Chasing Gold: Analyzing Opium Cultivation in Afghanistan and its Alternatives

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Chasing Gold: Analyzing Opium Cultivation in Afghanistan and its Alternatives

Senior Project Submitted to
The Division of Social Studies
of Bard College

by
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When I began writing this essay it was unclear how the incoming Biden Administration would choose to engage with Afghanistan. Trump was focused on fulfilling his public commitment to troop withdrawal but left office before this was achieved. In recent weeks the new Administration has confirmed that US troops will exit Afghanistan completely by September 11th of this year (2021). As the remnants of our endeavors in this unconquered land are packed into the C-17 planes and sent back to their home bases, we are left to ponder the future of Afghanistan and the struggles of its people. It is my sincere hope that by the end of this essay the reader, like me, will share a sense of optimism that the country will not descend into the chaos and violence that characterized many chapters of its history.
Acronyms & Terms:
  AREU: Afghanistan Research and Evaluation Unit
  AEF: Afghan Eradication Force
  ASNF: Afghan Special Narcotics Force
  COIN: Comprehensive civilian and military efforts taken to simultaneously defeat and contain insurgency and address its root causes
  GLE: Governor Led Eradication
  HFZ: Helmand Food Zone
  ISI: Inter-Services Intelligence
  INL: Bureau of International Narcotics and Law Enforcement Affairs
  Jirib: The jirib is a traditional unit of land measurement in the Middle East and southwestern Asia. The Afghan Jirib is 0.2 hectare
  KFZ: Kandahar Food Zone
  MRRD: Ministry of Rural Rehabilitation and Development
  PEF: Poppy Eradication Force
  PTR: Provincial Reconstruction Team
  RAMP: Rebuilding Agricultural Markets Program
  USAID: United States Agency for International Development
  UNODC: United Nations Office on Drugs and Crime
  UNAMA: United Nations Assistance Mission in Afghanistan
  UNIDO: United Nations Industrial Development Organization
  USFOR-A: United States Forces Afghanistan
Introduction:

In the remote and arid landscape of Southern Asia, a flower called Papaver Somniferum naturally grows. After three months, the flower blooms and turns purple. However, as the flower withers and the petals fall away, an egg-shaped seed is exposed. This seed produces one of the most controversial, yet sought-after products in the world; opium.

Before harvesting, farmers spend a great deal of time examining the pod to ensure it is ready for harvesting. Farmers look for the crown of the poppy to be standing out or curved upwards, indicating that it has reached the optimum moment for harvesting.1

Once ripe, the farmer lances the outside of the pod with a set of three to four small blades made of iron or glass. These vertical cuts cause the pod to seep a milky white fluid. When exposed to air, the sap turns darker and thicker until it reaches a gum-like consistency. Farmers need to make sure that they do not cut too deep, causing the opium to overflow and drop to the floor and not too shallow causing it to flow slowly and harden. The farmer will score these pods multiple times before the harvest is over. On average, a single pod will give a farmer 80 milligrams of pure opium.2

The raw opium is then dried in large wooden buckets. Once the water fully evaporates, the opium is wrapped in fabric bags and stored for eventual processing. From here, it goes into our medicine, fuels our addictions, and even funds our worst enemies. The biggest producer of raw opium in the world is Afghanistan.

Since 2001 the US has spent on average $1.5 million each day on counternarcotics efforts in Afghanistan.3 Multiple Administrations, allied nations, experts, and military advisers have

applied strategies to reduce levels of opium cultivation. They have tried buying it from the farmers, replacing it with other crops, and more recently bombing it with highly advanced weaponry. Sadly, none of this has worked. Afghanistan remains the biggest producer of raw opium in the world. So how can this seemingly intractable problem finally be solved?

This essay will examine the history of strategies in the war on opium and attempt to understand how and why they failed. More importantly, it will try to understand the chain of incentives that needs to be broken if we are to persuade farmers to give up poppy farming in a country that has experienced nothing but war and poverty for more than two decades.

Finally, this essay will examine a crop called saffron, often referred to as ‘red gold.’ And argue how this exotic spice may have the potential to provide a sustainable transition away from the stubborn and illicit opium economy. It will argue that saffron may eventually provide a path to prosperity for rural Afghans and a possible end to a decades-long crusade to control and destroy the opium of Afghanistan. Although saffron is by no means a perfect solution, the essay will highlight the potential power of market forces and the very human need for a better life as the keys to making progress where coercion, eradication, and violence have objectively failed.
Chapter 1: Before the Towers Fell

1950-2001
Before Afghanistan became the largest producer of raw opium in the world, only a few tribal farmers living in the mountainous regions of the Himalayas and the Hindu Kush, cultivated limited quantities of opium to be sold in the markets of Iran and India.\textsuperscript{4}

The British observed this small opium market when they established a colonial interest in Afghanistan. But unlike India or China, where the British saw opium as a source of revenue they could exploit, they believed that the cultivation of opium in Afghanistan would only destabilize the region. They worried that controlling the tribes would be difficult if they obtained independence and financial strength from selling opium.

By the 1950s, Afghanistan's neighboring state, Iran, had over a million people addicted to opium, causing a substantial spike in production.\textsuperscript{5} This demand only grew in 1955 when Iran entirely banned the production of opium, leaving Afghan producers with, in effect, no immediate competition in the region. The market for opium continued to grow throughout the 1960s as addiction spread throughout the surrounding areas. Finally, in 1972 Afghan opium farmers were challenged, yet again, to produce more when Turkey, one of the world’s largest suppliers of opium, also banned cultivation.\textsuperscript{6}

While the opium coming out of Afghanistan was dominating the region, most opium that found its way to the lucrative markets of ‘The West’ came from the ‘Golden Triangle’ (Burma, Thailand, and Laos).\textsuperscript{7} But in the mid-1970s, the collapse of the South Vietnamese and Laotian governments led to a significant disruption in that region's production and distribution capacity.

\textsuperscript{5} Haq, 4.
\textsuperscript{7} Haq, "Pak-Afghan Drug Trade in Historical Perspective,” 3.
The ‘Golden Crescent’ of Afghanistan, Iran, and Pakistan now had an opportunity to step up and produce most of the world's opium.8

Moving forward to 1979, the Soviet Union, under the pretext of enforcing the Soviet-Afghan Friendship Treaty, invaded Afghanistan and propped up a Soviet-friendly government. This led to the rise of a ‘freedom fighting’ group known as Mujahedin, who began to lead Jihads against the Soviets in an effort to win back Afghanistan's independence. The US and its allies, engaged at the time in a global ‘Cold War’ with the Soviet Union, provided aid and arms to the Mujahedin, aligning their global interests of containing and undermining the Soviet bloc with the very local interests of the Islamic insurgency.

By this time, Afghanistan had become the world's second-largest opium producer, with the main benefactors being local farmers and the Mujahedin, respectively. But the US and its allies, focused foremost on the defeat of the Soviet Union, turned a ‘blind eye’ towards this illicit economy. As long as the Mujahedin concentrated their insurgent power on the Soviet army, the opium industry was simply seen as the cost of doing business.

While in-depth information is challenging to obtain and is highly debatable, it seems clear that the CIA had a significant role in the cultivation of opium. This was primarily delivered in the form of cash, arms, and protection.9 One specific example that is well documented is that of a Mujahedin leader named Gulbuddin Hekmatyar, who oversaw the radical Hezb-i Islami.

During the Soviet occupation, Hekmatyar enjoyed the protection of the CIA, receiving money and arms with the intent to fight the Soviet army. However he actually used much of the money to invest in opium harvesting plants and deployed the weapons he received to force

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8 Haq, 7.
farmers to produce more opium.\textsuperscript{10} It is important to note that not all members of the Mujahideen participated in the cultivation of opium. Still, a large enough number of them did, justifying the process on the grounds of delivering funds for the war efforts against the Soviets.

The Mujahideen were not the only US partner engaged in the opium business. Pakistan, which was pivotal in ‘Operation Cyclone’, a multibillion-dollar campaign to arm the Afghans against the Soviets, was also highly involved in the opium business.\textsuperscript{11} Specifically, the ISI (Inter-Services Intelligence), who still oversees Pakistan's national security operations today, were primarily responsible for the processing of opium into heroin and morphine. Hekmatyar, for example, exported most of his product to the labs controlled by the ISI.\textsuperscript{12} Nearing the end of the Soviet occupation in 1988, it was estimated that 100 to 200 heroin refineries were in the province of Khyber District, on the border between Afghanistan and Pakistan.\textsuperscript{13}

After processing, the heroin and morphine was packed into trucks belonging to the National Logistics Cells, the same trucks used to transport CIA arms from Karachi.\textsuperscript{14} The Herald of Pakistan acknowledges this in an article from September of 1985 where they say, “They come from Peshawar to Pipri, Jungshahi, Jhimpir where they deliver their cargo, sacks of grain, to the government. Some of these sacks contain packets of heroin. This has been going on now for about three and a half years.”\textsuperscript{15} Tom Carew, a British SAS soldier, and one of the first agents to connect with the Mujahideen is also quoted saying,

I saw more than one thousand kilograms of opium being taken from Camp One near Wazir to Parachinar in Pakistan. Once the opium was inside Pakistan, it was escorted by

\textsuperscript{10} MACDONALD, 3.
\textsuperscript{11} Peter L. Bergen, \textit{Holy War, Inc.: Inside the Secret World of Osama Bin Laden} / (Free Press, 2001), 68.
\textsuperscript{12} MACDONALD, “Heroin Producers and Traffickers,” 3.
\textsuperscript{13} Haq, “Pak-Afghan Drug Trade in Historical Perspective,” 16.
\textsuperscript{14} Haq, 3.
\textsuperscript{15} Kathy Evans, “The Tribal Trail, Newsline (Karachi),” December 24, 1989.
the Pakistan military to a special section of the Mujahideen Camp, which was
undoubtedly under Pakistani military control. My conclusion is that the Mujahideen are
using the opium to fund their operations and obtain cooperation from Pakistan, and that
the Pakistani military--or somebody in it--is taking a significant cut.¹⁶

In short, the United States, Pakistan, and the Afghan fighters, while combating the Soviets, were
intricately caught up in an illicit economy of arms and heroin smuggling fueled by the
burgeoning opium production of Afghanistan.

Following the Soviet Union's humiliation and withdrawal from Afghanistan at the end of
the 80s, the United States eased back it's involvement in the region. By 1989 while the US had
effectively exited Afghanistan, it also left behind a heavily armed insurgent army in the
Mujahedin.

