## A DECADE OF CLARITY OR CONFUSION?:

## AN EMPIRICAL STUDY

OF THE

## CAUSAL RELATIONSHIPS BETWEEN

## THE US COUNTER-INSURGENCY AND COUNTER-NARCOTICS

## POLICIES IN AFGHANISTAN

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#### Abstract

This study embarked on a statistical analysis of the US counter-insurgency and counternarcotics efforts in relation to the overall process of state-building in Afghanistan.

Compiling data from year 2006 to 2011, this study employed panel data analysis at the
province level. While testing some of the widely held theories, this study found that
insecurity—insurgent activity—is the main driving force behind poppy cultivation. This
relationship is not dependent on whether insurgents get involved in the opium economy
for financial gains. Furthermore, this study found that outside support for insurgents, in
the sense of providing a safe haven, is the main exogenous causal factor that drives
insurgency. In light of these findings, this study proposed a long-term regional policy that
would be mindful of the complexities existing between Afghanistan, Pakistan and India.

#### Introduction

The state-building process has turned Afghanistan into the land of metrics.

Officials and their reports with inflated figures usually depict an Afghanistan on the right track towards prosperity. Even by the standard of metrics the real situation is gloomy.

The number of improvised explosive devices (IED) targeting International Security Assistance Force (ISAF) rose to 3420 in 2009 from only 191 in 2004. The number of ISAF fatalities has consistently risen from 70 in 2002 to 566 in 2011, counting 1,900 American soldiers with a price tag of \$ \$86,736.29 million. The numbers for Afghan National Security Forces (ANSF) and civilian deaths are in five digits, with reports varying by thousands

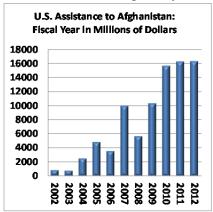


Figure 1: US Assistance to

Afghanistan

Source: Katzman (2012)

with reports varying by thousands.

The Afghan Government and its international allies are in an "operational stalemate" where the core components of state-building, namely governance, reconstruction and economic development, are slowing down as the requirement for security and military forces in the face of increasing insecurity are speeding up. The resurgence of insurgency is a testimony to the deteriorating situation and the stalemate the Afghan Government and its international allies are facing.

Meanwhile the insurgency in the east and south along the border with Pakistan has turned into a complex and dynamic alliance with the Taliban at the core supported by militant groups operating from Pakistani territory. 5245 (71.47%) out of 7,338 IED attacks on ISAF personnel happened in eleven of the provinces bordering Pakistan.

Similarly, 1,590 out of 2,200 ISAF fatalities between years 2001 and 2011 have happened in the provinces that share a border with Pakistan.

The situation described here has become a norm for the Afghan political climate. For the past four decades, Afghanistan has been in a state of constant political unrest coupled with several regime changes. For every regime that came to grasp control, an

insurgency ran parallel to it.

Insurgents have received extensive support from foreign actors who claim a stake in the situation, specifically Pakistan serving as a sanctuary.

During this period of turmoil, Afghanistan turned

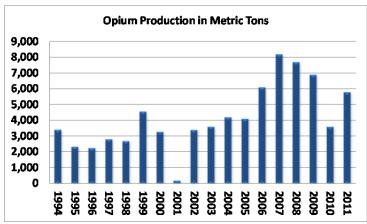


Figure 2: Opium Production 1994-2011

Source: UNODC (2011)

into a drug production hub. At least on the part of the governmental policy makers,

national and international, it is a very popular and widely held theory that insurgents use the drug economy to finance their operations. Thus, tremendous attention is devoted to counternarcotics efforts. Although opium production levels have

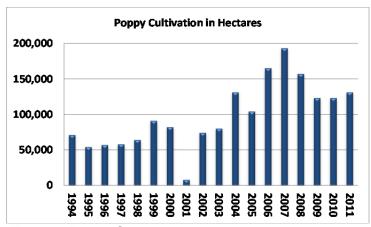


Figure 3: Poppy Cultivation 1994-2011

Source: UNODC (2011)

dropped since 2007, insurgency has gained strength. While 1,786 out of 2,200 ISAF

fatalities happened between 2008 and 2011, quite interestingly, 1,286 of these incidents happened in provinces that share border with Pakistan.

A conglomeration of literature has evolved around the themes of insurgency, opium economy and their nexus, which retards the overall process of state-building. Nonetheless, the existing body of literature suffers from a deficiency of quantitative research. Most importantly, the effects of outside factors, i.e. sanctuary and outside support for insurgency, are usually discounted or marginal at best. While understanding that the situation in Afghanistan is very complicated and numerous factors are in play at different levels, this study aims to find and clarify simple causal relationships between the drug economy and insurgency. Thus, this study aims to accomplish two tasks: First, statistically test a few key propositions and theories pertaining to counter-drug and counter-insurgency efforts; second, emphasize and statistically assess the effect of exogenous factors in relation to these efforts. While embarking on any statistical effort pertaining to Afghanistan is a daunting task, given the scarcity of data available, this approach is justified by the need for an understanding of the interaction between the opium economy and insurgency in the context of state-building at a macro level. The results of such efforts would assist in evidence-backed policy formulation.

#### **Literature Review**

The conventional US counter-narcotics and counter-insurgency views consist of three elements: first, insurgents benefit from illicit economy; second, destruction of this illicit economy would cripple the financial basis of insurgents and is necessary to defeat the insurgency; and third, no distinction should be made between insurgents involved in the illicit economy and the criminals who participate in the illicit economy. These views

have resulted in the construction of the so called "holistic approach" to supply-side counter-narcotics policies, which nominally combines three elements; namely eradication, interdiction and alternative livelihood. The rationale behind such interventions is that a large-scale illicit economy hinders and distorts the political process in a state through corruption (Felbab-Brown, 2010).<sup>1</sup>

A vast and rich conglomeration of literature pertaining to the formulation and implementation of counter-narcotics and counter-insurgency policies in Afghanistan has evolved as these issues gain significance. Byrd (2008) reasons against the eradication component, listing three arguments: First, eradication is technically a difficult undertaking where opium economy is "footloose" taking in account time and space<sup>2</sup>; second, the political costs of eradication are very high; third, eradication does not address the deeper determinants of poppy cultivation, i.e. lack of physical and capital assets. Even though eradication achieves visible and quantifiable short-run results, it is not a sustainable approach to the problem of poppy cultivation.

Felbab-Brown (2010) maintains that even if eradication efforts were highly successful—an assumption inconsistent with empirical evidence—they would only restrict one source of funding for insurgents; insurgents are capable of finding other sources.<sup>3</sup> Where the highly emphasized approach of eradication has mostly been carried out under the leadership of provincial governors, there are serious concerns that

<sup>&</sup>lt;sup>1</sup> In Afghanistan, although it contributes on a large scale to local incomes, the drug trade's illegality and related corruption and criminal activity threaten the institutions of state (Byrd, 2008).

<sup>&</sup>lt;sup>2</sup> Kaufman (2009) explains, based on empirical evidence from eradication programs implemented by the United States (US) in some Asian and American countries, that eradication disperses cultivation to smaller plots scattered over larger terrain and eradication of these smaller plots is coupled with even more difficulties.

<sup>&</sup>lt;sup>3</sup> Common alternative sources of income are from kidnappings, robbery, extortion and production of synthetic drugs. However, insurgents in Afghanistan have been able to make gains from development projects funded by Western donors. Read (Richter, 2010) for more details.

governor-led eradications are vulnerable to corruption due to close ties between local officials and opium economy (Byrd, 2008).

Felbab-Brown (2010) postulates that eradication of illicit crops has not extensively weakened insurgencies; instead, forced and aggressive drug suppression has strengthened insurgencies (Felbab-Brown, 2010). Eradication of poppy crops puts farmers in serious debt, which provides incentives for them for re-cultivation (Byrd, 2008; Durham, 2009; Mansfield & Pain, 2008). The cumulative debt and need for re-cultivation, Felbab-Brown (2006) contends, strengthens the bond between farmers and insurgents. Since this alliance is mutually beneficial,<sup>4</sup> it creates incentives for further cooperation between farmers and insurgents; eradication efforts face strong resistance from insurgents who protect the crops of their allied farmers (Blanchard, 2009).

Challenging the conventional views on the nexus of illicit economy and insurgency—that insurgents can make only financial gains from the illicit economy and in turn use the money to enhance their military power— Felbab-Brown (2010) offers a more expanded explanation of this alliance. Her theory, political capital, suggests that involvement of insurgents in an illicit economy strengthens both their military and political capabilities. She further explains political capital consists of two broad components: First, legitimacy, i.e. the local residents believe that insurgent actions are "beneficial and justified"; second, popular support, i.e. local residents' complicity with

<sup>&</sup>lt;sup>4</sup> According to Caulkins, Kleiman, & Kulick (2010), UNODC estimates an opium production of 7,000 metric tons per year; thus, the estimated farm-gate revenue from opium sales would be \$500 million per year and total net revenue for criminals (excluding farmers) would be \$1.5 billion. The same amount is generated by smuggling this production to neighboring countries that makes it around \$3 billion per year: equal to one quarter of licit Afghan GPD.

insurgency through provision of supplies, shelter and intelligence.<sup>5</sup> In poor economies, the insurgents can gain extensive political capital through their positive involvement in illicit economy and the more labor-intensive the illicit economy, the more political capital the insurgents can generate.

