

## **The Costs of War Taking Afghanistan as a Case Study**

A Conference Paper Intended for Presentation at the

Oxford Business and Economics Conference

Oxford University, UK, July 1-2, 2017

M. Siddieq Noorzoy, Emeritus Professor of Economics

Department of Economics, University of Alberta

Edmonton, Alberta, Canada

### **Abstract**

Due to the complexities of the issues coupled with deficiencies in statistical data about the costs of war in Afghanistan this manuscript is a preliminary effort to discuss the issues and offer revisions as more information becomes available. In fact this approach is also adopted by the research team at the Watson Institute at Brown University for the same reason.

The present ongoing war for the past 16 years in Afghanistan and other wars launched by the US following the terrorist attacks on September 11, 2001 have been the longest and most expensive war undertakings. The costs of these wars as a critical constraint to prevent wars have been neglected as well as public discussions about them. Recent studies about the actual and probable costs of the wars to the US particularly the wars in Afghanistan and Iraq have been estimated as much as to range between \$4.8 - \$6 trillion. At the same time there are no comparable studies about the costs of the wars in the countries that have been invaded. This study discusses problems and issues about estimating the costs of the war in Afghanistan as a case study.

The case of Afghanistan is complicated by the fact that there have been two invasions; the first by the former Soviet Union on December 24, 1979 and then by the US-cum-NATO on October 7, 2001. In between there have been several civil wars which clearly have complicated the picture for any direct estimates of the costs of the war for any period, except for the costs of the first invasion which draws on studies of the war for the period 1979-1989 pull together in a book by the author referenced below. The costs of the civil wars cannot be ignored, especially the war during 1992-1996 that caused massive deaths, and destruction in Kabul. The civil wars were also fought with much foreign involvements during 1989-1992, 1992-1996, 1996-2001 all of which have created more costs to Afghanistan.

This paper will discuss the costs of the wars resulting from the invasions. It is also hoped that the rising costs in human lives among other costs will generate motivation for pursuing peace as an alternative to the conflict in solving the unresolved issues among the parties to the war. All wars must end in peace. The present war is called a 'stalemate' by General Nicholson the present Commander of the US-cum-NATO forces in Afghanistan when he testified in front of the US Senate Armed Services Committee in March, 2016. This statement provides strong motivation for both sides to the conflict to reach a peace settlement after 16 years of war. It seems clear that trying to reach a clear 'victory' to impose a peace settlement cannot be the end result of this war. Thus the peace making approach by all sides is the only reasonable option.

## **Introduction**

### **A Brief Background to the Present War**

America along with NATO have been at war in Afghanistan going on for nearly sixteen years. At the present in March, 2017 it seems that this war may be dragged on for more years as the new Administration in Washington is contemplating its policy toward the war. For the past several years especially since the end of combat mission was announced by President Barack Obama on

December 31, 2014 the war in Afghanistan has taken two tracts where a civil war is reignited by the occupation forces substituting Afghan security forces to do the fighting while the US and NATO forces were withdrawing. However, while the training of the Afghan security forces are taking place the US-cum-NATO reduced forces carry out the “assist” part of their change in the war policy through aerial attacks by their forces particularly attacks by Drones, where civilian casualties have also been rising commensurately. It is clear that the costs in human lives to Afghanistan have been significantly rising.

For many years the American people and certainly the vast majority of the Afghan people have demanded an end to this war. The Armed Opposition ( Viz., Taliban ) have repeatedly stated they will carry on with the fighting if occupation continues with foreign troops remaining in Afghanistan. The Taliban as a national movement cannot be confused with any other groups in Afghanistan which are also opposing foreign occupation. At the time of the invasion on October 7, 2001 the Taliban had established a central government in Kabul for five years following the retreat of the several factions that were fighting amongst themselves for the control of the capitol since the fall of the last communist regime in 1992. In late 1996 these factions formed what became known as the Northern Alliance. The US and NATO countries allied themselves with the Northern Alliance against the Taliban in the beginning of the invasion on October 7, 2001. Even before the invasion the CIA was active in supporting the Alliance.