After defeating the Soviet Union, one of the largest superpowers in the world, the
Mujahideen were left to their own devices in shaping the future of Afghanistan. Now, with no
unifying purpose, this heavily armed group splintered along the tribal and ethnic divisions that
were deeply embedded in Afghan culture for centuries. The tribal groups, often headed by
warlords, needed to protect their autonomy. The only way they could do this was by providing to
their soldiers and supporters through means such as growing opium. Opium reached its first peak
in 1994 when these groups produced 3,400 tons of opium, a seventeen-fold increase compared to
fifteen years before the Soviet invasion.¹⁷

¹⁷ Hermann Kreutzmann, “Afghanistan and the Opium World Market: Poppy Production and Trade,”
In 1993-1994, with the Mujahedin in turmoil, a new, more fundamentalist group emerged.\(^\text{18}\) The Taliban movement, supported by Islamic clerics and students of mostly rural Pashtun origin provided an alternative to the constant turmoil of Mujahedin in-fighting.\(^\text{19}\)

The leader of this movement was Mullah Muhammad Umar. Umar was a renowned fighter in the Khalis’s Hezb-i-Islam party during the anti-Soviet war. Umar, just like many of the Taliban fighters, was a Pashtun. Pashtuns are known as ‘ethnic Afghans’; they are a fraction of an Iranian ethnic group native to South Asia.\(^\text{20}\) In Afghanistan, they make up a large part of the population, 42 to 60 percent, to be precise.\(^\text{21}\)

At this time, the Taliban's main opposition was the former Afghanistan government headed by Burhanuddin Rabbani, another Mujahideen fighter in the Soviet-Afghan War. The Rabbani Government had been weakened by civil war (1992-1996). Many Afghans, tired of the years of conflict, blamed Rabbani and his government for failing to end the conflict.

This disappointment in the existing power structures allowed the Taliban to position itself, and its strict Islamic values, as a possible path to stability. On September 27, 1996, this vision became a reality when the Taliban seized control of Kabul, forcing the Burhanuddin Rabbani government to flee.\(^\text{22}\) As a show of force and resolve to uproot and ‘purify’ Afghanistan, the Taliban stormed the UN building in Kabul and took Mohammad Najibullah, the former president of Afghanistan after the withdrawal of the Soviets, and hung him along with his brother and aides.\(^\text{23}\) Once in power, the Taliban enforced strict adherence to Islamic customs.

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\(^{19}\) Katzman and Thomas, 4.


\(^{21}\) “Pashtuns.”


They created the ‘Ministry for the Promotion of Virtue and Suppression of Vice’ and used physical punishment and killing to enforce their extreme interpretation of Islamic law.\textsuperscript{24} An overall ban on all Western practices was implemented. Activities such as watching television, listening to music, consuming alcohol, and dancing, were banned and adherence strictly enforced.

Women experienced a particularly oppressive environment during this time, being banned from schools and working outside the home. In cases where moral offenses were committed, such as adultery, many were executed.\textsuperscript{25}

This ‘extremism’ led to the rejection and isolation of the Taliban by most of the international community. The United States and the United Nations both refused to acknowledge the Taliban as the legitimate government of Afghanistan.\textsuperscript{26}

The Taliban’s growing reputation as a rogue government escalated further when the feared terror group Al Qaeda and its leader Osama Bin Laden relocated to Afghanistan from Sudan in May 1996.\textsuperscript{27} The US repeatedly demanded that the Taliban extradite Bin Laden for trial, but this request was denied multiple times.

Predating the September 11th attacks, the Bush Administration's policy was to continue to apply economic and political pressure on the Taliban, using diplomacy, in large part, to attain their goals of extraditing Osama Bin Laden. At this time, the Taliban exercised control of 75% of

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the country.\textsuperscript{28} While the opposition power, the Northern Alliance, made up of the former
government and their allies, was on the defensive in the remainder of the country.

As a result of their control, the Taliban were able to tax the local producers of opium. It is
estimated that, during the early years, the Taliban received around $30 million per year from
taxation.\textsuperscript{29} By the 1990s this escalated to an estimated $70 to $100 million a year.\textsuperscript{30}

Then, unexpectedly, in 2001, the Taliban banned the production of opium for one year.
There are many theories about why the Taliban decided to ban opium. Some argue that it was
because they wanted to gain international recognition and legitimacy, while others believe it was
for religious purposes.

While the Taliban banned the cultivation of opium in the regions they controlled, the
Northern Alliance continued to produce opium as before. The ban, however, had a genuine
impact, reducing the production of opium from 3,300 tons the previous year to 200 tons, with
supply mainly coming from the Badakhshan province controlled by Ahmad Shah Masud
(Northern alliance).\textsuperscript{31}

After the September 11th attack, the Bush Administration radically altered its policy
towards the Taliban. Since the Taliban were harboring Osma Bin Laden, the Bush administration
would accept no other solution than the military overthrow of the Taliban. Bush famously
asserted that those harboring terrorists are now to be seen as enemies equivalent to terrorists
themselves. The U.N and Congress voted to take military action in Afghanistan, and on October
7th, 2001, Operation ‘Enduring Freedom’ began.\textsuperscript{32}

\textsuperscript{29} Coyne, Blanco, and Burns, “The War on Drugs in Afghanistan,” 3.
\textsuperscript{30} Coyne, Blanco, and Burns, 3.
\textsuperscript{31} Kreutzmann, “Afghanistan and the Opium World Market,” 10.
At first, ‘OEF’ used airstrikes to focus on Taliban and Al Qaeda forces, along with their training and command facilities. At the same time, the US and its allies provided military assistance to the Northern Alliance forces and Pashtun anti-Taliban forces.\(^{33}\) Eventually, about 1,300 Marines were deployed on the ground, forcing the Taliban into retreat and lose the south and east of the country to the US/Northern Alliance coalition.\(^{34}\)

Two major lessons can be drawn from this historical chapter in the fight against opium. Firstly, when the US (or any invasive power) prioritize military victory above all else, this singularity of focus can effectively create a protective shield around the forces driving the opium economy. The United States’ short-sighted focus on the humiliation of the Soviet Army enabled the opium market to develop into the monster it is today because the revenue that it brought to our ‘partners’ in the fight helped pay for their military campaign.

Many scholars would argue that the United States not only enabled the opium economy to grow under its supervision but encouraged it. Both the CIA and Pakistani government accepted short-term gains rather than predicting and planning for the inevitable long-term effects of a ‘narco-economy’. The lesson learned here is that obsessive focus can blind good intent, into bad outcomes. The social, religious, economic, and cultural factors in these regions are complex and multi-faceted and need a more nuanced and multi-dimensional strategy.

The second lesson can be drawn from the aggressive ban on opium by the Taliban. At first glance, this ban seems to be highly effective. In fact, one could argue that it was the most effective strategy used in the history of Afghan counter-narcotics, as it stopped opium production in most of the country. But without alternatives to opium, and with the world's largest producer of opium halting all production, the global price of opium started to increase significantly. With


surging prices, there comes the point where the risk-reward calculus for the Afghan farmers forces them to jump back into the now even more lucrative crop. The lesson here is the obvious but often overlooked power of market forces. If no profitable alternative exists, the growers need to survive. Inevitably, the desire for profit will drive them back to the most lucrative crop available.
Chapter 2: Don’t Get High On Your Own Supply

2001-2004
The Al Qaeda attacks of 2001 on US soil effectively made Afghanistan a rogue state. As a result, in 2001, when the United States decided that it would invade Afghanistan, it did so with the support of most of the western world.

While the Taliban had provided shelter and an effective base for Al Qaeda, the truth was that a bloody civil war was still raging inside the country. The Northern Alliance, composed of members of the overthrown Islamic State of Afghanistan, headed by President Burhanuddin Rabbani, was engaged in brutal combat with the Taliban to retain the North.\(^35\) Up to this point, the Northern Alliance had been fighting a defensive war against the Taliban, as they struggled to maintain control of provinces rather than going on the offensive. This changed with the backing of the United States military and its immense airpower. The Northern alliance quickly turned the tides of battle, largely defeating the Taliban forces.

With new territories under control in the Southern and Eastern areas of Afghanistan, it became imperative to the US government that the Northern Alliance, which eventually transitioned into the new Afghan Interim Government, to prevent the Taliban from regaining ground. The new government was fragile and on it’s own incapable of preventing Taliban resurgence. At the same time, it was unrealistic and dangerous for US troops to act entirely as a buffer military while the new government got its footing.

The solution was to fund and support local warlords capable of maintaining militias in vulnerable rural provinces.\(^36\) The warlords were highly effective at combating the Taliban’s ideology. They often drew upon ethnic homogeneity to recruit soldiers. This resulted in a regional force protecting their ‘home’ rather than soldiers from different parts of Afghanistan.

These warlords were also no strangers to the Northern Alliance. In fact, many of them made up the defensive force before US involvement. For example, Abdul Rashid Dostum, who eventually became the Vice President of Afghanistan, was pivotal in the Siege of Kunduz, which took control of the last remaining Northern Taliban Stronghold. Abdul was an infamous warlord accused of war crimes, including the massacre of 2000 Taliban prisoners.

Abdul was just one of many warlords that helped combat the Taliban during the early years of the US invasion. These warlords did not only gain new territories to control but benefited immensely from the blind eye the US and the new Afghan government gave when it came to the cultivation of opium. The ban of opium by the Taliban the previous year left many farmers in rural areas bankrupt. As a result, farmers were more than willing to pay opium taxes on their crops to their region's warlord. One farmer named Ali, from the small village of Chinar Khalia, said in 2001 that, “Before the ban the government used to collect taxes on my poppies, now the warlords will collect them. We will have no problems from them.”

The US government during this early period was also generally not involved in Afghan counternarcotics efforts. US forces mainly focused on military objectives such as airstrikes and ground operations against the Taliban. Eventually, the United Kingdom, which participated in the invasion of Afghanistan, was put in charge of the eradication of opium. The UK set the goal of reducing poppy cultivation by 70% in five years and eradicating the crop in ten.

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38 Nordland, 1.


41 United States and Office of the Special Inspector General for Afghanistan Reconstruction, 40.
This goal was unrealistic for post-2001 Afghanistan. The Taliban ban the previous year had left many farmers in debt. Loans and farming supplies were eaten up when the Taliban enforced its no cultivation policy. But in the wake of liberation, these same farmers now had a chance to rebuild their lives via poppy production. Simultaneously regions still controlled by the Taliban were forced to turn back to the opium trade to generate money. Many Taliban leaders, who had previously collected taxes on the production of opium, following their ‘defeat,’ pursued a more aggressive approach to prop up their dwindling finances.42

Eventually, the British proposed a plan to stop the sudden increase in production called Operation Down. Operation Down committed $30 million to incentivize farmers to eradicate their crops.43 At first glance, it seemed sensible. But it had the opposite effect. This was because compensation was based on the volume of opium crops they committed to destroying.44 This effectively incentivized farmers to grow as much opium as they possibly could. Farmers went out of their way to grow even more opium to be eventually destroyed at a price of $1,750 per hectare.45 Allegations also claimed that farmers were harvesting the gum before destroying it, doubling their profitability avenues in the process.46

In short, Operation Down, the first serious counter-narcotics program following the Afghan invasion was ultimately a failure. As Ehsan Zia, former Minister of MRRD, said, “The

42 Harris, “Victorious Warlords Set to Open the Opium Floodgates,” 2.
first mistake was compensated eradication. It did not send a message of a serious nature. Buying the crop was the wrong way.\textsuperscript{47}

The US at this time had also contributed, in indirect ways, to the production of opium. As stated before, it had become the priority of the United States to hold on to regions recently liberated from the Taliban. As a result, the US poured resources into developing rural areas and villages. In 2003 USAID launched a $150 million rural development program.\textsuperscript{48} This included the Rebuilding Agricultural Markets Program (RAMP).

RAMP focused on building irrigation systems and roads. In the short term, this helped support local villages but simultaneously bolstered the ability to produce and transport opium. At this point, these programs also did not include conditionality measures or quotas on the reduction of opium, which only worsened things on the ground.