Mansfield and Pain (2008) believe that lack of security, economic growth and governance are the main causes of poppy cultivation; a fundamental failure in providing these factors explains the overall dependence on poppy cultivation. Lack of these factors has ravaged Afghanistan with endemic corruption. It is widely acknowledged that in the presence of such widespread corruption, poppy cultivation bans and eradication efforts have often served to consolidate the economic and political power of the individuals who exercise power in the region and are usually involved in the illicit economy (Byrd, 2008; Felbab-Brown, 2010; Giustozzi, 2007; Mansfield & Pain, 2008). Also, targeted eradication of poppy fields belonging to competing local elites by the corrupt Afghan officials agitate tribal elders, mostly along the Pashtun belt, and they join forces with the Taliban covertly or overtly (Felbab-Brown, 2010).

Felbab-Brown (2010) maintains that "eradication loses the battle for hearts and minds without fulfilling the promise of its siren song—cutting the belligerent off from resources." Policies inspired by the present view of source-country counter-narcotics are effective in disrupting supply at most for two years (Felbab-Brown, 2010) before that

<sup>&</sup>lt;sup>5</sup> Felbab-Brown (2010) expands her theory, suggesting there are four main factors which contribute to the strength of insurgents in respect to an illicit economy: the state of overall economy; the character of an illicit economy; government response to the illicit economy; and presence of "thuggish traffickers." The two first factors are the most important in explaining the political capital the insurgents can generate.

<sup>&</sup>lt;sup>6</sup> Richard Holbrooke, the late U.S. special envoy for Afghanistan and Pakistan, maintained that eradication was counter-productive to counter-insurgency: "It wasn't just a waste of money... This was actually a benefit to the enemy. We were recruiting Taliban with our tax dollars." (quoted in Felbab-Brown, 2010, p. 155)

supply recovers at the same place or relocates to some other location in the absence of reduction on the demand side (Byrd, 2008; Felbab-Brown, 2010).<sup>7</sup>

Brinkerhoff (2005) considers security a prerequisite for stabilization and progress toward normal political and economic activity. Security, provision of basic services and some economic opportunity are essential for a government to be considered legitimate. If a state does not or cannot provide basic services and some level of economic opportunity, then the citizens tend to withdraw support from the state. Concurrent with these assertions, Jones (2008) contends a government's capacity to provide services to a population can change the outcome of a conflict in which insurgents contest for power.

Brinkerhoff (2005) emphasizes the security factor in the credibility of a state and contends that a very important ability of a viable state is to have a "monopoly on coercion and the exercise of force; the state is repository of legitimate coercive power."

Lister and Wilder (2005) argue that existence of a *de jure* state with several *de* facto governments within it distorts this ability of the state. Confirming rather than undermining the status of warlords<sup>9</sup> who provide security, representation and welfare for

<sup>&</sup>lt;sup>7</sup> The Taliban ban by decree on 27 July 2000, which reduced the cultivation from 82,000 ha to 8,000 nationwide and from 78,885 ha to 1,220 ha in the Taliban-controlled territory, is considered one of the most successful bans in the history. It is usually considered as a benchmark in counter-narcotics polices in Afghanistan (Mansfield & Pain, 2008). Yet, the ban did not have long-lasting and sustainable effect. Similar scenarios have happened in some individual provinces after the Taliban ban too. These bans have been followed by re-cultivation in subsequent years. Nangarhar is a good example of such provinces. At the time of writing their paper, Mansfield and Pain (2008) cast doubt that the first time ever poppy-free label of Nangarhar in 2008 would last longer. Indeed, the subsequent years saw a slow raise in levels of cultivation; 2009 cultivation was 294 ha, 2010 was 719 ha, and in 2011Nangarhar produced 2,700 ha.

<sup>&</sup>lt;sup>8</sup> Brinkerhoff (2005) also posits that when donors and humanitarian NGOs take the role of provider of essential service to the population it curtails the chances of a nascent government to expand its legitimacy through provision of services to populace.

<sup>&</sup>lt;sup>9</sup> During extensive interviews, Lister and Wilder (2005) finds the still pending disarmament of warlords and their commanders by government and international community mentioned repeatedly as hurdles for effective authority of the de jure state.

the populace under their control is marginalizing the *de jure* state in its role and responsibility towards population. <sup>10</sup> She argues that

...the boundaries between the de jure and de facto states are not always clear [in Afghanistan]...some individuals are influential within both the de jure state and the de facto state. Indeed they owe their de jure positions to their de facto power. Moreover, they use their de facto powers to influence the de jure structures according to their interests, at both central and local levels (p. 41).<sup>11</sup>

Jones (2008) analyzes 90 insurgencies since the Second World War and finds evidence harmonious with the assertions that the outcomes of an insurgency could be changed by fortifying the capabilities of indigenous security forces, especially police and quality of local governance.

However, besides these indigenous factors, Jones (2008) finds some exogenous variables of prime importance pertaining to insurgencies and their outcome, namely: external support for insurgents and existence of a sanctuary. While counter-insurgency focuses on protecting the population and establishing a credible government through provision of security and isolating insurgents (Cassidy, 2010), external support and existence of a sanctuary for insurgents retard these objective drastically (Jones, 2008).

While lack of security, economic growth and governance create a very suitable atmosphere for poppy cultivation (Mansfield & Pain, 2008), alternative livelihood in the

<sup>&</sup>lt;sup>10</sup> Read footnote number 8 above.

<sup>&</sup>lt;sup>11</sup> A very good example of manipulation and interference of warlords in subnational governance could be explained by the control of four revenue producing districts of Faryab province by Jowzjan province, the home province of General Abdul Rashid Dostum. These four districts include the major carpet trading town of Andkhoi and Turkmenistan border customs post at Aqina. Whenever Dosutm is in power these four districts operationally come under the control of Jawzjan province and in his absence, for instance during the Taliban era, they are controlled by Faryab province (Lister & Wilder, 2005).

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sense of providing farmers with better social and economic opportunities drive poppy cultivation down (Byrd, 2008; Felbab-Brown, 2010; Mansfield & Pain, 2008). Not only does eradication of poppy crops put farmers in serious debt, which creates incentives for re-cultivation, (Byrd, 2008; Durham, 2009; Mansfield & Pain, 2008), it strengthens the bond between farmers and insurgents, and creates incentives for them to cooperate with each other (Felbab-Brown, 2006). On the one hand this cooperation affords insurgents a chance to make financial gains by offering services to protect farmers' livelihood—poppy cultivation—on the other hand it earns them political capital—popular support and legitimacy (Felbab-Brown, 2010). 12

The ability of indigenous security forces to run a monopoly on the use of force, and the ability of state to offer effective governance enhance state's legitimacy (Brinkerhoff, 2005; Jones, 2008). Provision of basic services and some economic opportunities is the driving wheel of government's viability. Government's incompetence to provide these basic needs causes the populace to withdraw support from government (Brinkerhoff, 2005; Jones, 2008). Moreover, external support and the existence of a sanctuary for insurgency makes it very resilient (Cassidy, 2010; Jones, 2008), corrupt officials agitate Pashtun tribal elders along the Pakistani border with targeted eradication and they join forces with the Taliban (Felbab-Brown, 2010).

<sup>&</sup>lt;sup>12</sup> Since Afghanistan is in very poor economic condition and poppy cultivation is very labor intensive, insurgents should gain extensive political capital as the theory of political capital, advanced by Felbab-Brown (2010), predicts.

## Theory and Hypotheses

## **Hypotheses Pertaining to Poppy Cultivation**

Positive involvement of insurgents in illicit economy saves crops from eradication and promotes cultivation; thus,

1. Insurgency should increase poppy cultivation.

Eradication in the absence of meaningful alternative livelihood is counterproductive. It puts farmers in debt; hence, if a farmer's crops were eradicated, he would re-cultivate next year; thus,

2. Previous year's eradication increases cultivation.

Lack of social and economic development is among the main causes of poppy cultivation dependency; thus,

3. Investments in social capital and physical capital such as education and development projects reduce poppy cultivation.

## **Hypotheses Pertaining to Insurgency**

Eradication of poppy crops distances farmers from the government and brings them closer to insurgents; thus,

4. Eradication of crops in the previous year strengthens insurgency.

Insurgents make financial gains from their positive involvement in illicit economy. However, farmers need to harvest their poppy crop and sell the opiate before they could pay dues to their allied insurgents; thus,

5. The previous year's cultivation, in the sense of revenue, makes insurgency stronger.

Since provision of basic services and economic opportunities establishes a government's legitimacy, any services provided to the population and any development taking place should affect insurgency negatively; thus,

- Provision of services and development weakens insurgency.
   Foreign support and existence of a sanctuary make an insurgency resilient; thus,
- 7. Provinces bordering Pakistan show higher levels of insurgent activity.

#### **Methods**

To test the hypotheses proposed above pertaining to determinants of insurgency and poppy cultivation, derived from the body of literature consulted for this study, two general models are constructed:

- 1. Insurgency =  $\beta_0 + \beta_1$  Sanctuary +  $\beta_2$  Poppy Cultivation of Previous Year (in the sense of revenue) +  $\beta_3$  Poppy Eradication of Previous

  Year +  $\beta_4$  Development (economic and social) +  $\beta_5$  Government Services +  $\alpha$
- 2. Poppy Cultivation =  $\beta_0 + \beta_1 Insurgency + \beta_2 Poppy$  Eradication of Pervious Year+  $\beta_3 Development$  (economic and social)+  $\beta_4 Government$  Services+u The analyses use province level data. Indicators for the variables to be included in the analyses were collected from various sources. Please refer to Annex A for a detailed discussion of the data.