Afghanistan is mostly mountainous, and rural with 78- 80 % of the estimated population of 28-31 million living in some 40,000 villages. Both of these figures are estimates. Full census has not been completed on either the population or its gender and age size distribution or on the number of villages. The wars during both the Soviet and the US led invasions and occupation have been fought in the rural communities and the bulk of the opposition forces have come from the small farmers, peasants, shop keepers, teachers and laborers. Afghanistan does not have an arms industry for defense. Consequently, lightly armed opposition Afghan forces both in case of the Opposition Forces or Freedom Fighters (Mujahideen) during the Soviet war and the Taliban during the US led

war have relied on imported weapons and on the rural communities for the defense of their homes and the country.

In contrast the civil wars have been fought in the urban areas principally in Kabul. These are historical facts make it clear that unless specific studies are done about the impact of the wars fought in the rural communities the costs of what has happened cannot be directly estimated. For the first invasion and war during 1979-1989 there have been studies referenced below and therefore cost estimations have been possible in different areas. However, for the US led war there has been no attempt to estimate the number of villages destroyed through aerial attacks and depopulation of the villages as it had happened during the first invasion. Independent reporters at times were embedded among the Resistance Fighters during the Soviet war. This rarely has taken place during the present war.

UN and Human Rights Organizations have also found it difficult to make full reports. One main indicator during the ongoing war for a short period between 2013-2016 was the number of Internally Displaced Afghans which increased from 630,000 in 2013 to 1.2 million nearly doubling in 2016, mostly going to Kabul the capitol city. This indicated the intensity of the fighting, but, again how many were killed and how many were wounded are not clear.

It has been clear for a while that Afghanistan cannot be controlled through wars. The former Soviet Union experienced the same fate as had the British in several wars in the ninetieth and early twenty century. The present war can only be solved through peace for there is no military solution. Nearly three years ago a report on the war stated that 5.3 million soldiers were rotated for the war in Afghanistan from the Manas Air Base in Kyrgyzstan by the US-cum-NATO and the International Security Assistance Force ( ISAF ) ( 1). This massive force did not bring peace and security since the war continued to the present.

### **The Costs to the Environment**

Below the cost in lives estimated by the Watson Institute at Brown University is cited. Here what it is mentioned that the direct and indirect costs to human lives have not been the only costs. Afghanistan may suffer for decades from these wars due to the damages done to the environment.

What the massive military force and the length of the war have done in Afghanistan requires a study in its own right. Because there were at any time 45-50 countries involved in the war with their different military sizes present in different parts of Afghanistan it becomes an instrumental problem in discovering what each force from each of the countries did in different districts. Afghans have reported the use of open ranges for testing weapons, open burning of toxic materials and the use of proscribed weapons have also been reported in both super power wars in Afghanistan. The direct and indirect costs from these military activities cannot be determined. But, clearly the human and environmental costs are significantly increased. (2).

### **Broad Impacts of the Wars**

The costs of the war are felt in Afghanistan in many areas. The US war led policy has failed to bring security, good governance and development as promised and needed to reduce poverty, or to win the hearts and minds of the Afghan people so often proclaimed by US politicians as a way to end the war, and then pull the troops out of Afghanistan. Public opinion in the US and in the major NATO troop contributing countries have turned against the war and the demands for withdrawing the troops are heard through many surveys in the US ( as carried out repeatedly by PEW, ABC-Washington Post, and CNN) over recent years and in Europe public demonstrations have taken place in many capitals against the war. What is needed is to point out to the high costs of this war and the ultimate objective.

In Afghanistan the demands for peace, and end of occupation have been going on for many years, and the fact that the Armed Opposition ( Taliban, et al ) have gained grounds steadily in the post invasion period especially since 2004/05 is a clear testimony to this fact that the US policy makers are not listening to the demands of the Afghan people suffering from the high costs of this war. Without the support of the Afghan people the Taliban could not hold some 43 % of the territory of Afghanistan.