Two major lessons dominate these initial years of counternarcotics efforts. Firstly, the relationship with the Northern Alliance and local warlords exposes that ‘marriages of convenience’ can have unforeseen consequences. By empowering the Northern Alliance and its local warlord counterparts to defeat the Taliban, the coalition got rid of a military foe but accelerated the engine that was driving the narco-economy. The second and most ironic lesson must be drawn from the ill-fated ‘Operation Down’; a government buying drugs is similar to the addict on the street. Both fuel demand.

\textsuperscript{47} United States and Office of the Special Inspector General for Afghanistan Reconstruction, 83.  
\textsuperscript{48} United States and Office of the Special Inspector General for Afghanistan Reconstruction, 43.
Chapter 3: What Strategy?

2004-2006
Even with the Taliban remaining largely dormant in 2004, the cultivation reached an all-time high of 131,000 hectares.\textsuperscript{49} The lead eradication nation, the United Kingdom, had failed to achieve its goals. This forced the US and other external agencies to step in to restructure and refocus the counter-narcotics effort.

The US invested large sums of money into the Afghan Eradication Force (AEF), which would eventually be renamed the Poppy Eradication Force (PEF). These expenditures totaled $250 million by 2005 for eradication efforts alone.\textsuperscript{50} These forces were tasked with using tractors supplied by the US to harvest and burn opium.\textsuperscript{51} The US also funded efforts by DEA to seize drug shipments, destroy heroin labs, confiscate precursor chemicals, and arrest major drug traffickers.\textsuperscript{52}

These efforts did result in some initial success, as the Counter Narcotics Police of Afghanistan (CNPA) and DEA were able to seize 47.9 metric tons of opium.\textsuperscript{53} At the same time, the Afghan National Security Forces (ASNF) destroyed 100 metric tons of opium that year alone.\textsuperscript{54} However, they were not able to curtail the opium market. Though some farmers were losing their harvest, demand was so high that the remaining output outweighed the overall loss. This is reflected in numbers, as cultivation increased with opium being grown on 165,000 hectares in 2006 only to be beaten the following year with 193,000 hectares.\textsuperscript{55}

\textsuperscript{52} Glaze, “OPIUM AND AFGHANISTAN,” 16.
\textsuperscript{53} Glaze, 16.
\textsuperscript{54} Glaze, 16.
\textsuperscript{55} United States and Office of the Special Inspector General for Afghanistan Reconstruction, Counternarcotics, 97.
During this period, another major organization, The Bureau of International Narcotics and Law Enforcement Affairs (INL), began working closely with Afghan officials and ground forces to eradicate opium. The INL itself is an agency within the State Department with the general goal of creating and advising policy to help combat international narcotics and crime. The INL had a significant role during these years as the leading advocates for aerial spraying.

Aerial spraying had been used in other countries to deal with over-planting as well as counternarcotics. The INL first pushed for aerial spraying in 2004 at the cost of $25-$30 million. They argued that the use of controlled chemicals, used in farming around the world, including the US, would be effective at eliminating crops on a wide scale. While simultaneously protecting eradication troops, who were entering regions contested by the Taliban.

This seemed to be accurate, as newly appointed ambassador William Wood said, in an email to a colleague, “a massive aerial-eradication program that would wipe out 80,000 hectares of poppies in Helmand Province, delivering a fatal blow to the root of the narcotics problem.”

But aerial eradication was a double-edged sword. Members within the US government, mainly in the US Military, opposed aerial spraying.

The US military argued that it would be counterproductive. Moreover, it would undermine the standards of operations set by COIN. The military argued that airplanes spraying chemical agents on indiscriminate areas would not be received well by rural/local tribes. This invasive tactic would anger and alienate the same tribes, whose trust the US and Afghan government were trying to win.

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57 United States and Office of the Special Inspector General for Afghanistan Reconstruction, Counternarcotics, 94.
58 United States and Office of the Special Inspector General for Afghanistan Reconstruction, 98.
Similarly, the UK opposed any form of aerial spraying. As the lead nation for Afghan
counternarcotics, they cited environmental impact assessments that showed that licit crops in
Afghanistan, such as wheat, grapes, etc., were often grown near opium. Therefore the
indiscriminate nature of aerial spraying would hurt farmers making a living through legal means.

USAID also distanced itself from crop eradication programs, fearing that aerial spraying
would lead to bad press. One former US embassy member was quoted saying, “USAID mostly
paid lip service to counter-narcotics, rather than being an active participant. They gave the
feeling they did not want to be in the photograph when the picture was taken.”

This fear of public outrage and embarrassment almost came to pass in 2004 when in
Nangarhar province, small grey pellets, synonymous with aerial spraying, were found in a school
courtyard located near a known opium field. The US government denied all involvement or
responsibility but soon after, the acting ambassador, Khalilzad, acknowledged that allegations
were not without footing.

With no real momentum, aerial spraying was put on the sidelines; until 2007, when
opium cultivation again reached an all-time high. For a moment, it did seem like aerial spraying
could be the solution, but ultimately, President Karzai, fearing the political repercussions, refused
to implement the strategy. Aspects of the program, such as ground-based spraying, did see

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59 United States and Office of the Special Inspector General for Afghanistan Reconstruction, 96.
60 United States and Office of the Special Inspector General for Afghanistan Reconstruction, 47.
61 Jonathan S. Landay and ay-McClatchy Newspapers, “U.S. Ignores Angry Reaction to Secret Poppy
62 United States and Office of the Special Inspector General for Afghanistan Reconstruction,
Counternarcotics, 94.
63 Anna Bawden, “US Backs down over Aerial Destruction of Afghanistan’s Poppy Fields,” The Guardian,
some action, as both the US and the UK agreed on its effectiveness. Still, the accessibility to the water needed to spray the crops made this very difficult and ultimately ineffective.64

While aerial spraying never became a major counter narcotics strategy, it helps to demonstrate the complexity of the opium problem in Afghanistan. When multiple agencies and governments all seek different definitions of success at different costs, an inevitable breakdown of the ability to tackle a problem occurs. Some avoid strategies out of fear of appearing as a headline months later, while others vehemently push for policies that create fast-moving results at any cost. This leads to a lack of ability to step back and look at the bigger picture at hand.

The overall eradication efforts conducted by the UK, US, and Afghan forces at this time were a failure. While they were able to eradicate large amounts of opium crop and help some provinces to achieve poppy-free zones, the overall levels of opium production increased annually. As Afghan farmers put it, eradication efforts were like “a thief in the night.” Only seeking to destroy opium for numerical gains rather than provide healthy and long-lasting alternatives.65

While selecting an effective policy is imperative to counter-narcotics, it is far from easy. Things such as logistics, public opinion, political fallout, etc., are all constant factors when determining a strategy. And of course the Taliban never really went away and as 2006 became an increasing security threat once again.

64 United States and Office of the Special Inspector General for Afghanistan Reconstruction, Counternarcotics, 95.
65 United States and Office of the Special Inspector General for Afghanistan Reconstruction, 100.
Chapter 4: Playing Both Sides

2004-2006 EXTENDED
While the Taliban was largely dormant from 2001-2005, it resumed its campaign to destabilize the new Afghan government in 2006. For example, on September 8th, 2006, a Taliban suicide bomber detonated his vehicle next to an American Humvee, killing three American soldiers who had been tasked with helping to build schools and roads for rural Afghan villages.\textsuperscript{66} In the crossfire, “An elderly woman sitting outside her home was hit by shrapnel in the chest and died instantly, witnesses said. A boy selling baseball caps on the street and another boy with a second-hand clothing stall were killed.”\textsuperscript{67}

This type of attack was one of many in 2006. In fact, there were 139 suicide attacks in Afghanistan in that year and 140 in 2007.\textsuperscript{68} General fighting had also increased from 1,558 direct attacks by insurgents in 2005 to 4,542 in 2006; a level of violence not seen since 2001.\textsuperscript{69} The Taliban offensive attacks started in the southern region of Afghanistan, where cultivation of opium was at its highest, posing a massive threat to allied and Afghan forces tasked with eradication.

Arguably, the US and Afghan Government's continued focus on eradication at this time, helped to bolster Taliban control. As the violence created a void of government security in multiple regions, rural Afghans turned to the Taliban for a new sense of security. The Taliban would not only protect them but enable them to produce the opium that sustained their livelihood. Drug traffickers, governors, and other actors who were so deeply entrenched in the narcotics business also saw the Taliban as an opportunity to increase their production. The


\textsuperscript{67} Gall, 3.

\textsuperscript{68} Seth G. Jones, \textit{Counterinsurgency in Afghanistan: RAND Counterinsurgency Study--Volume 4} (Rand Corporation, 2008), 64.

\textsuperscript{69} Glaze, “OPIUM AND AFGHANISTAN,” 17.
increased instability made it harder to enforce a ban on opium while making it easier for drug actors to operate.

The Taliban's fighting not only created a fog of war for others. In fact, during this time, the Taliban became more involved in the production of opium. At first, this took the form of a Ushr or a 10% Islamic agricultural tax. While not all the Ushr went to the Taliban, it was estimated that at least 30-60% of it did. As a result, the Taliban collected around $60-100 million in farm gate taxation from 2005-2008.

This was not the only tax the Taliban collected; Zakat, a wealth-based tax of 2.5 percent, was often imposed on lower-level farmers. The combination of these taxes helped to build a constant revenue stream for the Taliban and a guarantee of protection for the farmers and narcotics operations. But the Taliban was more intimately involved in opium production, beyond simply taxing farmers in their given territories.

The Taliban, controlling large areas of land in Afghanistan, monopolized the control of trading routes. While some provinces transitioned to processing opium within the border of Afghanistan, the bulk of heroin and morphine processing still took place in Pakistan. This was ideal for the Taliban, as they controlled a substantial amount of the southern region that borders Pakistan. These routes provided the Taliban a lucrative business of transportation and protection. The UNODC has reported that the Taliban, during these years, provided a ten-man group to follow and protect trucks on the way to the border. A combination of taxes and security is estimated to have generated 350-650 million USD for the Taliban.

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71 Addiction, Crime and Insurgency, 108.
72 Addiction, Crime and Insurgency, 108.
73 Addiction, Crime and Insurgency, 108.
74 Addiction, Crime and Insurgency, 108.
It is important to note that while the Taliban contributed to the narco economy, the
criminal organizations that operated much of the trade still maintained the power and revenue. A
study by UNAMA revealed that by 2008, approximately 25 networks or key traffickers oversaw
the entire Afghan opiate economy. At the lower levels, a 2007 UNODC report revealed that the
total number of middle and high-level traffickers was about 800-900.

These few narco leaders are hidden from public view due to their ties with Afghan
government officials and the Taliban. But one leader, referred to as the Pablo Escobar of
Afghanistan, is a prime example of the immense influence and scale of the Afghan Narco
economy. Haji Bashir Noorzai was a wealthy and influential tribal leader in his ’40s. During
the Soviet invasion, he joined the Mujahadah effort, as well as played a crucial role as a US
informant. In fact, he is credited with having helped the US locate and identify anti-air
weaponry in the early ’90s. But after the invasion, he helped to support the Taliban, being one
of the early leaders providing weapons, men, and funds. In exchange, he was permitted to grow
opium in the southern regions of Afghanistan, where he had considerable influence over tribal
leaders and governors.