Collecting data for the indicators detailed included extraction of data from published reports and surveys. The results have been satisfactory enough to conduct some preliminary statistical analysis. Variables are operationalized as follows:

<sup>&</sup>lt;sup>13</sup> The first administrative division in Afghanistan is province. There are 34 provinces as of April 2004. Daykundi Province was established in March 2004 while Panjshir Province was announced in May of the same year. The second tire administrative division is district. Finding data at district level was not possible.

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Insurgency: The best indicator to represent insurgent presence and activity—other than their actual number, strength etc.—is Improvised Explosive Devices (IED). This data was obtained from The Guardian online. Data have been constructed based on the Wikileaks database of Afghanistan warlogs from 2004 to2009. The records include only roadside bombs which exploded, and do not include person- or vehicle-borne suicide bombs. A total of 7,526 records are available out of which 188 of them were missing coordinates and could not be province-coded. Thus, only 7,338 valid records were extracted out of these data. The data was projected on the map of Afghanistan with administrative boundaries for its 34 provinces and the data was coded for the corresponding provinces. The geocoding process was done in ArcGIS software using the shapefile for administrative boundaries created by Afghanistan Information Management Services. The variable name is Exploded IEDs and the unit of measurement for this variable is total number of IED exploded in a year.

Since IED data does not cover years beyond 2009, another indicator is used to capture insurgent activity in Afghanistan for years 2010 and 2011. This variable counts the number of coalition fatalities in Afghanistan. Data is obtained from icasualities.org, which has maintained records of coalition fatalities since the beginning of the war in Afghanistan. Out of the total 2,487 records for 2001-2011, 254 were missing province references so they were deleted. Out of 2,593 remaining records, 393 of them were reported to have happened of causes not related to "hostile" activity. It should be noted that coalition fatalities from hostile acts cannot capture the concept fully. There are not

<sup>&</sup>lt;sup>14</sup> Even though The Guardian provides summary figures for IEDs that were neutralized, it does not provide the detailed dataset. Follow this link for more information and to access the data <a href="https://www.guardian.co.uk/world/datablog/2010/jul/26/wikileaks-afghanistan-ied-attacks">www.guardian.co.uk/world/datablog/2010/jul/26/wikileaks-afghanistan-ied-attacks</a>

always fatalities in all attempts made by insurgents. Nevertheless, icasualites.org does not provide a detailed record of the wounded. Furthermore, icasualities.org only records military fatalities; however, there are more foreign contractors than military personnel in Afghanistan—and most foreigners are considered legitimate targets by insurgents. For every soldier that is killed many more are wounded—IED and suicide attacks are the most common method of attacking coalition forces and explosions usually injure several while killing some. The same is true of the civilian fatalities. Thus, the number of fatalities of coalition soldiers is not a good indicator to capture the full extent of insurgent activity compared to IED incidents. This variable is named *ISAF Fatalities* measured in number of coalition fatalities in a year.

Sanctuary: It is a widely accepted fact that Afghan insurgents have always had safe heavens in Pakistan, at least in FATA. Eleven out of thirty four provinces of Afghanistan share a border with Pakistan. This factor is represented in models by a dichotomous variable, *Provinces Bordering Pakistan*, coded 1 if the province has a shared border with Pakistan and 0 otherwise.

Poppy Cultivation: Data are compiled from the annual Afghan Opium Survey published by the United Nations Office on Drugs and Crime and the Government of Afghanistan, Ministry of Counter Narcotics. Data are available from year 2002 onwards. The variable name is Poppy Cultivation and unit of measurement is hectares (ha) of land cultivated with opium poppy crops in a year.

<sup>&</sup>lt;sup>15</sup> For instance, as of January 2012 there were 113,491 employees of defense contractors compared to 90,000 American soldiers. Out of this number 25,287 i.e. 22 percent of them were American citizens—47 percent Afghans and 31 percent from other countries. Military fatalities in year 2011 reported by icasualies.org were 418 American soldiers; however, the number of contractors exceeded it by 12 i.e. 430 (Nordland, 2012).

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Poppy Eradication: Data are compiled from the annual Afghan Opium Survey published by United Nations Office on Drugs and Crime and Government of Afghanistan, Ministry of Counter Narcotics. Some data are available from year 2003 with several missing cases. Data for year 2004 are not reported at all. Data are regularly reported from year 2005 onwards. This variable is included in the models as Poppy Eradication with unit of measurement of eradicated poppy fields measured in hectares (ha) of land in a year.

Poppy Cultivation Lagged and Poppy Cultivation Lagged: These two variables are constructed by lagging the data one year. Poppy Cultivation Lagged indicates income that the insurgents gain from their involvement in opium trade while Poppy Eradication Lagged captures the notion that eradication leaves farmers indebted and creates incentives for re-cultivation and cooperation with insurgents.

Electricity Consumer Units: This variable represents a development indicator in the models. Despite that electricity supply in Afghanistan does not very often extend to rural areas, this variable has consistent data from year 2003 to 2010 which makes a better choice, where other development indicators are not available. Data are obtained from Afghan Energy Information Center at <a href="http://www.afghaneic.org/">http://www.afghaneic.org/</a>. Da Afghanistan Breshana Moassassa now known as DABS has been privatized since May 2008 which is the national power utility provider; thus, it is a good indicator of services and development. DABS customers units include residential, commercial, governmental, industrial, NGO and holy places. This variable is named Electricity Consumer Units and its unit of measurement is number of electricity consumers units in a year.

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National Solidarity Program: This variable corresponds to the number of "Community Development Plans" (CDP) which the National Solidarity Program (NSP) has completed through its "Facilitating Partners". These partners include national and international organizations and companies that implement NSP projects. Similarly, data for year 2009 were extracted from 2009-09 National Status Report Sunbula 1388 (22 Aug to 22 Sep 09) which lacks data for the last three months of year 2009. Data for year 2010 were retrieved from NSP- 3rd Quarterly Report (23rd Sep to 21st Dec, 2010) and data for 2011 was extracted from NSP-3rd Quarterly Report (23rd September to 21st December 2011). These data represent the cumulative number of CDPs completed by the date the reports were issued and are accessible at <a href="http://www.nspafghanistan.org/">http://www.nspafghanistan.org/</a>. While unit of measurement is cumulative number of CDPs completed by NSP in a year, this variable is represented as National Solidarity Program in the models.

Government School Teachers: This variable is an indicator of government services and social development. Since education is freely provided for the populace by the Afghan Government, this variable precisely represents the intended causal variable in the model. Data are obtained from Central Statistics Organization of Afghanistan at <a href="http://www.cso.gov.af/">http://www.cso.gov.af/</a>. Data are available for years 2008, 2009 and 2010. Data include total number of male and female government-employed teachers teaching at primary, secondary and high schools. Named Government School Teachers, this variable is measured in number of teachers on the Ministry of Education payroll in a year.

Government School Students: This indicator intends to capture the idea of human capital development. Furthermore, it could measure the level of security. It often times happens that governmental schools are touched down by insurgents. Such incidents tend

to drawdown the number of students attending school. Data are obtained from Central Statistics Organization of Afghanistan at <a href="http://www.cso.gov.af/">http://www.cso.gov.af/</a>. Data are available for year 2010 only. It includes both male and female students at all three levels of schooling i.e. primary, secondary and high. The variable appears as *Government School Students* in the models and its unit of measurement is number of students enrolled into governmental schools in a year.

Inconsistency and unavailability of data over consecutive periods of time for indicators do not permit compilation of a single and uniform dataset. With the data accessible, two datasets containing panel data and one dataset containing cross-sectional data were possible to put together. The first panel dataset would allow analysis over a period of four years, 2006-2009, with 136 records. The second panel dataset consisting of data for years 2009, 2010 and 2011 results in 102 records. 2010 is the year for which data are available for the highest number of variables, although with only 34 records corresponding to 34 provinces.

#### **Models**

To formulate these models, this study uses linear regression models with Ordinary Least Square (OLS) estimators.

Given the availability of data, the first dataset, which consists of panel data for years 2006, 2007, 2008 and 2009, affords this study analysis of these four models:

#### 1. *Insurgency:*

1.1. Exploded IEDs =  $\beta_0 + \beta_1 Provinces$  Bordering Pakistan+ $\beta_2 Poppy$ Cultivation Lagged +  $\beta_3 Poppy$  Eradication Lagged+  $\beta_4 Electricity$ Consumer Units+u

- 1.2. ISAF Fatalities =  $\beta_0 + \beta_1 Provinces$  Bordering Pakistan+  $\beta_2 Poppy$ Cultivation Lagged +  $\beta_3 Poppy$  Eradication Lagged+  $\beta_4 Electricity$ Consumer Units+u
- 2. Poppy Cultivation
  - 2.1. Poppy Cultivation =  $\beta_0 + \beta_1 Exploded IEDs + \beta_2 Poppy Eradication$ Lagged+  $\beta_3 Electricity Consumer Units + \beta_4 Provinces Bordering$ Pakistan+u
  - 2.2. Poppy Cultivation =  $\beta_0 + \beta_1 ISAF$  Fatalities +  $\beta_2 Poppy$  Eradication

    Lagged +  $\beta_3 Electricity$  Consumer Units +  $\beta_4 Provinces$  Bordering

    Pakistan+u

The reason two similar models are constructed for both insurgency and poppy cultivation is to compare the results from these pair of models pertaining to *Exploded IEDs* and *ISAF Fatalities* variables and see if *ISAF Fatalities* is a good indicator of insurgent activity. Data for the former is available only for years 2004-2009 where the latter has data available beyond year 2009. Analysis for years beyond 2009 would use this variable as indicator for insurgent presence and activity.

