



Cutting the Afghanistan Opium Harvest?

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Introduction

There is no question that opium production provides a major financial support to the Taliban and other anti-government forces, and that a reduction in the crop would represent a major factor in bringing the war to an end. Consequently there have been many solutions proposed to achieve this goal, but each has limitations.

A major Afghan government policy has been the use of poppy eradication teams, either managed by the central government or by teams under the control of the provincial governors. While these teams have been successful in eradicating much of the poppy crop in the central, eastern and northern areas, they have predictably been met with armed opposition, especially in the seven southern provinces which are the heart of the opium production area: Helmand, Kandahar, Uruzgan, Nimroz, Zabul, Farah, and Day Kundi.

Some US officials have proposed using crop-duster aircraft to undertake an aerial spraying programme using glyphosate, the active ingredient found in commonly available commercial herbicides such as *Roundup*. Unfortunately, such a spraying programme is subject to drift, which

can be as much as 800 metres from the point of release of the chemical.

An inspection of the following



photograph contained in the annual *Afghanistan Opium Survey* and the *Afghanistan Opium Winter Rapid Assessment* published by the United Nations Office on Drugs and Crime (UNODC) shows a pattern of wheat and opium fields adjacent to each other (wheat is the darker green).

Such close proximity of opium and food crops suggests that an aerial run would destroy the wheat harvest as well as the opium planting.

Moreover, such aerial spraying effects would not be restricted to wheat. The Ontario Ministry of Agriculture, in its advice on the use of glyphosate, warns of the potential impact on young shoots on fruit trees—an important high value alternative cash crop which development agencies have proposed as a replacement for opium poppy.

Proposals from laymen have often

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been phrased in the form of “Why don’t we just buy the opium crop from the farmers and burn it?” Unfortunately the iron law of unintended consequences would overturn such a simple suggestion. A very small percentage of the total arable land in Afghanistan is actually currently devoted to opium production, so it would be quite easy for astute farmers to plant more poppy in order to supply the new market which had opened up in addition to their traditional customers. It would be equally easy for the druglords to simply kill the new opium buyers and take the opium which they had bought.

So what to do?

An Unexpected Poppy Crop Decline

Two recent annual Reports from the UNODC show an unexpected but very welcome decrease in the size of the opium harvest in Afghanistan and may provide some guidance in developing an effective, market-driven counter-narcotics strategy.

The first report, appearing in late November of 2008, was the annual *Afghanistan Opium Survey 2008*, which provides a statistical summary of that year’s opium harvest. The second, appearing in January 2009, was the *Afghanistan Opium Winter Rapid Assessment*, which provides an assessment of the amount of farmland devoted to the planting of the crop for the following year.

Surprisingly, both reports indicated an unexpected decrease in poppy planting and opium harvest.

And both contained some key evidence of the reasons for those decreases.

The Afghanistan Opium Survey 2008

In the 2008 *Survey* UNODC Executive Director Antonio Maria Costa reported a surprising 25% drop in opium production.

“In 2007 the (farm gate) value of opium cultivation was one of the largest ever, at about \$1 billion. In 2008 it dropped by more than a quarter, to \$730 million.

In 2007 the (potential) export value of opium, morphine and heroin (at border prices in neighbouring countries) was \$4 billion. This year’s drug export was valued at \$3.4 billion.”

Executive Director Costa was blunt in assessing the financial impact of such a drop on the Taliban war machine, which has come to be so dependent upon opium profits.

“In many parts of Afghanistan, authorities impose a charge (called *ushr*) on economic activity, traditionally set at 10% of income.

Thus, opium farming may have generated \$50-\$70 million of such tax income in 2008. Furthermore, opium processing and trafficking may have raised an additional \$200-\$400 million.

Who collects this money? Local strong men.

In other words, by year end, warlords, drug-lords and insurgents will have extracted almost half a billion dollars of tax revenue from drug farming, production and trafficking.

Not surprisingly the insurgents’ war machine has proven so resilient, despite the heavy pounding by Afghan and allied forces.”



Cutting 25%, or \$100 million, out of the revenue base of the Taliban and their allies is a significant development.