Noorzai was arrested in 2005 after coming to the US to negotiate ‘a high position in the
new government of Afghanistan,’ in exchange for information about the Taliban and their

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76 Addiction, Crime and Insurgency, 108.
77 Addiction, Crime and Insurgency, 108.
79 Benjamin Weiser, “In Drug Trial, Sharply Differing Portraits of Afghan With Ties to the Taliban,” The New
weapons depots. He was charged and convicted of smuggling $50 million worth of heroin into the United States, specifically New York, in the late ’90s.

In the Southern District Court of New York, the prosecution outlined that “(the Noorzai Organization) was responsible for manufacturing and transporting hundreds of kilograms of heroin into Afghanistan and Pakistan. The Noorzai Organization then arranged for the heroin to be exported to the United States and other countries and sold for tens of millions of dollars.”

This document also exposed just how powerful Noorzai was when it referred to an incident where the Taliban seized a shipment of Noorzai’s product: “Shortly thereafter, Taliban authorities returned the seized morphine base to NOORZAT with personal apologies from Mullah Mohammad Omar, the leader of the Taliban.” In other words, Mullah Omar himself, credited with the founding of the Taliban, was forced to send ‘personal apologies’ to Noorzai.

Noorazi is a prime example of the powerful leaders that make up the Afghan narco economy. While stories of corruption within the Afghan government, or statements about how the Taliban is involved in the cultivation of opium get the headlines, it is often these unseen drug ‘King pins’, who monopolize the opium industry and hold a powerful grasp on the country. Operating in a fog of instability, they thrive and exercise tribal influence over both sides of the conflict, even sometimes finding immunity from foreign agents.

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81 Weiser, “In Drug Trial, Sharply Differing Portraits of Afghan With Ties to the Taliban,” 1.
82 UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK - v. - BASHIR NOORZAI, “Haji Bashir Noorzai,” (UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK April 7, 2005).
83 UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK - v. - BASHIR NOORZAI, “Haji Bashir Noorzai,” at 2.
84 UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK - v. - BASHIR NOORZAI, “Haji Bashir Noorzai,” at 4.
Chapter 5: Turning Poppies into Bread

2008-2012
In 2009, in front of a room of West Point students, Obama announced that he would temporarily add 30,000 troops to support the counterinsurgency effort in Afghanistan. He further committed that the US would begin withdrawing these troops starting in 2011.\textsuperscript{85} Obama, who ran on a campaign emphasizing the importance of exiting conflicts like Iraq and Afghanistan, was suddenly forced to reverse his policy as a new Taliban offensive was growing in strength in the southern provinces of Afghanistan.

In the summer of 2009, President Obama signed off on the request for troops by Secretary of Defense Robert Gates.\textsuperscript{86} This escalated US troop numbers in Afghanistan at a total of 63,450 active service members, more than double the year before. In addition, there were a further 31,000 NATO troops in the area, which brought the total troop strength in Afghanistan to 81,000 in 2009.\textsuperscript{87}

This increase in troop numbers, which would later be called ‘the surge,’ had a direct and fast impact in reducing the cultivation of opium. This was especially true in the Helmand Province, an area often referred to as ‘the opium capital of the world.’ By the end of 2009, four major operations, Blue Sword, Zafar, Panther’s Claw, and Kanjarsaw deployed “4,000 British, Danish and Estonian soldiers, and 11,000 US Marines” in the area that would later become ground zero for the next strategic experiment in opium control; Helmand Food Zone (HFZ).\textsuperscript{88}

By the Fall of 2010, ISAF and the ANDSF had largely pushed the Taliban back, and aid started pouring into the region. One of the most extensive programs, the HFZ, sought to replace

opium, a cash crop, with wheat, a food crop.\textsuperscript{89} The implementation of the HFZ was a multistep process starting with an information campaign. Hard copy media, distributed by ANDSF and Allied coalition, and airtime on local TV and Radio, spread information about the HFZ.\textsuperscript{90} Most of the hard effort of converting the opium farmers to wheat group however was led by Governor Mohammad Gulab Mangal, the newly appointed governor of the province.\textsuperscript{91} Mangal would host large meetings called Shuras in the newly secured regions of the Helmand Province.

Shuras are a traditional Islamic meeting where elders discuss local issues and politics.\textsuperscript{92} This provided the perfect opportunity for Governor Mangal to speak to influential members about how the HFZ would operate. His speeches would explain that if they cultivated opium they would risk economic ruin, as eradication efforts would proceed at the end of the season.\textsuperscript{93} Instead, he encouraged them to grow wheat. While food insecurity was on the rise in Afghanistan, and a food crop was a genuinely good thing, Governor Mangal's proposition wasn’t a viable substitute for the income farmers received from opium. As local farmers explained, the message, ‘Grow wheat, feed your family,’ seemed more like a pipeline dream rather than a viable alternative.\textsuperscript{94}

After warning the population of the dangers associated with cultivating opium, the priority became finding a way to effectively distribute and encourage wheat farming. At first, the seeds were bought and supported by the Provincial Reconstruction Team (PRT), a department set

\textsuperscript{89} United States and Office of the Special Inspector General for Afghanistan Reconstruction, \textit{Counternarcotics}, 52.
\textsuperscript{90} Mansfield, “The Helmand Food Zone The Illusion of Success,” 16.
\textsuperscript{91} Mansfield, 16.
\textsuperscript{93} Mansfield, “The Helmand Food Zone The Illusion of Success,” 16.
\textsuperscript{94} Mansfield, 18.
up by the US military and the UK. In the initial years, this was perceived as a successful model, as it was estimated that the HFZ distributed around 50,000 packages of wheat seeds and fertilizer to farmers. New verification systems, set up initially to prevent the over-reporting of eradication, helped verify these assumptions, as the “amount of land dedicated to wheat doubled between 2008 and 2009.” The increases in wheat production followed sharp declines in the cultivation of poppy which “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.”

While finding an effective way to distribute seeds and fertilizer remained integral to the success of HFZ, eradication efforts remained foundational if reductions in opium were to be actualized. Eradication was not a new practice in Afghanistan. The AEF had been destroying crops, mainly with tractors, since the early 2000s. This carried over to the HFZ, but unlike before, those eradicating the crops found little resistance due to high military presence in the area. This presence, combined with state-of-the-art satellite verification methods, helped to stop farmers from bribing eradication teams. Even eliminating the practice of sacrificing one farmer's crop and having the rest of the town support him to satisfy the eradication quotas.

With eradication teams being more effective than ever, the farmers, who previously saw their efforts as threatening, recognized them as a legitimate authority. This mindset pushed

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98 Mansfield, 1.


101 Mansfield, 26.
farmers to stop investing in opium cultivation, as they believed eradication was inevitable rather than something they could avoid once harvesting season began.

In these early years of the HFZ, the initial successes helped Afghan officials and their Western counterparts justify their expenditures and military presence in the area. This changed in 2012 when opium cultivation started to increase once again. By 2017 Helmand had reached 144,018 hectares, far above its cultivation numbers in 2008. What happened to the success of the HFZ between 2008-2011?

David Mansfield, in his two reports, *The Helmand Food Zone: The Illusion of Success* and *TRULY UNPRECEDENTED: How the Helmand Food Zone supported an increase in the province’s capacity to produce opium*, explains how these short terms successes might have been due to a wide variety of external factors. Moreover, he looks at how the HFZ might have contributed to the increase of opium production in the year following troop withdrawals.

Mansfield points out that the prices of opium steadily decreased during this period. Opium prices “fell from US$120/kg to US$70/kg” in 2007-2008; this price decrease continued throughout 2009 with opium reaching less than US$40/kg, a drastic decrease from its $500 per kilogram price tag held in 2001.”

Simultaneously, while wheat cultivation increased during the years of the HFZ, it had already begun to climb without threats of eradication or the supply of seed and fertilizer to farmers (Refer to Figure 4). This was the result of an increase in the price of wheat globally, as well as food insecurity in Afghanistan. In 2007-2008 wheat prices increased from 15 Afs/kg to 35 Afs/kg. This was due to “restrictions the Government of Pakistan placed on the export of its

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104 David Mansfield, “Managing Concurrent and Repeated Risks Explaining the Reductions in Opium Production in Central Helmand Between 2008 and 2011” (Foreign and Commonwealth office of the UK
own wheat production.” Afghanistan, a relatively infant nation, had yet to establish long-distance importing power and still relied on its regional neighbors to provide certain products, including wheat. In short, Pakistan's export reductions had an immediate effect on Afghanistan, causing widespread food insecurity.

Food insecurity was so drastic that farmers found it more effective to cultivate wheat instead of opium. It made more sense to grow wheat, which had low labor costs, sell the excess at the market for inflated prices and cut food costs by consuming their own crop, rather than cultivating opium and selling it at low prices, just to eventually buy wheat at a high price.

This shift might seem unexpected, but it is well documented that poppy profits are used for short-term expenditures in the Afghan household. As a result, farmers are acting in a cost-efficient manner, looking for sources of income to pay for items such as food, medicine, and water. With low prices in opium, it made sense that farmers produced food to cover these short-term costs. In other words, these cultivation trends existed before the HFZ without established threats of eradication and increased troop numbers.

While the HFZ did help to expedite wheat cultivation by providing seeds and fertilizer, they also locked themselves into a never-ending cycle of support. By 2011 the HFZ was no longer supposed to provide farmers with farming inputs, but sadly, the program was forced to

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106 “Afghanistan Opium Survey 2019 Socio-Economic Survey Report: Drivers, Causes and Consequences of Opium Poppy Cultivation” (United Nations Office on Drugs and Crime, 2019), 4, https://www.unodc.org/documents/crop-monitoring/Afghanistan/20210217_report_with_cover_for_web_small.pdf. (This report examines the Socio-Economic reasons farmers grow opium. It helps to explain why farmers who actually grow opium are more well off than those who don't. Therefore it exposes the misconception that opium farmers are farming due to poverty. The truth is that these farmers are actually more protected from economic shocks than most Afghans.)
push back the date year after year to suppress opium cultivation numbers.\textsuperscript{107} The PRT, US military, and the UK, had become too integral in the facilitation of the program to abandon it.

Troop levels during this period also had a massive effect on the success of the HFZ. The surge, which had been articulated by President Obama, as a short-term strategy to address the immediate Taliban resurgence, was never considered by those in charge, as a driving force for low poppy cultivation. Yet farmers, due to troop presence, in the area “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 fertilizer to a crop that had a high chance of being destroyed later in the season.”\textsuperscript{108} While the fear of eradication, acting as a deterrent to cultivation, is a good thing, it is neither sustainable nor a long-term strategy, and the eventual troop withdrawal, followed by a corresponding rise in poppy production, confirms this.