The second dataset, with panel data for years 2009, 2010 and 2011, allows formulation of the following two models:

3. ISAF Fatalities =  $\beta_0 + \beta_1 Provinces$  Bordering Pakistan+ $\beta_2 Poppy$ Cultivation Lagged + $\beta_3 Poppy$  Eradication Lagged+ $\beta_4 National$  Solidarity

Program+u

4. Poppy Cultivation =  $\beta_0 + \beta_1 ISAF$  Fatalities +  $\beta_2 Poppy$  Eradication

Lagged +  $\beta_3 National$  Solidarity Program +  $\beta_4 Provinces$  Bordering

Pakistan+u

While the cross-sectional dataset for year 2010 makes statistical analysis possible in two models as:

- ISAF Fatalities = β<sub>0</sub>+β<sub>1</sub>Provinces Bordering Pakistan+β<sub>2</sub>Poppy
   Cultivation Lagged +β<sub>3</sub>Poppy Eradication Lagged +β<sub>4</sub>Electricity
   Consumer Units+β<sub>5</sub>National Solidarity Program+β<sub>6</sub>Government School
   Teachers Female+β<sub>7</sub>Government School Teachers Male + β<sub>8</sub>Government
   School Students Female+β<sub>9</sub>Government School Students Male+u
- 6. Poppy Cultivation =  $\beta_0 + \beta_1 ISAF$  Fatalities +  $\beta_2 Poppy$  Eradication

  Lagged +  $\beta_3 E$ lectricity Consumer Units +  $\beta_4 N$ ational Solidarity

  Program +  $\beta_5 G$ overnment School Teachers Female +  $\beta_6 G$ overnment School

  Teachers Male +  $\beta_7 G$ overnment School Students Female +  $\beta_8 G$ overnment

  School Students Male +  $\beta_9 P$ rovinces Bordering Pakistan +  $\mu$

#### **Results**

All models were tested for presence of heteroskedasticity and models 1, 2, 3 and 4 produced positive evidence for presence of heteroskedasticity in the data (refer to Annex A for details). To account for this problem, heteroskedasticity-consistent standard error estimators are used as a corrective measure for these four models (refer to Annex A for details). Models number 5 and 6 do not violate the homoskedasticity assumption; thus, no corrective method is applied.

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Hypothesis 1 proposed that insurgents' positive involvement in illicit economy is translated into protection of crops against eradication and it promotes cultivation. Thus, insurgency increases poppy cultivation positively. Four models i.e. 2.1, 2.2, 4 and 6 (see Annex B for estimations) provide statistically significant results to support the hypothesis that the presence of insurgency promotes poppy cultivation. While model 2.1 suggests that, ceteris paribus, poppy cultivation would increase by 48.5 hectares for each additional IED explosion, model 2.2 indicates that for each ISAF service member fatality in the theater, poppy cultivation increases by almost 463 hectares. The coefficient of ISAF Fatalities in Model 4 signifies that, holding constant all other variables, for each ISAF soldier killed in a hostile act, poppy cultivation increases by 254.18 hectares. Model 6 estimates an almost 200 hectares increase for each ISAF fatality, keeping other factors fixed. The mean of ISAF deaths caused by hostile acts between 2006 and 2011 is 10 and mean of number of IEDs exploded between 2006 and 2009 is 50. Taking these averages into account, the presence of insurgent activity has effects of great magnitude on cultivation. These findings are in line with body of literature positing that lack of security—here indicated by presence of insurgent activity—is one of the main reasons farmers grow poppy (Byrd, 2008; Felbab-Brown, 2010; Mansfield & Pain, 2008).

Hypothesis 2 postulated that eradication in the absence of a meaningful alternative livelihood compels farmers re-cultivate. The variable *Poppy Eradication Lagged* was incorporated into the models to test this proposition. None of the coefficients are statistically significant to support hypothesis 2. To further verify these findings additional models were estimated excluding the development indicators which further validated these findings (refer to Annex C for estimations of these models). These

findings are inconsistent with the body of literature which maintains that eradication in the absence of social and economic development compels farmers to re-cultivate (Byrd, 2008; Durham, 2009; Mansfield & Pain, 2008). These findings, also cast partial doubt on political capital theory, as presented by Felbab-Brown (2010).

Hypothesis 3 posited that social and economic developments reduce dependency of farmers on poppy cultivation. Based on availability of data, different models included different indicators. Models 2.1, 2.2 and 6 included supply of electricity to the population as an indicator of development. Where models 2.1 and 6 find no statistically significant relationship between electricity consumer units and levels of poppy cultivation, model 2.2 indicates a statistically significant negative relationship. Keeping other factors constant, a one unit increase in *Electricity Consumer Units* is associated with a 0.033 hectare decrease in poppy cultivation; 100 units would decrease 3.3 hectares in cultivation. The mean of electricity consumer units between years 2006 and 2010 is 18,259 and consumer units increased on an average rate of 2,600 units between years 2006 and 2010. Thus, the size and magnitude of this effect is very minimal. The direction of this finding meets expectations of the hypothesis. Although this impact is negligible, the general proposition holds. Knowing that often rural areas are not supplied with electricity and that poppy cultivation fields are usually in isolated rural areas, these results are not very unusual. However, to find all other development indicators statistically insignificant is very surprising. NSP, which is the linchpin of Ministry of Rural Rehabilitation and Development, is considered one of most successful programs to have reached and answered needs of population according to population's proposed development plan. Furthermore, human development indicators—and in fact the widely

provided governmental service i.e. education measures—in model 6 show no statistical significance. These findings are incompatible with existing literature (Brinkerhoff, 2005; Byrd, 2008; Felbab-Brown, 2010; Jones, 2008; Mansfield & Pain, 2008) postulating that social and economic development reduces poppy cultivation. While this study falls short of any explanations for these findings, it highly recommends further careful investigation of these indicators with better and more data, if available along consistent years.

The variable *Provinces Bordering Pakistan* was included in the models pertaining to determinants of poppy cultivation to assess the relationship of the bordering sanctuary with poppy cultivation. However, none of these models produced statistically significant results in any direction. Despite this, there is a statistically significant positive correlation between poppy cultivation and *Provinces Bordering Pakistan*. Table 1 in Annex D provides some of these statistics.<sup>16</sup>

Hypothesis 4 maintained that eradication of poppy crops alienates farmers, consequently bringing them closer to insurgents. This cooperation makes insurgency stronger due to population's complicity with insurgents. The variable *Poppy Eradication Lagged* was incorporated into the models to test this proposition. Only the coefficient in model 5 is statistically significant at the borderline confidence interval of 0.1%. A 100 hectares increase in eradication of poppy fields has a ceteris paribus positive effect of 1.8 on number of ISAF fatalities. The impact is of moderate magnitude considering the mean value of 272 for eradication between years 2005 to 2010. But if the poppy eradication and poppy cultivation figures are compared, this impact is negligible. Given the small number

<sup>&</sup>lt;sup>16</sup> Having presented these statistics, one should remember the mantra of statistics: correlation does not necessarily translate into causation.

of cases and borderline significance level, validity of this finding for any inference pertaining to hypothesis 4 is questionable. Thus, this study finds no compelling evidence to support the hypothesis which maintained that eradication would make the bond between farmers and insurgents stronger. These findings were further supported by estimating additional models excluding the development indicators (refer to Annex C).

Another proposition this study considered is whether insurgents actively promote and engage in opium trade for financial gains. To answer this question, hypothesis 5, in line with conventional views on narco-insurgency, posited that insurgents get involved in drug economy for financial gains and use it to fund their operations. The insurgency models tested the effect of the previous year's cultivation on insurgency, included in models as *Poppy Cultivation Lagged*. Only coefficients in model 1.2 and 5 are statistically significant; holding other factors fixed, an increase of 1,000 hectares in poppy cultivation is associated with 1 and 3 ISAF fatalities respectively. This positive relationship might not look substantial at the first glance; however, considering mean cultivation of 4,240 hectares between years 2005 and 2010, these small coefficients bear sizable impact. Evidence to back the hypothesis that *Poppy Cultivation Lagged*—in the sense of revenue from the previous year's poppy harvest for insurgents—strengthens insurgency, lends partial support to any generalization. Two out of four models produced statistically significant results and one of these coefficients is significant at the borderline confidence interval of 0.1%. Whether insurgents make financial gains from their positive involvement in the drug economy requires further investigation.

While hypothesis 6 maintained that social and economic developments and provision of services legitimize a government and consequently impede insurgency.

