Within the governance and institutional set up of the activity, is there scope to conduct dialogue or transmit information, provide education and engage in communication about drugs? What measures could improve the impact on governance?

3. Is there an impact on the standard of living and on livelihoods, in general? Does the activity contribute to improvements in living standards and incomes in drug producing or “vulnerable” areas? What measures could improve the impact on the standard of living? Is the activity coordinated with other development efforts to avoid overlap or gaps and achieve a critical mass of impacts on livelihoods at the local level that would increase the attractiveness of licit activity over opium production?

4. Are there direct impacts on the target population? Are components of the activity likely to directly affect actual or potential drug producing households, and are these components adapted to maximise the chances of raising the opportunity cost of opium poppy cultivation and providing an alternative to opium? How can direct impacts be optimised? Is there a case for targeting actual or “at risk” opium producing areas and households by selection of project areas growing (or at risk of growing) opium, or by modifying the components to address the production systems of those engaged in the opium economy - or who might be? Is such targeting desirable? If so, is it feasible?

5. Is there a risk of harm? Is there a risk that the activity may promote drug production? How can that risk be managed? Could interventions be timed, targeted and coordinated with other initiatives to reduce this risk?
6. Do monitoring, evaluation and reporting capture outcomes? How would any agreed contribution of the activity to national drug control objectives be monitored and evaluated? How could an understanding of the movement from illicit to licit livelihoods be used to inform both operations and policy? How would any emerging risks be captured and reported?

7. Overall, does the activity contribute to Afghanistan’s counternarcotics effort? Overall, to what extent does the activity contribute to Afghanistan’s strategy to reduce and ultimately eliminate the opium problem?

8. Can more impact be obtained through the activity? What solutions could increase the contribution of the activity to Afghanistan’s fight against drugs? At what cost could those impacts be obtained? What operational changes would be required?


Chandrasekaran, R., Little America the War within the War for Afghanistan, (New York, 2012).


David Mansfield, “From the ground up: Where does the population of rural Helmand stand after over a decade of ‘statebuilding’,” Unpublished report for Afghan Drugs Interdepartmental Unit, 21 May 2014.


DFID, “Case study: Growing poppies instead of opium in Afghanistan - How improved security and agricultural support from the UK is helping Afghan farmers to move away from growing poppies to more sustainable crops,” Published 26 May 2011.


Ministry of Counternarcotics, “The Food Zone Program, Kandahar, Farah, Uruzgan and Badakhshan.”


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