During this time, eradication had also taken an aggressive approach. The Afghan police made it its policy to arrest and imprison those found violating the opium ban. Governor Mangal had farmers, “arrested and imprisoned until their families guaranteed the crop had been destroyed and paid a fine.”\textsuperscript{109} This resulted in overcrowding in prisons and accusations of human rights violations. Arrests also had an indelible effect on family members, as Mansfield explains:

\begin{quote}
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 later when temperatures were colder, there was less irrigation or when others on farm activities would require effort. Imprisonment could also leave the wife and
\end{quote}

\begin{footnotes}
\item[108] Mansfield, 26.
\item[109] Mansfield, 27.
\end{footnotes}
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.\footnote{Mansfield, 27.}

While it is clear that the Afghan Government and its western counterparts overestimated the HFZ impact in the region, it is also crucial to consider if the HFZ influenced future poppy cultivation. Mansfield, in his reports, argues that the HFZ pushed low-level farmers into the desert areas surrounding the urban towns/cities of the Helmand Province. These deserts, located north of the Boghra canal, were not considered when looking at the poppy levels in Helmand during this time.\footnote{Mansfield, 47.} In other words, Mansfield argues that HFZ simply exiled the rural poor to cultivate elsewhere, forcing those who needed it the most “without land, water, credit and shelter.”\footnote{Mansfield, 1.} This can be accredited to how the HFZ operated, specifically how seed distribution functioned.

Seeds were distributed to the pre-existing power structure in the Helmand province. Those with influence received seed while the poorer, less influential population did not.\footnote{David, "Truly Unprecedented," 12.} Thus, the risk of eradication was still not high enough for these farmers who needed to earn a living. Moreover, due to the arid conditions of the deserts, those who cultivated in that area had to pay significant upfront costs. The low-level farmers, who worked under a sharecropping model, now had to produce more opium to make up for the cost. Before “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.”\footnote{Mansfield, “The Helmand Food Zone The Illusion of Success,” 49.} This only helped to push the sizable poor population away from the government and towards the Taliban, who
promised to protect these new farms in exchange for taxes, farms that would otherwise be destroyed without consideration for the farmer’s livelihood.

The lack of seed distribution to lower-level farmers also unmasksthe level of corruption that plagued the HFZ program. During the HFZ, people within the governor's administration were accused of using seed distribution to gain power, including the governor's own advisor.\textsuperscript{115} Due to the nature of Shura meetings, the HFZ relied heavily on the cooperation of elders in the community. These same people were accused of distributing seeds on a favor basis, such as only giving names of their supporters to the HFZ program. Allegations also claimed that seeds being given to farmers were not the same seeds bought by the HFZ program.\textsuperscript{116} And those seeds, the allegations outlined, were sold in propped-up markets in the local bazaars, along with fertilizers and other farming equipment.\textsuperscript{117}

Lastly, Mansfield also explains that the HFZ program was one of many programs during this period.

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. These programs help to raise wages, build schools and improve the overall quality of life of Afghan citizens.\textsuperscript{118}

\textsuperscript{116} Mansfield, “The Helmand Food Zone The Illusion of Success,” 49.  
\textsuperscript{117} Mansfield, 49.  
\textsuperscript{118} Mansfield, 32.
While HFZ did raise wheat cultivation levels in Helmand, other programs during this period helped to cause meaningful change. Yet, the HFZ seemed to have received most, if not all, the credit.

The 'success’ of the HFZ only helped launch similar programs throughout Afghanistan, such as the Kandahar Food Zone (KFZ), but Mansfield argues that these programs are only temporary solutions. Without the proper market environment that supports innovation, investment, marketing, etc., opium will always rebound. Low-level food crops will never replace cash crops such as opium without the right conditions and support. It is not enough to provide farmers with seeds and security, and if one chooses to do so, one must understand that it will be an endless cycle, one that will only accelerate distrust and hatred, as farmers struggle to sustain a livelihood under a threat of constant eradication.

5.1: Violence & Corruption, The Only Constant in the Opium Saga

As the United States closed in on a decade of eradication effort in Afghanistan, the bulk of responsibility for poppy eradication had shifted to the regional governors. The Governor Eradication program (GLE) was a system in which governors, with the help of the local and national police, enforced the national ban on opium by destroying fields.119 After proving that the fields were destroyed, any cost incurred would be reimbursed by the Ministry of Counter Narcotics (MCM).120

This verification fell on the UNODC, who struggled at first to verify if fields were destroyed due to the presence of the Taliban. Despite these limitations, the GLE program was

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120 Greenfield et al., 168.
relatively successful, as aerial verification tools had become quite sophisticated. However, the GLE program was not without its complications. Primary amongst the challenges was armed resistance to the program by both the farmers and the Taliban, who regularly attack the GLE operators.

In the 2012 UNODC annual Afghanistan Opium Survey, this relation is reflected in the numbers. While “Total eradication of opium poppy increased by 154% in 2012 due to an increase in Governor-led eradication (GLE) in all regions, which accounted for 9,672 hectares.” The number of attacks increased drastically, “GLE teams were attacked 117 times in 2012, while there were only 48 attacks on GLE teams in 2011.” These attacks were not simply farmers shooting at tractors hoping that they would leave but armed conflicts aimed at killing members of the GLE program.

The number of fatalities in 2012 was significantly higher than in 2011, with a total of 102 people killed and 127 injured during the poppy eradication campaign (29 National Police, 12 National Army, 60 farmers and 1 verifier killed; 89 National Police, 8 National Army and 30 farmers injured). In 2011, 20 people were killed (13 Police and 7 farmers) and 45 were injured (40 Police and 5 farmers/tractor driver).

The constant attacks created substantial costs for the GLE program as tractors were damaged from incoming fire. Damage was not only incurred by shootings at the tractors, tractor

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122 Nations, 34.
123 Nations, 34.
operators, out of fear, also drove the tractors at high speeds to destroy the crop before farmers could respond.\textsuperscript{124} As a result, they damaged the tractors that were of limited supply.

Corruption, like everything in Afghanistan, also plagued the GLE program. In a report from RAND called, \textit{Reducing the Cultivation of Opium Poppies in Southern Afghanistan}, they explain that “there has been widespread acknowledgement that the selection of fields to be eradicated can be swayed by bribes or influence. According to one interviewee, ‘Eradication takes place only in some areas for the TV. In other areas they don’t do it; they take money from the villages.’”\textsuperscript{125} This corruption also translated to political favors, as members of the government used the GLE program to destroy the fields of political opponents.\textsuperscript{126}

RAND, in their report, also showed that the GLE can have the opposite effect than intended, “for farmers with very small or small landholdings, the effects of an increased risk of eradication are indeterminate. These risk-averse farmers might choose to increase the amount of land planted to opium poppy out of an expectation that in some years they are likely to lose the entire crop.”\textsuperscript{127} In other words, low-level farmers would cultivate more in preparation for a loss that would come at the end of the season. Opium, at such a high price, will remain profitable, even when balanced against its losses caused by eradication. Overall, despite GLE eradication, opium levels continue to increase, making “the total area under opium poppy cultivation in Afghanistan was estimated at 154,000 by 2012.”\textsuperscript{128}

\textsuperscript{124} Greenfield et al., “Programs with Crop-Eradication Features,” 171.
\textsuperscript{125} Greenfield et al., 170.
\textsuperscript{126} Greenfield et al., 171.
\textsuperscript{127} Greenfield et al., 172.
5.2 Nangarhar, Heaven, and Hell

A further challenge to poppy reduction was that the opium industry often relocated to other provinces in Afghanistan where eradication efforts were less intense. Nangarhar, located close to the Pakistan border, had a history with poppy, more specifically the transporting business. But when the level of Taliban presence decreased from 2006-2009, Nangarhar was able to essentially transition out of poppy cultivation, and by 2008 it was “declared poppy free by the United Nations Office on Drugs and Crime (UNODC).” Yet by the 2010-11 growing season, following the three-year provincial ban, and at the peak of the HFZ, opium cultivation had reached “2,700 ha, a rise of 276 percent compared to the previous year.”

This increase was primarily due to the government's failure to provide its citizens with alternative livelihoods. Although in some areas of Nangarhar, particularly around the Kabul River, there was a stable farming culture for fruits and vegetables, in the mountainous regions of Nangarhar, where it is difficult for the government to reach, citizens felt abandoned. In these areas’ farmers were comfortable cultivating opium again, as they deemed that the government was no longer concerned or watching. A farmer from the Asadkhel, upper Achin District explained the way he felt about the situation when he said:

Last year, a school and a bridge were built by an NGO, but these do not solve my problems--I need income. I worked for 15 days on the bridge; we all have some benefit from that. But I don’t have any agricultural produce to sell. I have no source of income.

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130 Mansfield, 3.
131 Mansfield, 3.
for the repayment of my loan. If the lender pushes me to repay I will mortgage my land; I
don’t have any other way. --Farmer, Asadkhel, upper Achin District\textsuperscript{132}

This testimony provides another prime example of how farmers, who voluntarily or forcibly
gave up opium cultivation, end up scraping by, unable to save up money for medical situations or
family events.

This struggle to maintain a livelihood is also reflected in the number of young men from
Nangarhar enrolling in Afghan National Security Forces for extra income. It was not uncommon
to find families from this area with multiple members in the ANSF.\textsuperscript{133} Some families even had
the younger children fake their age just to join.\textsuperscript{134} This reality diluted the ANSF force and created
a feeling of distrust, as Afghans felt forced into an army fighting for a cause disassociated with
their daily lives.

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The history of counternarcotics efforts between 2008-2011 helps to provide examples,
and more importantly, the results of extensive strategic efforts undertaken by the US, UK, and
Afghan coalition. As discussed above, the main program from this era was the HFZ. While in its
early years it saw significant success, as opium cultivation numbers dropped and the adoption of
wheat farming increased, opium levels did begin to rise again. By 2012, as troops had left the
province, opium was once again hitting record highs. Furthermore, areas in the surrounding
desert had also been developed to create a haven from eradication, which resulted in more
significant levels of opium being grown elsewhere.

\textsuperscript{132} Mansfield, 10.
\textsuperscript{133} Mansfield, 10.
\textsuperscript{134} Mansfield, 10.
The final irony of the HFZ, and more broadly this era of counternarcotics, was the fact that increased interest in growing wheat was a product of wheat prices having increased, while simultaneously opium prices plummeted to record lows. So rather than costly government intervention, it was arguably actually the effects of market forces that accelerated this brief transition. These same market forces need to be considered in any future counternarcotics efforts, as the law of supply and demand will always outweigh the efforts of governments, military, and NGO’s.
Chapter 6: Bomb The Bastards

2016-PRESENT
Since 2001, the United States and its allies have spent over 9 billion dollars fighting the cultivation of Afghan opium. Yet, by 2016, according to the United Nations annual report, opium production in Afghanistan had quadrupled. This put the total value of the opium market moving through Afghanistan at around $60 billion USD. This statistic shocked the world, embarrassing the nations tasked with the objective of eradicating the drug and ending the war in Afghanistan.

As a result, the incoming Trump administration decided on a new strategy, a simple and clear strategy, aimed at targeting and destroying drug labs. General Nicholson, a four-star US general, who had previously commanded NATO troops in the country, was put in charge of this mission. In his first press conference about Operation Iron Tempest, he explained that the Taliban was generating around $200 million each year from the production of opium. This, he elaborated, resulted from taxes, donations, and gifts from local drug kingpins, and an overall tax on the movement and protection of products. Some experts on Taliban funding agreed with General Nicholson’s claim, arguing that the Taliban generates 60% of its income from the opium trade.