### **Stalemate**

NATO taking over security from the International Security Assistance Force (ISAF) in 2003 and the expansion of NATO from Kabul the capital, which was the authorized security maintenance area for ISAF according to the UNSC Resolution 1386, December 20, 2001, to the rest of Afghanistan in 2006 intensified the conflict, but, did not change the course of the war. The surge of 30,000 additional US troops in 2009 along with 6,000 more troops from NATO again did not change the course of the war. The US and NATO summit on May 20-21, 2012 in Chicago declared the irreversible policy for the withdrawal of US and NATO troops by the end of 2014. President Barack Obama declared end of combat mission on December 31, 2014. Yet, today there is talk of breaking the stalemate in the war after 16 years through sending more troops rather than to resolve the conflict through peace and end the occupation demanded by the people.

The costs of war in Afghanistan have many different facets. Crisis in governance and the presence of rampant corruption are not the only problems faced by Afghanistan in the post invasion period. There is continued high unemployment of 40-60 percent throughout much of the country and the accompanying high levels of prevalent poverty. Visiting Kabul on a research trip in March 2012 one finds the unemployment rate is much higher in the capitol with five million population, many of whom were officially encouraged to return to Afghanistan and were promised assistance. More than 4.3 million did return from Pakistan and Iran during 2002-2005 and many of them are part of the long term displaced Afghans being unemployed. More than half million Afghans ( Pushtuns) forced to escape the aerial bombardments and night raids from the provinces of Helmand, Kandahar, Uruzgan and other regions in the east are also in the greater Kabul that have added to the huge body of the unemployed in and around the city and have remained unassisted for the whole period. Their appalling conditions are ignored by the regime and by the large contingent of the international community present in the capital Kabul. These IDPs are clear victims of the present war. The costs of the war to them in many areas are costs to the society.

The Director of the UN Office of Coordination of Humanitarian Affairs ( OCHA) recently stated in Kabul that, “more than nine million people in

Afghanistan – one third of the population – are food insecure; an average of 165 children under the age of five die every day; and an Afghan woman dies every two hours due to pregnancy-related causes. In addition, some 450,000 people have been displaced by conflict and natural disasters, and more than 75 per cent of Afghans have been forced from their homes by conflict at least once in their lives”. (3). Office of the UN OCHA, stated that 80 percent of the 1.6 million Afghan refugees in Pakistan do not want to repatriate to Afghanistan due to insecurity, lack of jobs and lack of any kind of official support for resettlement. More recently the following information was provided:

**Continued Crisis, People in Need** : The 2015 Afghanistan Refugee and Returnee Overview UNHCR 515,600 (Pakistani ( Tribal Pushtuns ) refugees, Afghan returnees and undocumented vulnerable returnees)

30,000 Pakistani ( Tribal Pushtuns ) refugee families inside Afghanistan

245,600 Afghan refugee returnees

45,000 Afghan undocumented vulnerable returnees

There are no active plans for solving the problems faced in these situations.

### **The Costs of War Study by the Watson Institute at Brown University**

The humanitarian crisis has intensified every year for the past twelve years during winter months and winter is approaching with 20 out of the 34 provinces inaccessible due to the war for direct humanitarian assistance according to Kabul based UN reports by the Afghan television media. The human costs are rising on a daily basis and so are the monetary costs. Some measure of these costs are given in a recent study titled the **Eisenhower Research Project at the Watson Institute, Brown University (4)**.

A research team of 35 scholars co-directed by Catherine Lutz of Brown University and Neta Crawford of Boston University estimated the human and financial costs of the wars launched by the US following September 11, 2001.

They reported that in Afghanistan between 27,561-42,701 Afghans (civilians, security personnel and “insurgents”) had been killed directly and more than 20,000 have died indirectly due to different war related causes. The total number injured has not been estimated (5). The US attacks on the tribal regions between Afghanistan and Pakistan and the larger effects of the war on Pakistan have led to the death of more than 35,600 “civilians, security and insurgents”. The team’s first estimates were for October, 2001- June, 2011.