Based on availability of data, different models included different indicators. Models 1.1, 1.2 and 5 included supply of electricity to population as an indicator of development. These three models indicate that, holding other factors fixed, an increase or decrease in the units of electricity consumers has no effect on insurgency. These results are statistically significant. One explanation for result from model 1.1 once again ties back to the nature of this development indicator; electricity is mostly provided to urban areas in Afghanistan. Model 1.1 used Exploded IED's as its dependent variable and most of IED incidents take place along the highways connecting urban settlements. The second most probable place for IED activity is rural areas—with less population—where insurgents can plant these IED without being detected. The same operational factors could explain the results obtained from model 5; in year 2010 58.4% of total ISAF fatalities were caused by IEDs. Model 5 also produced statistically significant results that an increase or decrease in number of female students attending government schools does not have any effect on insurgency, ceteris paribus. One plausible explanation is that most ISAF fatalities occur in rural areas, while a greater urban female population attends school. These results do not produce evidence in line with the expectations of the hypothesis. In fact, models 1.1, 1.2 and 5 indicate statistically significant results which estimate electricity supply and consumption—very good indicators of development and service provision, however only limited to urban areas in Afghanistan—do not have any effects on insurgency. These results are incompatible with existing literature (Brinkerhoff, 2005; Byrd, 2008; Felbab-Brown, 2010; Jones, 2008; Mansfield & Pain, 2008) which postulate that social and economic development would legitimize government and weaken insurgency.

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While all the other hypotheses dealt with indigenous causal variables, hypothesis 7 postulated that provinces that share border with Pakistan would show higher levels of insurgency. This assertion is based on the assumption that exogenous factors such as existence of outside support and sanctuaries make insurgencies resilient and exasperate complications that accompany counter-insurgency operations. Three out of four models (1.1, 1.2 and 5) devised to explain determinants of insurgency indicate statistically significant results to support this assertion. Model 1.1 estimates that provinces bordering Pakistan experience 56.58 more IED explosions compared to those provinces that do not share a border with Pakistan, holding all other factors fixed. Mean of IED explosions between years 2006-2009 is 50. Where model 1.2 shows statistically significant estimations that provinces bordering Pakistan are associated with 7.1 more ISAF member fatalities than those provinces that do not, model 5 indicates 13.1 for this relationship. The mean for ISAF Fatalities between years 2006-2011 is 10. Taking into consideration these means, the effect and size of these relationships are of importance. Table 2 in Annex D provides further statistics to illustrate this relationship. These findings concurrently support the proposition that support from outside and existence of a safe haven for insurgents make insurgency resilient and create hurdles for counter-insurgency efforts (Cassidy, 2010; Jones, 2008).

Overall, the most consistent variable in the poppy cultivation models is insurgency, statistically significant in four out four models, represented either by *Exploded IEDs* or *ISAF Fatalities*. This provides ample statistical evidence in support to the hypothesis that presence of insurgents and their activity—which could be translated into lack of security—affects poppy cultivation positively. This relationship is not

conditional on their positive involvement in the opium economy. The second variable that consistently shows statistical significance in three out of four models pertaining to insurgency is *Provinces Bordering Pakistan*. This variable captures the concept that Pakistan serves as a sanctuary for the insurgency. These two relationships shed light on the causal mechanism at work; insurgency is the main determinant of poppy cultivation and existence of a sanctuary makes insurgency strong and resistant.

## What Is Past Is Prolog

#### **Political Turmoil, Insurgency and Foreign Actors**

The present chaotic situation in Afghanistan dates back almost 4 decades when King Zahir Shah was overthrown by Mohammad Daoud Khan, changing Afghanistan from a monarchy to a republic in 1973. This change disrupted one of the longest periods of political calm in Afghanistan's turbulent modern political history, usually preyed upon by the players of the Great Game. This abrupt change was followed by a series of high-rank assassinations and coups which resulted in the Soviet invasion of Afghanistan in 1979.

As is the norm of international politics, these drastic developments in Afghanistan produced gains, losses and threatened geo-political and geo-strategic interests of players with stakes in the game; Pakistan was one of these stakeholders. From the very beginning of this political instability, Pakistan was wary of the nascent pro-Soviet regime of Daoud Khan. Pakistan's discomfort with Daoud Khan could be traced back to 1953 when he became the Royal Prime Minister and his foreign policy pursued the Pashtunistan<sup>17</sup> issue

<sup>&</sup>lt;sup>17</sup> Pashtunistan is a Pashtun nationalistic idea which to Afghan advocates usually translates into the abolition of British-demarcated Durand line of 1893. It is an idea of re-claiming the territories that Afghanistan ceded to British India which is now part of Pakistani territory.

as its top priority. To complicate matters for Pakistan, Afghanistan developed closer relationships with India—the rival neighbor which has always kept Pakistan on its toes. Daoud's obsession with the Pashtunistan issue played a major role in his forced resignation in 1963 (US, 2011). A decade later Daoud Khan, overthrowing the king through a coup, returned to power as a president and it alarmed Pakistan. One of the long-term remedies Pakistan sought to alleviate its problems was providing shelter for the oppositions of the Afghan government. When Daoud crushed a nascent Islamic fundamentalist movement in 1975, Pakistan welcomed these Islamic leaders—Gulbuddin Hekmatyar, Burhanuddin Rabbani and others—and settled them in Peshawar where they received assistance from the Pakistani government to continue their opposition against the Afghan state.

In the aftermath of Daoud Khan's assassination in April of 1978 and the subsequent volatile political climate, the Russian Army marched on Kabul in December of 1979. The Soviet invasion of Afghanistan soon turned Pakistan into the anticommunist hub that welcomed, without discrimination, all who sought an end to the communist expansion. The Afghan opposition Islamic leaders, who had escaped to Pakistan in 1975, declared jihad against the Soviet invasion and the pro-Soviet government of Afghanistan. These mujahedin groups started launching attacks on targets in Afghanistan infiltrating through the open tribal belts which forms the Afghan-Pakistan border areas. The United Sates (US) endowed itself to the cause of communist containment by encouraging and supporting the government of Pakistan to deal with the situation at hand. The government of Pakistan used Islamic rhetoric, invoking the Muslim

<sup>&</sup>lt;sup>18</sup> Access http://countrystudies.us/afghanistan/26.htm for more information on this subject.

world to join the sacred jihad against the Soviet in Afghanistan. This effort brought Muslims from all over the world to Pakistan, including some future top leaders of Al Qaeda.

The invasion ended with the United Nations sponsored Geneva negotiations in 1988 which resulted in the withdrawal of the Soviet forces from Afghanistan by mid-February 1989. However, this did not bring peace to Afghanistan. In 1992, the last pro-Soviet regime collapsed into the hands of the mujahedin, under whose leadership Afghanistan fell victim to sectarian, regional and ethnic conflicts. Although the collapse of the pro-soviet regime in Afghanistan mitigated to a great extent what had started as a pronounced threat to the geo-strategic interests of Pakistan vis-à-vis India, the instability and control of regions of Afghanistan by different factions still posed looming problems. These threats were realized in light of the fact that Afghanistan now served both a geoeconomic and a geo-strategic purpose in the context of Pakistan's Central Asia policy, i.e. access to Central Asian markets and strategic depth vis-à-vis India (Maass, 1999). Pakistan pursued both of these objectives by injecting the Taliban into the Afghan political arena. In fall of 1994, the Pakistani-backed Taliban movement made their way into Afghanistan. 19 After consolidating their power in Kandahar, the Taliban gained control of Herat in September 1995 and one year later moved on to Kabul. By 2000, the Taliban controlled more than 90% of Afghanistan's territory.

Through its support to the Taliban, Pakistan dismantled the network of warlorderected check points which harassed Pakistani truckers on trade routes to and transiting

<sup>&</sup>lt;sup>19</sup> When the Taliban launched their assault on the town of Spin Boldak in early fall 1994, a Pakistani "artillery barrage" helped them advance into the area (Felbab-Brown, 2010).

through Afghanistan. Second, Pakistan realized its desire to install a pro-Pakistani government in Afghanistan which would distance itself from India, Iran and Russia. These actions insured Pakistan's strategic depth in any possible military confrontation with India.<sup>20</sup> In response to the Taliban's regime, the nonPashtun mujahedin groups formed the Northern Alliance with the foreign backing of Russia, Iran, India and the United States (Felbab-Brown, 2010).<sup>21</sup>

In the aftermath of the 9/11 attacks, the United States, together with a coalition of the willing, intervened in Afghanistan by initially providing support to the Northern Alliance. The elimination of the Al Qaeda network, whose leadership and operatives were active in their sanctuary in Afghanistan, was the primary objective of post-9/11 intervention. By December 2001, the Taliban—never the main objective—were dismantled in Afghanistan. Al Qaeda operatives, together with their Taliban allies, were "shoved east" and south into Pakistan. To make sure they did not return to their sanctuary in Afghanistan, a stable Afghanistan was envisioned. An international conference in December 2001 laid blueprints of the post-Taliban Afghanistan, resulting in the creation of the ISAF from the countries termed as the coalition of the willing, soon led by North Atlantic Treaty Organization (Felbab-Brown, 2010).

No consideration was given to how the border with Pakistan—around 2,500 kilometers of rough terrain—would effectively be closed to infiltration of Al Qaeda and their affiliates. The fact that the lawlessness of Pashtun tribes in the Federally Administrated Tribal Area (FATA) is accepted and tolerated by Islamabad complicated

<sup>&</sup>lt;sup>20</sup> Read (Durrani, 2011) for a short and an interesting discussion of this subject.

<sup>&</sup>lt;sup>21</sup> Since the Taliban received financial and military support from Pakistan, this basically echoed a struggle for regional dominance vis-à-vis Pakistan's proxy control of Afghanistan.

this issue. They are a strategic assets Islamabad wants to keep intact because they can be used to serve Pakistan's interests in Kashmir and Afghanistan (deVillafranca, 2008). A good example of these Pakistani interests pertaining to Kashmir is the creation and support of the Lashkar-e Taiba group, which now poses perhaps the biggest threat to Western targets in South Asia.<sup>22</sup>

Up until 2005, Islamabad bluntly denied the presence of any Taliban in Pakistan even in the tribal belt. No Taliban leaders were captured in Pakistan yet the US-Pakistani relations—very well signified by the inflow of the US military and economic aid to Pakistan—followed its normal pace in the face of occasional arrests of Al Qaeda leaders.