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139 Mansfield, 8.
The first major strike by USFOR-A took place on November 19th, 2017, in the district center of Mosaqala, located in the Helman province, an area controlled by the Taliban.\textsuperscript{142} A total of nine buildings were bombed; six of them were spaces rented by opium traders.\textsuperscript{143} While the other three were not labs at all. One of them was a barracks used to house Taliban fighters, and the last two belonged to one man by the name of Hajji Habibullah.\textsuperscript{144}

Hajji was an opium trader just like many in the Mosaqala area. He sold opium in the bazaar out of his small shop, which was struck that night along with Hajji’s residence itself.\textsuperscript{145} Hajji, his wife, and children, including a seven-year-old daughter, four sons between the age of three and eight, his son-in-law, and a one-year-old granddaughter, were all killed in the strike.\textsuperscript{146}

Hajji’s death signified a significant shift in U.S policy towards those involved in the drug trade. Previously those who cultivated drugs, such as low-level farmers and traders, were simply considered civilians. While they were committing crimes in Afghanistan, it was not the responsibility, nor within the jurisdiction, of the United States to prosecute, and more specifically, kill these civilians. Yet, General Nicholson argued that individuals involved in the drug trade, no matter how big or small, ultimately supported a greater funding effort by the Taliban and therefore were legitimate targets. In other words, the farmers and traders were now synonymous with the armed combatants that made up the Taliban's ranks.


\textsuperscript{143} Mansfield, “Denying Revenue or Wasting Money? Assessing the Impact of the Air Campaign Against ‘Drugs Labs’ in Afghanistan,” 33.


\textsuperscript{145} Mansfield, “Denying Revenue or Wasting Money? Assessing the Impact of the Air Campaign Against ‘Drugs Labs’ in Afghanistan,” 33.

\textsuperscript{146} Barker, “Taliban Commander Orders Closure of Opium Labs in Towns and Cities,” 2.
This change of classification broke the standards of international engagement and law. Under International Humanitarian laws “military objectives are limited to ‘objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization in the circumstances ruling at the time, offers a definite military advantage.’”\(^1\) This does not include financial or economic targets; rather it is limited to those providing military forces a direct or immediate advantage in combat. Therefore, anyone killed in these strikes that are not members of the Taliban, and instead employed by the drug trade, should be protected from direct military strikes. Citizens like Hajji.

The airstrikes were a part of the larger South Asia strategy. In 2018, under this strategy, hundreds of missions were executed. They targeted Taliban strongholds, and subsequently, drug facilitates. By the end of 2018, these strikes were estimated by the USFOR-A to have created a $30 million loss for the Taliban and over $160 million loss for drug organizations. The estimates were based on the 200 drug labs that had been destroyed.\(^2\)

While these numbers may seem impressive, some were not convinced about the effectiveness of the airstrikes’ on the Taliban's revenue. David Mansfield, a long-time expert on the cultivation of opium and government policy towards it, wrote a report called *Denying Revenue or Wasting Money? Assessing the Impact of the Air Campaign Against ‘Drugs Labs’ in Afghanistan*, in which he takes an in-depth look at airstrikes conducted by the military, their effect on revenue, and more importantly, how they affected the lives of Afghan citizens.


Mansfield and his team used a combination of videos published by USFOR-A, high-resolution imagery, and interviews with compound owners, operators, and farmers. These images and interviews came from three major areas targeted during the campaign: Musa Qala, Gandard Raiz and Bakwa.

Mansfield starts by asserting that “of the 21 buildings covered by the fieldwork, 17 were identified as having been drug labs. Four were not. Three of the buildings not identified as drugs labs were destroyed during the first night of the bombing campaign on 19 November 2017.” While 17 buildings were drug labs, it is important to understand their scale and activity.

Interviews revealed that these labs were only in operation around 50% of the time, as they primarily functioned on a demand basis; only when orders were placed did lab operators go to work. Even with that being said, out of the 17 drug labs that were targeted in these areas, Mansfield concludes, “that most of the targets hit during the air campaign were in fact inactive labs; they may have been operational at some point, perhaps even a few days before – or, in the case of the two labs in Gandard Raiz, after – but they were not processing drugs at the time at which they were struck.” In fact, the total reported a loss of drugs came to “(9 kilograms) of opium had been destroyed (US$797), along with acetic anhydride (US$179) and a carton of ‘tablets’ (US$1,260) used in the production of methamphetamine. The combined value of these items was US$2,235.”

It is important to note that drugs were not the only thing being targeted. The processing equipment in these buildings was indeed a part of the total operation cost, and therefore should be considered. The question then becomes what the real cost to those processing drugs was.

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149 Mansfield, 32.
150 Mansfield, 36.
151 Mansfield, 38.
152 Mansfield, 39.
Mansfield outlines that the compound could cost anywhere from $2,500-$5,700 depending on size and location. The physical equipment loss could cost up to $8,100 and include items like barrels at the cost of $26 per barrel. While presses, used to process the opium, ranged from $1,200-$2,115.

Totaling all these costs leaves you nowhere close to the $12.6 million the USFOR-A estimated. In fact, if you take the compound with the most barrels and equipment, the max cost to the producer would have been somewhere around $615,000, not the most impressive ROI from a US military perspective.

But estimating the cost an individual involved in the drug trade would lose is not the same as calculating the losses the Taliban would experience. Moreover, It is difficult to estimate the potential revenue the Taliban lost because many experts disagree on how much impact the drug market has on Taliban finances.

At the center of this debate is the tax mentioned earlier, the ‘Ushr.’ The Taliban is assumed to collect on all cultivation/production of drugs in regions they control. Some argue that the Taliban collect upwards of a 20% tax, while others argue it is no more than 3% at most. USFOR-A is one of the departments that claim the Taliban tax at a “20% of total product value is based on the multiple ways the Taliban receive revenue from narcotics, including profits from direct ownership, fees for transportation and protection, licensing fees to drug traffickers, and taxation at harvest.” While others who disagree say that there is no possible way that the Taliban can exercise such a global tax in regions they do not totally control. The Afghanistan

153 Mansfield, 40.
154 Mansfield, 40.
155 Mansfield, 40.
156 Mansfield, 43.
158 “Special Inspector General for SIGAR Afghanistan Reconstruction, ADDENDUM TO SIGAR’S APRIL 2018 QUARTERLY REPORT TO THE UNITED STATES CONGRESS,” 2.
Research and Evaluation Unit put it best when they said it would be impressive if the “Taliban could run a taxation system in rural Afghanistan that the Inland Revenue or Internal Revenue System would be proud of.” ¹⁵⁹

This argument seems to make sense. The Taliban was originally formed by individual warlords attached to different ethnic and geographical backgrounds, so a centralized tax system would be impossible to implement. The, *SIGAR ADDENDUM TO SIGAR’S APRIL 2018 QUARTERLY REPORT TO THE UNITED STATES CONGRESS*, also explains that this argument is consistent with the studies they conducted, which found that “Taliban assign different fee and taxation rates in various regions as they negotiate the amount with the local populace.” ¹⁶⁰

So why is this tax so highly debated, and why are there estimates by people like Abdul Rahman Rahmani, deputy spokesperson for Afghanistan's Ministry of Defense, who said “the strikes would deny the insurgency of $1 million a day in lost revenue,” ¹⁶¹ while people like Mansfield say otherwise?

When aerial spraying dominated the policy discussion, those who advocated for it stressed the importance of targeting the drug business as a way of simultaneously hurting the Taliban. They insisted that drugs and the Taliban were intrinsically tied together. This rhetoric was mirrored by actors such as General Nicholson and the USFOR-A. It is not a coincidence that these strikes happened right after the 2016 harvest, the largest harvest of opium up to that point, and the 2017 harvest when they announced that the production had increased four-fold in the 15 years of US involvement. ¹⁶²

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¹⁶⁰ “Special Inspector General for SIGAR Afghanistan Reconstruction, ADDENDUM TO SIGAR’S APRIL 2018 QUARTERLY REPORT TO THE UNITED STATES CONGRESS,” 2.
¹⁶² “Afghanistan Opium Survey 2017 - Challenges to Sustainable Development, Peace and Security (May 2018) - Afghanistan” (United Nations Office on Drugs and Crime, May 2018), 5,
The assumptions at the heart of Iron Tempest have been challenged by commentators such as Mansfield who argues, the military grossly overestimates the impact of bombing on the Afghan drug trade. As one farmer north of the Boghra in Dasht-e Loy Manda explained, “there are too many factories everywhere. When one factory is bombed there are another 1,000 present. This campaign will not have any benefit for the government.”

Towards the end of 2019, the massive US anti-drug operation, Iron Tempest, was shut down abruptly and with significant objective failures. With the original goal of reducing the number of heroin laboratories, which supposedly filled Taliban coffers with over $200 million a year, Iron Tempest had rained down 200 plus air strikes during its time.

But after a year of operation, Iron Tempest was found to have a negligible effect on combating the opium trade. The sites being struck by bombers were often dormant, meaning the harvest had just been completed, or the season had not even begun. On top of that, the Taliban and farmers grew accustomed to moving their operation at a moment's notice, avoiding the bombings entirely.

Unfortunately, while the operation was officially over, it was discovered that the military had still been conducting bombings of ‘drug labs’ under the South Asia strategy. On May 5th, 2019, USFOR-A conducted three airstrikes on an alleged drug facility located in Bakwa.

165 “Special Inspector General for SIGAR Afghanistan Reconstruction, ADDENDUM TO SIGAR’S APRIL 2018 QUARTERLY REPORT TO THE UNITED STATES CONGRESS,” 1.
167 Rowlett, “How the US Military’s Opium War in Afghanistan Was Lost - BBC News.”
168 “AFGHANISTAN PROTECTION OF CIVILIANS IN ARMED CONFLICT SPECIAL REPORT: AIRSTRIKES ON ALLEGED DRUG-PROCESSING FACILITIES FARAH,” 1.
media in the area, the Taliban, and the district governor of Bakwa stated that civilians had been killed due to the airstrikes.\textsuperscript{169} UNAMA was set to make an independent report on the situation and “as of 15 September 2019, UNAMA had verified 39 civilian casualties (30 deaths, five injured and four undetermined including 14 children and one woman, due to the 5 May airstrikes.”\textsuperscript{170}

At the time of this report, UNAMA was also in the process of verifying “at least a further 37 more civilian casualties (30 deaths and seven injured), including 30 children and two women. It is working to further verify these civilian casualties.”\textsuperscript{171} Those who died in these airstrikes were not Taliban combatants, nor were they significant narco operators. Indeed the report says, most of these casualties were women and children.\textsuperscript{172} While there is no specific verification of this, it can only be assumed that these children were either playing near a sight that was struck or that USFOR-A had targeted homes when children were inside. Sadly, these civilian casualties have become more common.

While the Taliban are responsible for the majority of the civilian casualties, US allies and Afghan forces create a substantial portion of these deaths. The U.N. reported in 2019 that 784 civilians had been killed, and 377 had been injured; these are record numbers.\textsuperscript{173} A large part of this is due to the United States’ hands-off approach under the Trump Administration.