In a summary statement it is reported that a minimum number of civilians killed in Afghanistan, Iraq and Pakistan was 138,000 and adding those in uniform and out will raise the number to 236,000 “conservatively”. The team suggests that indirect deaths related to war based causes may raise this number of killed by a factor of four, raising the death toll to 944,000 in these countries. Further, the estimates on the refugees and displaced persons was given as 7,800,000 individuals. The dimensions of the tragedies of the so-called war on terror inflicted on the larger population of these countries cannot be determined for all the facts are not known ( 6).

For the US more than 6,000 soldiers, with 2,156 in Afghanistan, have been killed and more than 550,000 Veterans have been needing care. The financial costs of the three wars against Afghanistan, Iraq and Pakistan, will have been estimated at \$3.2- 4 trillion and will be more if the war continues, and according to this study much of it financed by borrowing thus costing long term interest payments and adding to the \$16 trillion national debt. The US was spending annually some \$120 billion during 2011-2012 and the US Congress authorized another \$86 billion for the war in Afghanistan for 2013 during drawdown of US troops.

Revising the results of their study the WATSON INSTITUTE FOR INTERNATIONAL AND PUBLIC AFFAIRS at Brown University, Providence, RI., provided the following findings:

**Summary of Findings (2001-2016)**

***Some of the Costs of War Project’s main findings include:***



***370,000 people have died due to direct war violence, including armed forces on all sides of the conflicts, contractors, civilians, journalists, and humanitarian workers.***

***It is likely that many times more than 370,000 people have died indirectly in these wars, due to malnutrition, damaged infrastructure, and environmental degradation.***

***200,000 civilians have been killed in direct violence by all parties to these conflicts.***

***Over 6,800 US soldiers have died in the wars.***

***We do not know the full extent of how many US service members returning from these wars became injured or ill while deployed.***

***Many deaths and injuries among US contractors have not been reported as required by law, but it is likely that at least 6,900 have been killed.***

***10.1 million Afghan, Iraqi, and Pakistani people are living as war refugees and internally displaced persons, in grossly inadequate conditions.***

***The US has made an estimated 76 drone strikes in Yemen, making the US arguably at war in that country.***

***The wars have been accompanied by erosions in civil liberties and human rights at home and abroad.***

***The human and economic costs of these wars will continue for decades with some costs, such as the financial costs of US veterans' care, not peaking until mid-century.***

***US government funding of reconstruction efforts in Iraq and Afghanistan has totaled over \$170 billion. Most of those funds have gone towards arming security forces in both countries. Much of the money allocated to humanitarian relief and rebuilding civil society has been lost to fraud, waste, and abuse.***

***The cost for the Iraq and Afghanistan/Pakistan wars totals about \$4.8 trillion. This does not include future interest costs on borrowing for the wars, which will add an estimated \$8 trillion through 2054.***

***The ripple effects on the US economy have also been significant, including job loss and interest rate increases. Both Iraq and Afghanistan continue to rank extremely low in global studies of political freedom.***

***Women in Iraq and Afghanistan are excluded from political power and experience high rates of unemployment and war widowhood.***

***Compelling alternatives to war were scarcely considered in the aftermath of 9/11 or in the discussion about war against Iraq. Some of those alternatives are still available to the US.***

WATSON INSTITUTE FOR INTERNATIONAL AND PUBLIC AFFAIRS,

Providence, RI USA 02912-1970

### ***Alternatives to War***

The team carrying out the work under the Eisenhower Research Project , Cost of War , cite in their summary of findings that the alternative to war was not considered by the Bush Administration before invading Afghanistan and Iraq. In their statement “alternatives to war”, they cite “success of various methods used against groups using terror tactics in 268 cases during 1968-2006” presenting the following results:

- |    |  |     |
|----|--|-----|
| 1) | Peaceful political accommodation                                   | 43% |
| 2) | Intelligence and police methods                                    | 40% |
| 3) | Group achieved its objective by violence and ceased its activities | 10% |
| 4) | Military defeat  | 7%  |

The use of force has not succeeding bringing security or any other objectives of the policy of regime change perused by both the George w. Bush and Barack Obama Administrations. The longest war fought by the US in Afghanistan is in its 16<sup>th</sup> year without any indication when will it end. The main policy objective of the so-called “war on terror” has been to bring regime change in the countries that have been invaded.