British Prime Minister David Cameron on July 28, 2010 firmly stated that,
We cannot tolerate in any sense the idea that this country [Pakistan] is allowed to
look both ways and is able in any way to promote the export of terror, whether to
India or whether to Afghanistan or anywhere else in the world...It is not right...to
have any relationship with groups that are promoting terror. Democratic states
that want to be part of the developed world cannot do that (Watt & Dodd, 2010).

<sup>&</sup>lt;sup>22</sup> State sponsor for jihad in Kashmir gave Lashkar-e Taiba extensive access to resources to establish its infrastructure. Since it has no allies and is prone to state pressure, it refrains from attacks on the Pakistani state. Unlike the Deobandi—a movement of Sunni Muslims following teachings of the Hanafi School—militant groups, Lashkar-e Taiba had no connections with the Taliban government in Afghanistan and refrained to cooperate with them after 9/11. However, by 2006 after their activities were restrained in Kashmir, they started sending militants to Kunar in Afghanistan. Lashkar-e Taiba is on the list of State Department as a Foreign Terrorist Organization and is officially banned in Pakistan. However, it has maintained a very close working relationship with both the Pakistani army and ISI. The US military and ISAF officials admit that Lashkar-e Taiba has the most effective fighters in the region. It attacks Western targets in South Asia, serves as trainer and facilitator to other organizations such as Al Qaeda to attack Western countries. Since they attract a lot of want-to-be Western jihadists to train for attacks in Western countries, Lashkar-e Taiba has become an ideal global jihadist facilitator (Tankel, 2010). Recently, the United States announced a \$10 million reward for information leading to capture of Hafiz Saeed, founder of Lashkar-e Taiba who now leads the Jammat-ud-Dawa group. A day after the announcement of the bounty, Saeed appeared at a press conference and said that he was neither a fugitive from neither the US nor a hiding in the mountains. He mentioned that he was on his way to Lahore tomorrow and the US could contact him whenever it wanted.

But such statements, which are usually timed to appease a particular audience,<sup>23</sup> generally fall on deaf ears demonstrated by lack of inaction on the part of the stakeholders, especially the United States.

The Pakistani complicity clearly makes a case for a thorough rethink of the state-building strategy in Afghanistan because it is known for a fact that insurgencies that enjoy a safe haven are almost impossible to defeat. Despite the deteriorating situation in Afghanistan-Pakistan border area, no major change in the US policy for Pakistan has taken place (deVillafranca, 2008), other than the intensified drone strikes inside Pakistani territory which has agitated the Pakistani civilian and military officials, not to mention outraged the general public.

# The Nexus of Insurgency with Illicit Economy (Mujahedin to Warlords and Emergence of the Taliban)

The mujahedin groups, who fought against the Soviet Army in Afghanistan, financed part of their operations by the revenue from poppy opium which was cultivated in Afghanistan and refined in labs in Pakistan.<sup>24</sup> Soon a vast network of producers, traffickers and buyers established themselves, including the two secret agencies, the Central Intelligence Agency (CIA) and Directorate for Inter-Services Intelligence (ISI) (Kreutzmann, 2007). Trucks belonging to the National Logistics Cell of the Pakistani Army would transport CIA-supplied weapons from Karachi ports to Afghanistan and return with loads of opiate which securely passed through police check points with ISI documents exempting them from being searched (Felbab-Brown, 2010).

<sup>&</sup>lt;sup>23</sup> This speech was delivered to the Indian business leaders in a trade summit in India.

<sup>&</sup>lt;sup>24</sup> Significant sources of finances were donations from Islamic countries, especially Saudi Arabia, and financial aid from Western countries especially the United States.

The mujahedin groups got heavily involved in the opium business and encouraged populations under their control in east and south of Afghanistan to grow poppies.<sup>25</sup>

Meanwhile they received extensive aid from both the ISI and CIA until end of 1980s (Felbab-Brown, 2010). When the Red Army withdrew from Afghanistan, the US aid appropriated to the mujahedin dropped drastically. These groups needed income to keep and pay their fighters; thus, they expanded the illicit sources of income, opium trade being the most favored (Kreutzmann, 2007).<sup>26</sup> Between 1979 and 1989 the opium production in Afghanistan raised from just 200 tons to 1,200 tons which marked the beginning of a narco-economy there. In 1994 the production of 3,400 metric tons of opium was 17-fold the production level fifteen years before. This trend of cultivation and production intensified under the Taliban when they formally started taxing drug activities and gained full control of the opiate business.

#### **Illicit Economy**

Before the 1970s, opium was produced traditionally on a very small scale for local or regional consumption; the involvement of the mujahedin in drug trade expanded it, turning Afghanistan into a major opium producer by the mid-1980s, as detailed above

<sup>&</sup>lt;sup>25</sup> Gulbuddin Hekmatyar, Mullah Nasim Akhundzada and Ismat Muslim were some of first mujahedin leaders to get involved in drug trade. Akhundzada established his dominance in Helmand Valley using drug money to expand his army.<sup>25</sup> Ismat Muslim from the Achekzai tribe emerged as the warlord involved in the drug trafficking in 1979 and over a drug-related dispute with the ISI defected to the government of Afghanistan and became part of the militia forces (Felbab-Brown, 2010).

While Hekmatyar received the highest amounts of aid from both ISI and CIA until end of 1980s, he got heavily involved in drug trade when he could not pocket foreign aid anymore. Similarly, after the failure of Mohammad Najubullah government in 1992 Afghanistan came under the control of these mujahedin groups. Ahmad Shah Massoud and Burhanuddin Rabbani controlled the trafficking routes to Tajikistan and Iran through which trucks loaded with opium would go, and come back carrying cash and weapons. On a similar account, Haji Abdul Qadir from the Arsala clan became the kingpin of illicit economy in Nangarhar, involved both in drug trade and smuggling of legal goods brought from Dubai to Pakistan. Arsala family's effective control of Jalalabad and its airport made it very convenient to air transport goods from Dubai to Jalalabad and then smuggle them to Pakistan (Felbab-Brown, 2010).

(Byrd, 2008). Cultivation and production kept their pace during the Taliban regime and turned Afghanistan into the heart of the Golden Crescent production hub.<sup>27</sup> Despite the counter-narcotics efforts in the post-Taliban Afghanistan, poppy cultivation and opium production have maintained pace and even regained momentum in 2011(Figures 2 and 3 illustrate these in the introduction section above).

Laissez-faire to counter-drug in the post-Taliban Afghanistan. The Afghan Interim Authority banned poppy cultivation, processing and trafficking, and consumption of opium and related products by issuance of a decree in January 2002 (Felbab-Brown, 2010). Nonetheless, the US did not consider curtailing the illicit economy and drug trade as part of its operations in the initial two years of the campaign in Afghanistan. The Bush administration prioritized stability in Afghanistan as its objective at the expense of the process of state-building (Giustozzi, 2007). This included a laissez faire approach to illicit economy, empowering warlords and hiring their militia as security forces. Due to this operational compromise, the US was unwilling to tackle the illicit economy and people involved in this vast network. Many of the US-friendly local commanders who provided intelligence and militia to hunt down Al Qaeda and the Taliban were deeply involved in the illicit economy. A diplomat in Kabul said that "without money from drugs, our friendly warlords can't pay their militias...It's as simple as that" (McGirk, 2003). These compromises drastically hammered the disarmament, demobilization and

<sup>&</sup>lt;sup>27</sup> Golden Crescent expands on the territories of Afghanistan, Iran and Pakistan and the productions from this hub usually are trafficked through the Balkans to European markets.

<sup>&</sup>lt;sup>28</sup> In the years 2001-02 the CIA and Special Forces officers distributed \$70 million in cash to warlords such as Ismail Khan, Abdul Rashid Dostum, Mohammad Qasim Fahim, Ustad Atta Mohammed, Gul Agha Sherzai and Hazrat Ali to hunt down the Taliban and al Qaeda. These individuals expanded their militia who were hired as security personnel and reaped huge financial benefits in subsequent years. These warlords found their way into high governmental posts while still maintaining their ties to the regional networks of illicit economy (Felbab-Brown, 2010).

reintegration (DDR) process—a core component of state-building—which began as the Afghanistan's New Beginnings Program in April 2003 and ended in July 2005.<sup>29</sup>

Neglecting to tackle the illicit economy brought the US under a lot of criticism at home and abroad. Consequently, the US revised its policy in 2004 from a laissez-faire approach to a policy committed to uprooting the drug trade (Felbab-Brown, 2010).<sup>30</sup> The anti-drug efforts and rhetoric were intensified in the following years.<sup>31</sup> The US asserts that there is a strong nexus between drug trafficking and terrorism, posing a significant transitional threat that undermines "Afghan economic and governance development and the stability of the broader region that are of importance to the United States interests." Moreover it considered drug use a serious threat stating that "drug use endangers health

The program was laid out to disarm, demobilize and reintegrate 100,000 Afghan militia forces with an initial completion date before the first presidential elections in June 2004. By June 2004 however, only 10,000 individuals had gone through the DDR process and the target figure was reduced to 40,000 from the original 100,000 (Lister & Wilder, 2005). At the end of the DDR program in July 2005 an estimated 1,800 armed groups consisting of around 100,000 individuals were still present in country (Lister, 2009). The Afghanistan's New Beginnings Program webpage accessed at <a href="http://www.anbp.af.undp.org/introduction-to-anbp/">http://www.anbp.af.undp.org/introduction-to-anbp/</a> on 03/18/2012 indicates the end date of program June 2005 with the achievements indicating that "93,260 names were removed from the [Ministry of Defense] payroll, allowing a budget saving of over \$120 million; Disarmed 63,380 former officers and soldiers; Decommissioned 259 units; 53,145 excombatants selected the reintegration option, 53,054 ex-combatants completed the reintegration training; 90% are employed; 94,262 light and medium weapons as well as 12,248 heavy weapons were collected; 56,163 weapons destroyed."