\textsuperscript{169} “AFGHANISTAN PROTECTION OF CIVILIANS IN ARMED CONFLICT SPECIAL REPORT: AIRSTRIKES ON ALLEGED DRUG-PROCESSING FACILITIES FARAH,” 9.
\textsuperscript{170} “AFGHANISTAN PROTECTION OF CIVILIANS IN ARMED CONFLICT SPECIAL REPORT: AIRSTRIKES ON ALLEGED DRUG-PROCESSING FACILITIES FARAH,” 1.
\textsuperscript{171} “AFGHANISTAN PROTECTION OF CIVILIANS IN ARMED CONFLICT SPECIAL REPORT: AIRSTRIKES ON ALLEGED DRUG-PROCESSING FACILITIES FARAH,” 11.
\textsuperscript{172} “AFGHANISTAN PROTECTION OF CIVILIANS IN ARMED CONFLICT SPECIAL REPORT: AIRSTRIKES ON ALLEGED DRUG-PROCESSING FACILITIES FARAH,” 11.
With fewer boots on the ground, the U. chose to rely on airstrikes to carry out it’s missions which has created more civilian casualties. The US actually "dropped more bombs on Afghanistan in 2019 than any other year since the Pentagon began keeping a tally in 2006, reflecting an apparent effort to force concessions from the Taliban at the negotiating table."\(^{174}\) This number has been estimated to be around 7,423, an eightfold increase from 2015.\(^{175}\)

In conclusion, this chapter of history, dominated by the story of ‘Operation Iron Tempest,’ unfortunately, displays one of the least effective and most harmful strategies undertaken by the United States. It not only failed to cut off Taliban funding but alienated a significant portion of the civilian population.

History has shown in wars, such as the American humiliation in Vietnam in the 70s, that you cannot win your way into the hearts of civilians by bombing them. If the United States genuinely seeks to end the narco-economy in Afghanistan, it is critical to avoid civilian casualties at all costs. Killing innocent civilians, and even those trying to operate, what they would describe as their livelihood, is unacceptable if the US is to win over the trust of the Afghan people.


\(^{175}\) Borger, 1.
Chapter 7: Turning Purple Gold to Red

PRESENT
So far, this essay has taken an in-depth look at past strategies designed to tackle opium cultivation in Afghanistan. The paper will now pivot to examine a crop that has lately received attention as a possible alternative to opium and a potential solution to this drawn out war.

Saffron is a high margin crop, with a growing following in the West for its culinary and healthful properties. Saffron has been touted in the media as a logical way to encourage farmers to transition out of poppy because of its high margins. But there is also significant and understandable skepticism that saffron will simply be another failed crop replacement program.

Historical documents dating back 2000 years ago mention the cultivation of Saffron, mainly in the region of Herat. This crop has recently been revived in the same province due to Afghan refugees who returned from Iran following the Taliban's rise to power. Iran being the world's largest producer of saffron, helped teach cultivation techniques to many Afghan farmers, who created a small but thriving saffron culture in the Herat Province.

Saffron agriculture starts by tilling and preparing plots of land for planting. Following preparation, farmers introduce nutrients to the soil using “between 20 and 100 tons of fertilizer per hectare to prime the fields.” The planting of saffron begins in the first half of June and ends in the late summer months. Fields are planted with corms, or bulbs, on an average of 50 per square meter. One of the remarkable properties of saffron is that it requires very little water, thriving on the natural irrigation from snow or rain that sustain it through the dry months.


\[177\] Ghafouri and Yüksel, 3.


By October/November the plant is ready to harvest. Saffron is a highly labor-intensive crop, not in terms of individual physical labor, but in sheer numbers, as there is a limited time of 48 hours to process the plant after the flower blooms. Work begins in the early morning, or as soon as the flower blossoms.\textsuperscript{181} On average, “50,000–170,000 flowers are required to produce a single kilogram of saffron.”\textsuperscript{182} The flowers are then processed almost exclusively by female workers. They start by separating the stigma from the flower. The stigmas are then sorted and graded “based on color, odor, length, and shape.”\textsuperscript{183} Lastly, the Saffron is dried using electric dryers and packaged for shipment.

A significant issue often raised about saffron agriculture is that it can be a costly process. The saffron plant needs to be cultivated for three years before it generates a cost-effective yield. During these three years, farmers add and split bulbs to grow more.

In a report by the AREU called \textit{Saffron: The social relations of production}, farmers reported that the initial start-up cost, “If we count each item like the bulbs that we need 800 kg for 1 jirib of land and the price of each kg of bulb is Afs 400 [giving a total cost of Afs 320,000 for the bulbs], the cost of planting of bulbs and land preparation will be at least Afs 500,000 Afs [equivalent to $7,300].”\textsuperscript{184} This is quite a lot for the average farmer. But once through the initial start-up costs, astonishingly, when compared to opium, saffron is a considerably more profitable endeavor.

One farmer reported:

\textsuperscript{183} “AFGHANISTAN’S NATIONAL EXPORT STRATEGY 2018-2022 SAFFRON SECTOR,” 10.
I was cultivating opium my yearly income was Afs 10,000–15,000 from 1 jirib of land while my income from 0.5 jirib of saffron is more than that. In this 0.5 jirib of land the first year I had Afs 6,000, the second year Afs 15,000, the third year Afs 44,000 and the fourth year Afs 67,000, and this will add up to more than Afs 170,000 if I count both the sale of bulbs and saffron.185

Clearly, by the third year, the cost of the initial investments was outweighed by the reward of transitioning to saffron. Costs for sustaining the farm after the first year are also low, as the first year requires a lot of attention. But after this point, even costs like water requirements are low at an average annual cost of “US$90 per jirib (US$450 per hectare).”186

Other than bulb cost, and cost of time, labor cost can be high when producing saffron. This is a double-edged sword from the perspective of someone trying to promote alternative livelihoods in the region. On the one hand, it might disincentivize people from turning to saffron, while on the other, it provides significant amounts of employment. But thankfully, labor scales with saffron. In the first year, around fifteen people per jirib are needed to care for and harvest the crop.187 By the third year, when profits would be at their highest, labor costs would be at 30-50 people per jirib.188 In terms of wages, this corresponds to around “AFN 25 (US$0.38) per kg. or US$4 to US$6 per day”, based on the average 10kg of saffron a worker picks per day.189

This labor cost raises some eyebrows, as labor is not always accessible in Afghanistan. Often farm hands are busy with other crops and choose to turn to the crop that will pay them the most or give the highest yield, such as opium. However, one benefit to the saffron cultivators is

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185 Minoia and Pain, 15.
188 Minoia and Pain, 25.
189 Minoia and Pain, 25.
that saffron is “harvested in autumn, after the harvesting period of other local crops. The result is high availability of seasonal workers who are able to boost their annual income during a period where they may otherwise be idle.”

A related and controversial aspect of saffron labor, which also drives down costs, is that most workers are women. This, again, is a double-edged sword. The report by the AREU takes an in-depth look at this. It explains that while women are receiving employment, they make less money than their male counterparts. Also, the women who want to start their own businesses find it hard to penetrate the market and receive loans. As one woman reported, “Women are not doing deals with people – only men talk about rates and undertaking business activities while women only do work inside their house. She did not get paid for her work but once a year her father took her to the city so she could buy clothes and cosmetics.” But while this woman found it difficult to make a living, others were luckier and have become effective saffron entrepreneurs. One interviewee explained that:

She started cultivation on 1 jirib of land, in the second year expanded to a second jirib and in the third brought another 2 jiribs under cultivation. After three years, she had earned enough to pay the mortgage on the house and recover it. Now she is cultivating nearly 10 jiribs of land under saffron. She commented that the price now was about AFS 120,000–130,000 per kg ($USD 1,800).

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192 Minoia and Pain, 24.
193 Minoia and Pain, 23–24.
Here we have a prime example of a woman who was able to break the traditional boundaries of Islamic culture and grow a sizable business on her own land. So while there are two different realities for women working in saffron, the newness and lack of traditional structure over the industry does afford women the opportunity to break through and create businesses of their own. Moreover, while inequality exists in this industry, its friction acts as a driving force for change. It would not be unreasonable to argue that saffron could be the industry needed to break the traditional roles women play in Afghan society.

Currently, there are about “24 companies and 26 saffron manufacturers association in Afghanistan.”194 These associations were initially set up to deal with farming inputs, licenses, and loans. They eventually evolved into marketplaces where saffron farmers can consign their crops to eventually be sold across the world.195 But while these associations are effective in their ability to prop up the saffron market, where the government fails to do so, they limit the value chain, and they control market information.196 In other words, they set a price for farmers who do not know any better.

But with all this considered, from the role of women, to the initial cost, and the complex dynamics of tribalism and price manipulation, saffron does ultimately provide an alternative to opium. As one of the most expensive spices in the world, it has the potential to succeed where other food crops failed, such as wheat. This is because it offers the genuine prospect of greater financial return and, therefore, the hope of a better life.

Further, the doubt cast on the ability for saffron to work is based on the idea that the initial cost is simply too high. This assumption is based on a larger belief that the reason Afghans

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195 Ghafory and Yüksel, 3.
cultivate opium in the first place is to leave poverty. This would also assume that the most impoverished Afghans are the ones producing most of the opium. This is factually incorrect.

In 2006 the UN released a study on the reasons for cultivation. It challenged the idea that poverty is the leading reason for poppy production. It is important to note that while this information is old, it is hard to calculate an Afghan’s average economic status. Secondly, these trends were presented since 2002, and thirdly the images, found at the end of the essay, show updated maps of Afghan poverty (2014). In other words, the economic status can be assumed to be the same if not even more pronounced.

This study compared the average income of a poppy farmer to that of other farmers. It found on average that “farmers who reported growing opium poppy had an average annual cash-income of US $3933, which was significantly higher than that reported by other farmers (US$2279) despite the fact that the landholdings of the two groups were largely the same.”

While this might seem straightforward, the research also looks at geographical data to see where poppy cultivation was happening and the average net worth of a farmer.

Ultimately “some 41% of households in Helmand reported opium as a source of income in 2005, far more than any other province – ten times the national average of 4%. In 14 out of 15 categories of assets analyzed, households in Helmand owned more than the national average.”

The assets analyzed reflect things such as cars, tractors, homes etc. Those in Helmand, who were presumed the poorest, and as such, in need of cultivating opium, are far wealthier than initially assumed.

This wealth is also reflected in the land,

If it were these poorest farmers who were leading the recent years’ boom in opium poppy cultivation, one would expect a corresponding proliferation of small plot opium poppy cultivation. But this is not the case – the average size of opium poppy plots has increased over time, suggesting the relatively better-off farmers have been entering the market.”

This study is important when considering saffron as a viable alternative to poppy cultivation. It is not a compelling argument to say that poor farmers can’t turn to saffron when, in fact, poppy farmers are most likely to be able to afford the switch than farmers from the central and northern regions of Afghanistan. Areas that remain largely poppy-free.

Saffron, it would seem, can realistically provide an alternative to poppy eradication because saffron would be a voluntary transition to a crop that has higher sustainable returns than poppy. This would seem to prove effective, as the average lifespan of crop replacement programs was around 3-4 years—the same amount of time it takes saffron to become profitable.

Simply put, the numbers do not lie, “While farmers from 2000 square meters of poppy farm income earn between 2,500 to 4,000 US dollars, saffron grown on the same land brings income of 6,000 US dollars to farmers.”

Saffron also far exceeds its alternative crop counterparts; take wheat, for example, the main crop used in the HFZ.

from 1 jirib of good land a person can get up to 800 kg of wheat, and each kilo of wheat at the time of harvest can fetch Afs 15-20. So, the total amount of money a farmer can receive from 1 jirib of land is equal to Afs 16,000, but when a person cultivates 1 jirib of

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saffron, in its second year he will be able to get up to 1 kg of saffron, if at the time of season the price of 1 kg of saffron is between Afs 80,000 and 90,000.\textsuperscript{201}

It is clear from these numbers that saffron can be highly effective as a crop alternative to opium, even when costs to cultivate are applied.