### **The Costs of wars in Afghanistan**

The costs of wars studied in the available research fundamentally cover estimated number of deaths due to the war by the US-cum-NATO and the number of number of deaths due to the indirect effects of the war disabled and refugees and “370,000 people have died due to direct war violence, including armed forces on all sides of the conflicts, contractors, civilians, journalists, and humanitarian workers”. And in addition, “It is likely that many times more than 370,000 people have died indirectly in these wars, due to malnutrition, damaged infrastructure, and environmental degradation”. For Afghanistan at least 100,000 Afghans have been killed and more have been wounded.

### **The Periodical Breakdown of the Human Costs of the War Since 2001:**

#### **The Second Invasion by the US-cum-NATO Annual Figures**

**From Wikipedia, the free encyclopedia. The statistical data Wikipedia provides are from different sources and are referenced on its web site. The citations are not reported here. These estimates are taken on face value in the absence of any alternatives. The estimates by the Watson Institute also cite some of the same sources.**

#### **Civilian casualties in the war in Afghanistan (2001–2014)**

##### **Civilian casualties (2001–2003)**

According to Marc W. Herold's extensive database, Dossier on Civilian Victims of United States' Aerial Bombing, between 3,100 and 3,600 civilians were directly killed by U.S. Operation Enduring Freedom bombing and U.S. Special Forces attacks between October 7, 2001 and June 3, 2003. This estimate counts

only "impact deaths" – deaths that occurred in the immediate aftermath of an explosion or shooting – and does not count deaths that occurred later as a result of injuries sustained, or deaths that occurred as an indirect consequence of the U.S. airstrikes and invasion.

### **Civilian and overall casualties (2005)**

An estimated 1,700 people were killed in 2005 according to an Associated Press count, including civilians, insurgents and security forces members.[35][36] Some 600 policemen were killed between Hamid Karzai's election as president of Afghanistan in early December 2004 and mid-May 2005.

### **Civilian and overall casualties (2006)**

A report by Human Rights Watch said that 4,400 Afghans had been killed in 2006, more than 1,000 of them civilians.[38] Some 2,077 militants were killed in Coalition operations between September 1 and December 13.

An Associated Press tally based on reports from Afghan, NATO and coalition officials puts the overall death toll slightly lower, at about 4,000, most of them militants. More than 1,900 people were killed in the first eight months of the year by the end of August.

### **Civilian and overall casualties (2007)**

More than 7,700 people were killed in 2007, including: 1,019 Afghan policemen;[41] 4,478 militants;[42] 1,980 civilians[43] and 232 foreign soldiers.[44]

With by far the most comprehensive research into Afghan civilian casualties,[45] Professor Marc W. Herold of the University of New Hampshire estimated in September 2007 that between 5,700 and 6,500 Afghan civilians had been killed so far in the war by US and NATO military forces.[46] He stressed that this was an "absolute minimum" and probably "a vast underestimate" because the figures do not include: the dead among the tens of thousands of Afghans displaced during the initial military operation in 2001-2002, who ended up in refugee camps or elsewhere with little or no supplies for long periods; civilian

victims of U.S./NATO bombing in mountainous areas, which have few or no communications links or which the U.S./NATO forces "cordon off as part of news management"; and civilians that did not die immediately at the scene but died later of their injuries.