The Afghanistan Opium Winter Rapid Assessment 2009

Looking forward, the *Winter Rapid Assessment 2009* noted that 18 of the 34 provinces in Afghanistan were essentially poppy free in 2008 and are expected to remain so.

Moreover, the *Assessment* predicted that there will be two more provinces reaching very low levels of production and seven additional provinces reaching low levels of production.

This will leave the seven provinces in the south continuing as the heart of the opium business, accounting for 95% of total Afghan production of opium

The Motivation to Grow or Not to Grow Opium Poppy

The UNODC has conducted surveys to determine the reasons that Afghans choose to plant or not to plant poppy. 90% of those planting poppy do so for purely economic reasons, as the following table shows

Reason to Plant Poppy	Population Share
High sale price of opium	58%
Poverty alleviation	32%
Lack of government control	7%
Other	8%

The reasons to not grow poppy vary

by region. In the South and West the primary (37%) factor is market driven (high wheat price/low opium income). Pressure from government authorities (16%) is a much weaker factor and reflects the lack of government control in this area. Indeed, traditional values (against Islam/elders and Shura decisions) are significantly more important reasons (24%) than

Reason to Not Plant Poppy: South and West	Population Share
High sale price of wheat	22%
Low income from opium	15%
Pressure from Government authorities	16%
Against Islam	21%
Elders and Shura decision	3%
Climate, drought,	21%
Other	2%

Reason to Not Plant Poppy: Rest of Country	Population Share
Pressure from Government authorities	52%
Against Islam	15%
Low income from opium	10%
Elders and Shura decision	3%
Climate, drought, other	17%
High sale price of wheat	0.4%

government pressure

In the rest of the country, which accounts for a minor percentage of the total opium crop, the impact of government pressure as a reason not to



plant is triple the importance (52%) of that in the South and West.

So Why the Drop in Poppy Planting?

While there is clear evidence of more effective government pressure on farmers in the North, Central, and Eastern areas of Afghanistan to stop growing poppy, the real impact in the South and West has been that of old-fashioned “market forces,” the precipitous decline in the “farm gate” price received by the farmers for their opium crops.

The *Survey* suggests that a significant factor in this price decline may be the amount of over-production from previous years which remains in storage and thereby reduces demand for opium in the following year

The annual price decline in the average “farm gate” price in \$US for dry opium is shown quite clearly in the following table.

Year	Price/Kg.
Nov., 2004	\$222
Nov., 2005	\$145
Nov., 2006	\$133
Nov., 2007	\$105
Nov., 2008	\$83

Moreover, “farm gate” prices in the South are smaller than the national average—the “farm gate” price in Helmand province in 2008 was \$US 69/kg and \$US67/kg. in Kandahar province.

Add to that the fact that the “inputs” or production costs of growing opium are “fixed” regardless of the

price received for opium. In 2008 opium farmers spent, on average, about 45% of the realized sale price of opium on various production inputs such as seeds, ploughing, weeding, fertilizers, lancing, and opium collection. Once these costs are factored in, the “net income” from poppy declines even more quickly.

Wheat has lower production costs than opium—about 20% of the realized market sale price in 2008. Since Afghan farmers in the South commonly grow both poppy and wheat, changes in the relative price of the two crops influence the proportion of each crop planted

Thus another “market factor” in 2008 was the sharp rise in the world price of wheat, which was the consequence of drought both in Afghanistan as well as the rest of the world.

The Agricultural Commodity Price Bulletin, which is published by the Afghanistan Ministry of Agriculture, Irrigation and Livestock, showed a year-over-year increase in the market price of wheat from 14.3 Afghanis per kilo in October 2007 to 30.7 Afghanis per kilo in October 2008, an increase of 115% (1 Afghanis was worth about 2 US cents at then current exchange rates.)

Gross Income per Hectare \$US			
Year	Opium	Wheat	Ratio
2003	12,700	470	27.0
2004	4,600	390	11.8
2005	5,400	550	9.8
2006	4,600	530	8.7
2007	5,200	546	9.5
2008	4,700	1,625	2.9



These changes in price shifted the relationship between the gross income per hectare from the two crops quite substantially, as the previous table drawn from the *Survey* indicates.