<sup>&</sup>lt;sup>30</sup> This change in the US policy translated into some major events in Afghanistan: In December of 2004 Karzai declared jihad against poppies at a major counter-narcotics policy conference in Kabul, soon the Counter Narcotics Directorate was upgraded to Counter Narcotics Ministry while Afghanistan's National council of *Ulema* issued a *fatwa* declaring cultivation and trade of opium *haram* (Felbab-Brown, 2010).

<sup>&</sup>lt;sup>31</sup> In 2005 the implementation of Afghan anti-drug strategy was issued which the Bush administration revised in 2007. This strategy consists of five elements also known as the Five Pillars Plan. The first pillar is Public Information that aims to raise awareness about the dangers of narcotics business in public through meetings with locals and tribal leaders. The second pillar is Judicial Reform; the Criminal Justice Task Force under presidential decree to bring in corrupt officials and high profile traffickers. The third is Alternative Livelihood Development that provides different alternatives to formers who agree not to cultivate poppy. The forth pillar is Interdiction under which the United States Drug Enforcement Administration (DEA) initiated Operation Containment in early 2002 in Afghanistan and neighboring countries that now has extend to 19 countries in the region. Fifth, and the most emphasized, pillar of the strategy is Eradication (Blanchard, 2009). Out of the \$2504.9 million spent on counter-narcotics efforts between 2005-2009 fiscal years in Afghanistan, \$992.2 million has been spent on eradication and \$966.3 million on interdiction activities. Rule of law/justice has been allocated \$382.5 million, public information \$35.4 where drug demand reduction has been allotted \$17.6 million (GAO, 2010).

and safety of every American, depletes financial and human resources, and deadens the spirit of our communities" (ONDCP, 2010). Considering that the United States and Canada consumed 22 tons i.e. 6% of the overall heroin produced in year 2008 and 17-20 tons of it possibly originated from Afghanistan, listing Afghanistan drugs as a threat to Americans was justified. Nonetheless, it is not the United States that is grossly affected by narcotics produced in the Golden Crescent hub. Europe (with the exception of Russia and Turkey) consumed 88 tons i.e. 26% and the Russian Federation consumed 70 tons i.e. 21% of the 2008 heroin produced by Afghanistan and its neighbors (UNDCP, 2009). Afghan Heroin kills 100,000 people around the world each year and in Russia alone 30,000 youth die due to this killer plague (Pyatakov, 2010). These high drug demands coupled with the extreme mortality rates due to drug abuse put the United States—which is in-charge of the counter narcotics efforts in Afghanistan—under pronounced pressure from its European allies. Furthermore, Russia has pleaded the US to take firm and effective counter-narcotics action in Afghanistan.

Afghanistan produces an estimated 90 percent of global and 95 percent of the European market needs. The income from this production is estimated to constitute more than one-third of the overall Afghan economy which is equal to more than half of the licit GDP (Felbab-Brown, 2010). The fact that illicit economy has penetrated the political and economic system of Afghanistan is widely recognized (Mansfield & Pain, 2008). The

<sup>&</sup>lt;sup>32</sup> The corresponding measure has targeted both aspects of the drug market i.e. supply hubs globally and demand reduction domestically. However the supply-side reduction has been more emphasized lately. Looking at the budget allocation for the drug control funding from 2002-2005 fiscal years, the supply reduction components of the budget are above 54% of the total budget; since 2005 they are above 62% for all subsequent fiscal years (ONDCP, 2010).

<sup>&</sup>lt;sup>33</sup> Caulkins, Kleiman and Kulick (2010) contend that the U.S. should not consider the Afghan counternarcotics policies as having any effect on the U.S. heroin use. Afghanistan has no comparative advantage over the Columbian and Mexican markets in the United States.

pyramidal hierarchy consists of only a few dozen key traffickers at the top who are collaborators with warlords, government officials and figures involved in the politics of Afghanistan (Byrd, 2008). While taking any action against these highly connected players accompany huge political costs, not brining any significant blow to this driving mechanism would undermine any other development efforts, especially the counternarcotics.

This historical account of insurgency, foreign support to these insurgencies and the parallel expansion of the illicit economy with the involvement of insurgent groups demonstrated several key points concurrent with the overall arguments presented in this study.

First, Pakistan has historically served and is still serving as a sanctuary where Afghan insurgents are sponsored overtly and covertly by Pakistan. This sanctuary not only provides a safe haven for Afghan insurgents but to all who wish to take part in jihad against nonMuslim invaders. During the Russian invasion of Afghanistan, support to the Afghan mujahedin in their fight against the Soviet Army and letting Muslim jihadists operate in the region turned Pakistan into a hub of Islamic fighters. Subsequent creation of the Taliban by ISI to get rid of the mujahedin groups in Afghanistan and supporting the rebels in Kashmir, who carry terrorist attacks in Indian, have slowly magnified and expanded operations from this hub (Tkacik, 2010).

Second, these fighters and insurgents have and still use illicit economy, in particular opium trade, as one of the sources of revenue to finance their operations.

Although the drug trade has expanded greatly when insurgency has grown stronger, it has not been the only source of revenue for them. Extortion of the populace, warlord

checkpoints on the highways and smuggling of licit goods have also been methods used by belligerents to generate revenue. Thus, going after poppy fields has been confusing causality with correlation on the part of policy makers who assume that curtailing the opium economy would bring a big blow to the insurgency. It is insecurity—in the form of the presence of insurgents—which promotes poppy cultivation where sanctuaries allow insurgents to recover, regroup and re-launch. A glimpse of the past four decade history of Afghanistan stands testimony to these assertions.

### **Implications and Conclusions**

While scholarly literature is full of plausible suggestion in all different dimensions of counter-insurgency, counter-narcotics and the overall scheme of state-building in Afghanistan, this study resulted in statistical evidence in line with the body of literature which posits security a pre-requisite for any development initiative to work effectively. No binding statistical results were produced to support that development reduced poppy cultivation or insurgency. Better and consistent data for indicators are needed to assess these relationships.

Nevertheless, this study found that insecurity—insurgent activity—is the main driving force behind poppy cultivation. This relation is not dependent on whether insurgents get involved in the opium economy for financial gains.

There are several factors which undermine security in Afghanistan. As far as endogenous causal variables are concerned, the existence of de facto states within the de jure state—as warlords and their militia roam every corner and quarter of the country—is one of the factors. This study fell short to account for this variable in its statistical models because no data are available on the number of warlords, their militia and geographical

limits of their operation. Similarly, data pertaining to number of ANFS and ISAF at the province level are not disclosed; thus, an important security indicator has not been accounted for.

However, the models could account for a major exogenous factor which affects the security situation inside Afghanistan substantially; provinces bordering Pakistan are the areas of activity where insurgents effectively operate against collation force. From the historical context, it is understood that Pakistan has always projected a cynical attitude toward any Afghan government which has undermined Pakistan's geo-strategic and geo-economic interests. To undermine these governments, Pakistan has and still serves as a sanctuary for Afghan insurgents. This sanctuary complicates the counter-insurgency efforts greatly.

The situation in Afghanistan demonstrates that history repeats itself, with some minor variations. The emergence of this jihadist hub traces back to the era of Soviet invasion of Afghanistan. The mujahedin groups that the US, Arab countries and Pakistan financed and buttressed are still operational. Good examples are the renowned Haqqani and Hekmatyar fighters. The only aspect different in the present episode is that they are up against the West instead of the Soviet Army. The fighters are the same; the sanctuary is the same; the same network of support exists. Only some allies from the old days are now on the other side of the line. Thus, the United States and its coalition of the willing know that the most important part to the Afghan conflict lies in Pakistan. As long as this sanctuary exists, the insurgency continues. The persistence and patience of the insurgency cannot be captured better with anything else than by the Taliban mantra: Americans have all the watches but we have all the time.

The US policies so far have lacked a long-term regional geo-strategic scheme; these policies have been reactionary in nature rather than shaping the developments in the region. The US should be mindful of Indo-Afghan-Pakistani relations.<sup>34</sup> Any policy should try to mitigate these frictions, alleviate the fears Pakistan has for Indo-Afghan relationships and commit to a long-term regional policy in the region.

As deVillafranca (2008) maintains "...the insurgency is a little like an overflowing sink: We can use more and more rags to mop up the overflow, or we can try to figure out how to turn off the tap" (p. 90). Pakistan is the tap and a long-term regional policy is the method to turn it off.

<sup>&</sup>lt;sup>34</sup> The Kashmir dispute between Indian and Pakistan is one of the main reasons Pakistan needs to maintain Islamic jihadist groups and resort to an Islamic rhetoric.