### **Civilian and overall casualties (2008)**

See also: List of civilian casualties in the war in Afghanistan (2008)

The UN Assistance Mission in Afghanistan (UNAMA) reported that 2,118 civilians were killed as a result of armed conflict in Afghanistan in 2008, the highest civilian death toll since the end of the initial 2001 invasion. This represents an increase of about 40 percent over UNAMA's figure of 1,523 civilians killed in 2007.[16][18][19][23]

### **Civilian and overall casualties (2009)**

See also: List of civilian casualties in the war in Afghanistan (2009)

Victims of the Narang night raid that killed at least 10 Afghan civilians, including eight schoolchildren. 2009 was again the most lethal year for Afghan civilians in the American-led war since the fall of the Taliban government in late 2001. According to the UN Assistance Mission in Afghanistan (UNAMA), 2,412 civilians were killed by the war in 2009, a jump of 14% over the number that lost their lives in 2008. An additional 3,566 Afghan civilians were wounded as a result of the war in 2009.[24][25] Of these, UNAMA attributed two-thirds, or 1,630, of the deaths to the action of anti-government forces, around a quarter, 596, of the deaths to action by American-led military forces, and was not able to clearly attribute another 186 civilian deaths to any one side. Airstrikes continued to be the main cause of civilian deaths resulting from US-led military action, with 359 Afghan civilians killed by US/NATO airstrikes in 2009.[25] In its mid-year report, the UNAMA underlined that "if the non-combatant status of one or more victim(s) remains under significant doubt, such deaths are not included in the overall number of civilian casualties. Thus, there is a significant possibility that UNAMA is under-reporting civilian casualties." [51]

## **Civilian and overall casualties (2010)**

See also: List of civilian casualties in the war in Afghanistan (2010)

2010 was again the deadliest year for Afghan civilians in the war since the fall of the Taliban government in late 2001, as insecurity and volatility continued to spread to the northern, eastern, and western regions of Afghanistan.[26][27] According to the UN Assistance Mission in Afghanistan (UNAMA) and the Afghanistan Independent Human Rights Commission (AIHRC), 2,777 Afghan civilians were killed in the war in 2010, a jump of 15% over the civilian toll in 2009.[26][27] Of these, UNAMA/AIHRC attributed 2,080 civilian deaths to insurgents and anti-government elements, representing 74.9% of the 2,777 Afghan civilian deaths they recorded in the war in 2010, and up 28% from 2009. 1,141 or 55% of these deaths were caused by suicide attacks and improvised explosive devices (IEDs). [26][27]

UNAMA/AIHRC attributed 440 (15.9%) of the 2,777 Afghan civilian deaths they recorded for 2010 to U.S.-led military forces, a reduction of 26% from 2009. Of the coalition caused casualties, Airstrikes caused 171, or 39% of these deaths.[26][27] In 9% of the civilian deaths, UNAMA/AIHRC were unable to clearly attribute the cause to any one side.[26][27] In addition to the civilian deaths, a total of 4,343 civilians were documented by UNAMA/AIHRC to have been wounded in the war in 2010, a jump of 22% from 2009.

## **Civilian and overall casualties (2011)[edit]**

See also: List of civilian casualties in the war in Afghanistan (2011)

In the first half of 2011, the U.S.-led war in Afghanistan again brought yet higher numbers of civilian deaths as violence intensified and security spiralled downward. According to UNAMA/AIHRC figures, 1,462 Afghan civilians were killed in the first six months of 2011, another 15% jump over the same period in 2010.[28] UNAMA/AIHRC attributed 1,167 (79.8%) of those deaths as having been caused by insurgents and anti-government elements, up 28% from the same period in 2010.[28] UNAMA/AIHRC attributed 207 Afghan civilian deaths as having been caused by U.S.-led military forces, down 9% from the same period in

2010 and representing 14.2% of the civilian deaths.[28] In 6% of the civilian deaths, UNAMA and AIHRC were unable to clearly attribute the cause to any one side.[28]

For the whole year of 2011, the United Nations reported that the civilian death toll numbered 3,021, a record high. In addition, 4,507 Afghans were wounded.[57] The use of improvised explosive devices (IEDs) increased, with an average of 23 roadside bombs a day which were detonated, discovered, or defused.[57] Suicide attacks also became more complex and sophisticated, targeted killings intensified, ground fighting increased, and civilian deaths from airstrikes also increased.[28]