One of the key reasons why the HFZ, the largest crop replacement project in Afghanistan, ultimately failed was that they were replacing a cash crop with a food crop. Once food insecurity in the region returned to normal levels, Afghan farmers were still willing to take on the risk of eradication or even arrest to grow poppy.

There is an inflection point that can be seen in all crop replacement projects between the returns on opium, the necessity to grow food, and the government’s ability to provide long-lasting alternatives with clear earning potential. As David Mansfield explains, “Evidence suggests that rural communities transition out of opium production when they can realize broader development goals.”\textsuperscript{202} Unless global opium prices fall, as they did in 2008-2011, to levels in which it doesn’t make sense to grow under the risk of eradication, food and government alternatives will never be a high enough incentive to help farmers transition out of opium. Saffron provides a highly lucrative crop that can be grown on a limited amount of land, with limited resources.

This shift, if at a large enough level, would also likely reflect in employment rates. The current model of sharecropping put more destitute Afghans at the will of market demand. If saffron becomes the most labor-intensive crop with high wages, the work demand will overtake opium. Saffron also requires many farmers, mainly women, resulting not only in an employment

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\textsuperscript{201} Minoia and Pain, “Secure Livelihoods Research Consortium | Saffron,” 27.
\textsuperscript{202} Mansfield, “The Helmand Food Zone The Illusion of Success,” 62.
\end{flushright}
shift from an illicit to licit crop but a higher number of farmers employed and new pools of labor accessed.

Saffron also provides the perfect opportunity to target geographic areas where poppy is being grown. As of recently, due to advances in farming technology, farmers have moved to arid desert climates. Such as the deserts located north of the Boghra canal, infamous for their cultivation levels during the HFZ. These climatic conditions are perfect for saffron cultivation as saffron is traditionally grown in these environments. Saffron itself benefits from low levels of irrigation as overwatering can hurt the plant and produce poorer quality saffron.

While Afghan saffron seems to be a prime example of a cash crop that could help convince farmers, with extra cash on hand, to transition out of opium production, it is going to take a lot of effort from the Afghan government and aid programs in the area to help the saffron industry. Ultimately the sector needs to reach economies of scale, drive competition and increase investment.

Though this is difficult, it is not impossible, “In 2016, Afghanistan exported US$17 million of saffron to international markets. Major destinations were India (US$ 14 million), France (US$ 1.2 million), Saudi Arabia (US$ 1.2 million), the United States of American (US$ 238,000) and Bahrain (US$ 110,000), and these numbers are only growing. Afghanistan is positioned as a real competitor in the saffron industry, with a “growth rate of 36% annually between 2012 and 2016.” Due in part to the cheap labor, Afghanistan producers can provide competitive prices while still maintaining high margins of profitability.

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203 Mansfield, 1.
Key to growth will be expanding the number of farmers who grow saffron in the first place. This will drive up competition and evolve farming practices, but most importantly, it will drive down the cost of corms. Right now, corms “can be as much as 30% higher than in neighboring Islamic Republic of Iran,”\textsuperscript{207} the largest producer of saffron in the world. This is because, with low levels of cultivation, corms must be imported into Afghanistan by direct competitors, rather than being grown in Afghanistan and sold at market prices.\textsuperscript{208}

Training will also be key to driving the saffron market forward, “expertise is required in such areas as plot preparation, row spacing, timing of irrigation, and the quantity and composition of fertilizer to be applied.”\textsuperscript{209} Investment is also desperately needed in the saffron market; right now, a farmer is considerably more likely to find financial support from local lenders to grow opium, even though it is an illicit crop.

Considering saffron needs three years to become sustainable and profitable, the government/NGO’s need to supply upfront capital and loans to farmers who understand the outlook of saffron. The investment will also help standardize prices, as often those who give out loans are the same companies who buy the saffron from farmers at inconsistent prices.\textsuperscript{210} The investment will help farmers retain the power of pricing, being able to set prices not tied to loans they took out initially.

One of the key drivers of growth that can be applied at a low cost is marketing. It is important to remember that one of the major reasons crop replacement programs failed is the overreliance on external support from NGOs and the government. HFZ is a crucial example of this, as NGOs found it extremely difficult to transition out of being the main provider of seed to

\textsuperscript{207} “AFGHANISTAN’S NATIONAL EXPORT STRATEGY 2018-2022 SAFFRON SECTOR,” 17.
\textsuperscript{208} “AFGHANISTAN’S NATIONAL EXPORT STRATEGY 2018-2022 SAFFRON SECTOR,” 9.
\textsuperscript{209} “AFGHANISTAN’S NATIONAL EXPORT STRATEGY 2018-2022 SAFFRON SECTOR,” 23.
\textsuperscript{210} Minoia and Pain, “Secure Livelihoods Research Consortium | Saffron,” 8.
farmers in Helmand. In fact, “Since 2002, USAID has obligated over $18 billion to help rebuild Afghanistan through a wide range of projects and programs in areas such as healthcare, education, and agriculture, among others.”

On the other hand, marketing and brand building is a relatively low-cost endeavor, consisting of things such as packaging, website building, and awareness.

Afghan saffron currently markets itself. Mainly produced by women in low quantities and tied to the effort to transition out of opium cultivation, it is easy to see how people would support the message behind the brand and value Afghan saffron as an exceptionally rare item.

Saffron itself is a very versatile spice. It is found in cuisines such as European, Middle Eastern, North African, and Asian. Saffron is also used in medicine. A report by “United Nations Industrial Development Organization (UNIDO) summarizes the medicinal benefits of saffron as follows: There is some evidence that saffron may have anti-cancer effects and may help lower cholesterol and triglycerides.”

It can also benefit from the rise in alternative medicines, as has been the case with turmeric, which has seen mass adoption in health food stores. But, as a report by Washington State University International Research and Development explains, what is necessary if all these use cases are to be explored, is raising awareness that Afghan saffron exists.

Currently, the Saffron market is made up of re-exporters. Countries like Spain import large quantities of saffron from Asian countries and rebrand it before selling at a higher price. This is because countries producing saffron have a hard time penetrating the highly developed markets as they operate on low market information and often don’t control their own supply.

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chains.\textsuperscript{214} Over the years, Afghan saffron, specifically, has had a history of being imported into Iran and rebranded as Iranian saffron. \textsuperscript{215} The truth is that those who know saffron know that Afghan saffron is the gold standard, “Afghan saffron has attracted more and more attention in the high-end European market, based on its unique taste and high quality. This trend indicates remarkable future export opportunities for Afghan saffron, as long as the reputation of the Afghan saffron brand can be protected through the implementation of quality control measures.”\textsuperscript{216}

If investments in packaging and quality grading are taken seriously by Afghan Government officials and NGOs, it is possible to see Afghan saffron taking off.\textsuperscript{217} Hypothetically the government could create provincial associations that could earn income from fees charged for drying, grading, and packing. These associations would not be over involved in the industry, such in the case for the HFZ. Rather, they could act as a broker, putting producers, in touch with potential buyers. This would generate revenue from commissions rather than buying and selling. Leaving the final sales decisions to the producer, a situation which would help build trust in the association.

There is clearly real value in using saffron as an alternative to opium. Referred to as ‘red gold,’ saffron would be one of the few crops tested that provides returns higher than opium itself. The notion that it is impossible due to lack of capital from ‘poor Afghan farmers’ is a highly misconstrued idea, when, in fact, regions that cultivate opium at high levels have the lowest rates of poverty in comparison to the rest of Afghanistan. If the government and NGOs invest in the facilitation of brand building rather than getting tied up in seed distribution, as they did in the

\textsuperscript{215} “AFGHANISTAN’S NATIONAL EXPORT STRATEGY 2018-2022 SAFFRON SECTOR,” 19.
\textsuperscript{216} “AFGHANISTAN’S NATIONAL EXPORT STRATEGY 2018-2022 SAFFRON SECTOR,” 10.
\textsuperscript{217} Ghafoory and Yüksel, “Competitive Strategy in Afghanistan’s Saffron Sector,” 8.
HFZ, there could be an opportunity to expand the saffron market without being attached to a higher sunk cost.

**Conclusion:**

The reality is that opium has touched all corners of the world. While there are real-world applications for opium, uncontrolled, it tends to wreak havoc wherever it gains a foothold. Here in the US, opiates have taken the lives of many young men and women who struggle with addiction. On the opposite side of the globe, Afghan farmers, plagued with years of war, cultivate opium as their everyday job out of the necessity to feed their families, buy a home and pay for weddings. At the top, the kings of the opium trade use the profits from our western addictions to buy guns that they train back on their unwelcome occupiers.

As a result, dismantling the illicit opium market, that ends up hurting so many, is by no means a small task. In fact, after considering the failures of so many well-intended programs, and the massive commitment of money and resources, one is left to wonder if it is even possible and how many more people it will hurt if we continue this process.

But challenging past assumptions and innovating new solutions needs to be the priority if we are ever going to find a solution. This essay criticizes past attempts to eradicate opium, but it is important to note that these failures have helped to reveal what doesn’t work and at the same time offer insights about aspects of each effort that did work. Hopefully, these successes can point us in the right direction.

Most fundamental in our learning is the idea that only when we fully understand the incentive chain that controls this market can one begin to provide solutions. In the early years, we saw how simply buying the crop led to farmers cultivating more opium, driving the opposite
outcome than was intended. Soon after, aerial spraying sheds light on the bureaucracy that plagues this task, forcing those in decision-making positions to prioritize short-term results over long-lasting solutions. The Helmand Food Zone helped paint a picture of what a crop replacement program looks like and how much of an unbalanced demand it was to ask farmers to change from a high return cash crop to a low return food crop. HFZ simultaneously taught us to stay away from creating dependencies as farmers needed seed and military presence from both NGOs and US coalition forces to operate. Finally, through operation Iron Tempest, we gain an understanding that not all solutions can come at the barrel of a gun. And more importantly, we must make sure we do not hurt whose trust we seek to gain.

These fifteen-plus years of lessons can only improve our decision-making if we take accountability for our failures. If we continue to pursue alternatives such as saffron, a high margin crop, we might very well find a sustainable solution to controlling and curtailing the opium grown in arid regions of Afghanistan. If we deliver sustainable livelihoods, which seems very possible given the price resilience of saffron. If we apply and teach our easily accessible talents for standardization and brand building, driving the image of Afghan saffron as the best in the world, we might even create a virtuous cycle of individual success and even national pride in the product. Perhaps akin to a country like Columbia and the role that coffee has taken there in terms of cultural identity and pride.

But then again, Afghanistan may resist the seductive simplicity of a saffron solution or any other single organizing concept. If history teaches us one thing, it is that Afghanistan is perhaps the most enigmatic country on our planet, and more than anything, resists the imposition of ‘good ideas’ by outsiders. Instead, it remains beautiful, unconquerable, and intractably sad in our human geography.
Figure 1: Population below the national poverty line reflected as a percentage (2014)

Figure 2: Levels of opium cultivated, reflected in hectares (2011)
Figure 3: Unemployment rates reflected in percentage (2018)

Figure 4: Levels of opium cultivated, reflected in hectares (2006-2018)
Figure 4: Levels of wheat cultivated, reflected in tons (2000-2011)
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