If we shift to “net income” per hectare from “gross income” per hectare we arrive in 2007 at the following ratio.

Year	Opium	Wheat	Ratio
2007	2,585	1,308	2.0

And if we adjust for the even lower farm gate price of \$67/kg in Helmand province the ratio drops to 1.3 to 1.

Agricultural Support in Pakistan

Given the impact of such market effects it is appropriate to ask whether a focus on the wheat/opium relationship would be potentially effective such that the increase in wheat market share could be achieved through government and ODA intervention.

A recent (2009) update of a report by the Cotton Economics Research Institute of Texas Tech University, titled *Crop Subsidies In Foreign Countries: Different Paths to Common Goals*, notes that

“All countries, both industrialized and developing, support their agriculture sectors, but use vastly divergent policy tools and combinations of tools. Most use guaranteed minimum prices and import tariffs to protect domestic producers.”

And that

“Developing countries supplement

their price support programs with input subsidies”

The Report describes the agricultural support system of neighbouring Pakistan, whose northern territories share some of the climate, cultural, and economic characteristics of Afghanistan

“The government of Pakistan uses a minimum price support program for major crops produced in the country. Under this program, the government agrees to make purchases when the market price falls below an announced level. In addition, the government subsidizes agricultural production credit through both government and private banks for the purchase of seeds, fertilizers, pesticides/insecticides, animal feed, labor, fuel, irrigation water charges, and agricultural machinery. Input subsidies are offered for electricity and fertilizer and development loans are also provided for machinery purchases. The government also subsidizes natural gas purchases for fertilizer production at around \$200 million/year.

“Pakistan’s wheat marketing system is largely government-dominated that controls the market through a minimum guaranteed support price and an issue price for wheat sold to flour mills. Through Provincial Food Departments, the GOP procures wheat from farmers at the support price and then sells the wheat to the provinces for sales to the flour mills at the government-fixed issue price. The MSP for wheat for 2009/10 is \$8.08/bu.”

The current market price for wheat (May 21, 2009) is \$5.94 per bushel, so the Pakistan subsidy on this date is the



equivalent of \$2.14 per bushel or 36% above the international market rate

In parallel with this would be policies to provide wheat farmers with the means of increasing yields through the subsidization of inputs such as improved seeds, fertilizers and the like.

The International Fertilizer Development Centre (IFDC), for example, notes that:

“The current average yield for wheat worldwide is three tons of wheat per hectare planted. In Afghanistan, the average yield is far less at one ton per hectare. This difference is attributed to the improper and inadequate use of fertilizer, crop protection products, and improved seeds – the building blocks of high-yielding agriculture.”

“IFDC evaluated Afghanistan’s situation and concluded that the country has to overcome three main challenges. According to Roy, the first problem is the lack of credit extended to farmers. “The farmers don’t have money and they need support during the growing season.” The enormous distances between farmers, suppliers, and markets create the second problem. “It is very difficult to move supplies,” says Roy. For one acre of land, for example, two or three 50-kg bags of fertilizer are needed. “Fertilizers are very bulky and must be transported on trucks. The roads, however, are in bad condition, especially in areas primarily used for farming.” The third challenge is to overcome the current lack of knowledge regarding modern agricultural practices. “For example,” explains Roy, “the farmers do not know how to apply the fertilizer.” IFDC’s plan is to not only provide hands-on training to some farmers but to get the local dealers involved in

training and informing their customers.”

In the long run, of course, the approach of the IFDC is optimal. If the average wheat yield per hectare in Afghanistan could be increased to the global average yield the need to plant poppy to generate an adequate income would be vastly reduced.

Implications for Policy

The real evidence of a decline in opium planting in favour of wheat planting when the opium price drops and/or the wheat price rises suggests that a better way of dealing with the opium menace is not to attempt to buy opium from the farmer, or to eradicate his crops through aerial spraying, but to “buy wheat” from the farmer by raising his net income from wheat production so that he does not have to resort to poppy to make a living.

Market forces can be expected to do the rest.

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