Annex A

### **Results of Heteroskedasticity Tests:**

Models	The Breusch-Pagan Test	Koenker Test
1.1, 1.2, 2.1 & 2.2	544.223 significant at 0.01	43.178 significant at 0.01
3 & 4	30.764 significant at 0.01	14.828 significant at 0.01
5 & 6	Did not test significant	Did not test significant

To employ a corrective measure, this study used the heteroskedasticity-consistent standard error estimators in OLS regression models. This procedure was done through the macro developed by Hayes and Cai (2007). Value "3" was assigned for the "Method" while regressions models were run.<sup>35</sup>

<sup>&</sup>lt;sup>35</sup> For a detailed discussion of the four corrective measures possible through the macro, please read Hayes and Cia (2007) (Hayes & Cai, 2007).

### Annex B

### **Model Results**

Model 1: Insurgency 2006-2009

	Model 1.1: Exploded IEDs as Dependent Variable	Model 1.2: ISAF Fatalities as Dependent Variable
Constant	7.686	-0.17
	7.666	1.072
Provinces Bordering Pakistan	56.58***	7.102***
	17.00	2.163
Poppy Cultivation Lagged	0.004	0.001*
	0.003	0.000
Poppy Eradication Lagged	-0.005	0
	0.048	0.006
Electricity Consumer Units	0.000**	0.000***
	0.000	0
R-Square	0.497	0.717
Number of Cases	136	136

### Model 2: Poppy Cultivation 2006-2009

Model 2.1: Exploded IEDs as Independent		Model 2.2: ISAF Fatalities as Independent		
Constant	64.49	Constant	264.526	
	1007.87		849.35	
Exploded IEDs	48.40**	ISAF Fatalities	462.83**	
	25.00		200.22	
Poppy Eradication Lagged	6.779	Poppy Eradication Lagged	4.830	
	7.307		6.448	
Electricity Consumer Units	-0.01	Electricity Consumer Units	-0.033**	
	0.012		0.015	
Provinces Bordering Pakistan	612	Provinces Bordering Pakistan	-867.263	
	2672.483		2040.928	
R-Square	0.433		0.584	
Number of Cases	136		136	

<sup>\*\*\* = 1%, \*\* = 5% &</sup>amp; \* = 10% Confidence Intervals

Numbers below the coefficients are Heteroskedasticity adjusted standard errors.

Model 3: Insurgency 2009-2011: With ISAF Fatalities as Dependent

Variable			
Constant	4.697		
	6.011		
Provinces Bordering Pakistan	6.202		
	5.026		
Poppy Cultivation Lagged	0.001		
	0.001		
Poppy Eradication Lagged	0.039		
	0.041		
National Solidarity Program	0.000		
	0.008		
R-Square	0.853		
Number of Cases	102		

Model 4: Poppy Cultivation 2009-2011: With Poppy Cultivation in

Hectares as Dependent Variable			
Constant	1422.865		
	1332.686		
ISAF Fatalities	254.18***		
	60.276		
Poppy Eradication Lagged	2.589		
	12.951		
National Solidarity Program	-2.686		
	1.830		
Provinces Bordering Pakistan	-627.051		
	1816.771		
R-Square	0.808		
Number of Cases	102		

<sup>\*\*\* = 1%, \*\* = 5% &</sup>amp; \* = 10% Confidence Intervals

Numbers below the coefficients are Heteroskedasticity adjusted standard errors.

Model 5: Insurgency 2010: With ISAF Fatalities as Dependent Variable

(Constant)	-3.386
	6.518
Provinces Bordering Pakistan	13.105**
	5.000
Poppy Cultivation Lagged	0.003***
	0.001
Poppy Eradication Lagged	0.018*
	0.010
National Solidarity Program	0.005
	0.014
Government School Teacher Female	0.000
	0.003
Government School Teacher Male	0.003
	0.004
Government School Student Female	0.000**
	0.000
Government School Student Male	0.000
	0.000
Electricity Consumer Units	0.000**
	0.000
R-Square	0.957
Adjusted R-Square	0.941
Number of Cases	34
*** 10/ ** 50/ 0 * 100/ C	C1 T.

Model 6: Poppy Cultivation: With Poppy Cultivation in Hectares as Dependent Variable

Cultivation in nectares as Dependent variable			
(Constant)	726.942		
	1889.216		
ISAF Fatalities	199.521***		
	45.401		
Poppy Eradication Lagged	2.119		
	2.910		
Electricity Consumer Units	0.001		
	0.045		
National Solidarity Program	0.972		
	4.124		
Government School Teacher Female	-0.168		
	0.957		
Government School Teacher Male	-0.574		
	1.128		
Government School Student Female	0.004		
	0.047		
Government School Student Male	0.003		
	0.035		
Provinces Bordering Pakistan	-1626.933		
	1579.954		
R-Square	0.930		
Adjusted R-Square	0.904		
Number of Cases	34		

<sup>\*\*\* = 1%, \*\* = 5% &</sup>amp; \* = 10% Confidence Intervals

Numbers below the undesterdized coefficients are standard errors.

 $\label{eq:Annex C} \textbf{Result of Models which Excluded Development Indicator}$ 

### **Insurgency 2006-2009**

Constant	12.655*
	6.72
Provinces Bordering Pakistan	52.717***
	15.831
Poppy Cultivation Lagged	0.005
	0.004
Poppy Eradication Lagged	-0.004
	0.048
R-Square	0.490
Number of Cases	136

Constant	1.313
	1.013
Provinces Bordering Pakistan	5.949***
	2.094
Poppy Cultivation Lagged	0.001*
	0.001
Poppy Eradication Lagged	0.000
	0.007
	0.697
	136

## Poppy Cultivation 2006-2009

Exploded IEDs as Independent Variable	ISAF Fatalities as Independent Variable
---------------------------------------	---

-159.752	3	Constant
1065.633	_	
47.973	-	ISAF Fatalities
47.973	_	
822.194	-	Provinces Border
47.973	_	
6.730	-	Poppy Eradication
47.973	_	
0.433	_	
136	-	
	1065.633 47.973 47.973 822.194 47.973 6.730 47.973 0.433	1065.633 47.973 47.973 822.194 47.973 6.730 47.973 0.433

Constant	-386.873
	930.249
ISAF Fatalities	449.780
	177.672
Provinces Bordering Pakistan	-210.704
	1801.837
Poppy Eradication Lagged	4.746
	6.446
	0.577
	136
<del></del>	

<sup>\*\*\* = 1%, \*\* = 5% &</sup>amp; \* = 10% Confidence Intervals

Numbers below the coefficients are Heteroskedasticity adjusted standard errors.

# Insurgency 2009-2011: With ISAF Fatalities as Dependent Variable

# Poppy Cultivation 2009-2011: With Poppy Cultivation in Hectares as Dependent Variable

Constant	4.594***
	1.376
Provinces Bordering Pakistan	6.204
	4.769
Poppy Cultivation Lagged	0.001*
	0.001
Poppy Eradication Lagged	0.039
	0.037
R-Square	0.853
Number of Cases	102

Constant	-580.436
	639.317
ISAF Fatalities	260.962***
	60.032
Provinces Bordering Pakistan	-601.584
	1724.207
Poppy Eradication Lagged	2.101
	12.090
	0.802
	102

<sup>\*\*\* = 1%, \*\* = 5% &</sup>amp; \* = 10%  $\overline{\text{Confidence Intervals}}$ 

Numbers below the coefficients are Heteroskedasticity adjusted standard errors.

### Poppy Cultivation: With Poppy Cultivation in Hectares as Dependent Variable

### -128.441 (Constant) 730.049 **ISAF** Fatalities 205.491\*\*\* 31.286 Provinces Bordering Pakistan -1526.976 1371.492 Poppy Eradication Lagged 1.813 2.210 0.926 R-Square Adjusted R-Square 0.918 Number of Cases 34

# Insurgency 2010: With ISAF Fatalities as Dependent Variable

Tutulities as Dependent	· uriusic
(Constant)	1.494
	2.762
Provinces Bordering Pakistan	12.581**
	4.973
Poppy Cultivation Lagged	0.003***
	0.001
Poppy Eradication Lagged	0.010
	0.009
	0.942
	0.936
	34

<sup>\*\*\* = 1%, \*\* = 5% &</sup>amp; \* = 10% Confidence Intervals

Numbers below the undesterdized coefficients are standard errors.

#### Annex D

Table 1: Exploded IEDs and Provinces Bordering Pakistan

Bordering: Total IED's = 5245 (71.47%), mean= 79.47, max 930

Not bordering: Total IED's = 2093(28.52%), mean= 15.17, max 196

Year	Pearson Correlation	Sig (2-tailed)	N
2004	.585	.01	34
2005	.656	.01	34
2006	.568	.01	34
2007	.605	.01	34
2008	.534	.01	34
2009	.429	.05	34
2004-09	.329	.01	204

Table 2: Poppy Cultivation and Provinces Bordering Pakistan

Poppy cultivation (ha) and Provinces bordering PAK (2004-2009)

Bordering: 619581 ha (71.02%)

Not bordering: 252711 ha (28.98%)

Year	Pearson Correlation	Sig (2-tailed)	N
2004	.421	.05	34
2005	.251	.153	34
2006	.290	.1	34
2007	.314	.1	34
2008	.314	.120	34
2009	.269	.124	34
2004-09	.276	.01	204

Poppy cultivation (ha) and Provinces bordering PAK (2002-2011)

Bordering: 933096 ha (72.87%) of 1280403 ha total

Not bordering: 347307 ha (27.13%)

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