### **Civilian and overall casualties (2012)[edit]**

See also: List of civilian casualties in the war in Afghanistan (2012)

A 2012 report by the UN Assistance Mission in Afghanistan noted that the number of Afghan civilians killed or injured in 2012 decreased for the first time since the United Nations began keeping track of such figures.[58] 2,769 civilian deaths and 4,821 injuries were reported in 2012.[59]

### **Civilian and overall casualties (2013)[edit]**

The UN recorded 2,969 civilian deaths and 5,669 injuries in 2013.[59]

### **Civilian and overall casualties (2014)[edit]**

See also: List of casualties in the war in Afghanistan (2014)

International aid workers in 2014 were still being targeted in addition to the general population of the country. This was brought home by the death of two Finnish aid workers, who were shot and killed while in a taxi by two gunmen on motorbikes, on 24 July 2014.[60] Overall, according to the UN, 3,710 civilians were killed and 6,825 were wounded in 2014.

## **The Costs of War During the First Invasion and War by the Former Soviet Union**

**December 24, 1979-February 15, 1989**

In a study this author did about the costs of the Soviet invasion and war the approach included several factors. **(7)**

**Appendix From: The Afghan Economy during the Soviet War**

**The Costs of the Russian Led Soviet War Inflicted upon Afghanistan (1979-1989).**

**The Human Costs:**

- I. Estimated Losses in Income and Human Capital from Wrongful Death
- II. Estimated Costs of Rehabilitation of the Disabled Persons
- III. Estimated Costs of Population Dislocation and Resettlement

**Destruction of Property:**

- I. Replacement Costs of Houses Destroyed
- II. Replacement Costs of Villages Destroyed
- III. Replacement Costs of Schools Destroyed
- IV. Loss of Income and Replacement Costs of Animal Stocks Destroyed

**Losses to the Afghan Economy and Society:**

- I. Destruction of the Growth Prospect of the Economy
- II. Losses from Trade Diversion
- III. Losses from Gas Exports and Mineral Exploitations
- IV. All Other Losses Including Destruction of Institutions and Infrastructure, Harm from Millions of Mines Laid, Thousands of Afghan Children Kidnapped for Indoctrination.



## Appendix: Estimating the Costs of War Inflicted upon Afghanistan (1979-1989)

The objective of this section is to obtain an overall estimate of the costs of war inflicted upon Afghanistan as a sum of the components of these costs in different areas. There have been verbal statements about the possible costs from the Russian led Soviet war in the past. However, I am not aware of any estimation of these costs offered to the public for discussion and possible litigation in a court of law. The estimations of the actual and assumed costs are difficult for many reasons including the lack of factual losses experienced by Afghanistan in some areas, whereas in other areas such costs are more easily ascertainable. Several chapters in this book contain estimations of the losses experienced by

Afghanistan based on specific studies covering those areas in the past. Here these estimations along with the costs in other areas are presented in monetary values in terms of the current prices in 2014. Specific segments of these estimations of costs may be questioned and assumptions may be changed. However, the overall argument that Afghanistan and the Afghan people are entitled to war reparations cannot be denied; only the magnitude of the damages may be subject to different assumptions and estimations and therefore different money value assigned to them. There is also the issue of evaluating historical losses in terms of current costs. Given the fact that a certain amount of past income is worth more than the same amount at the present due to the income earning capacity of the income and the utility of its use then the monetary estimations of the costs of losses experienced by the Afghan people probably would be higher than presented here if we had the actual losses experienced in different areas beginning in 1979 following the invasion and converted such losses to present values. The challenge is thrown to those who might argue that these estimations are too high to produce a set of their own estimations in the areas discussed here for comparisons.

Due to the lack of statistical information about some areas affected by the war difficulties are created in measuring the full dimensions of the costs inflicted.

For example, there were reports in 1984 that the Soviet communists had kidnapped 50,000 Afghan children and taken them to the Soviet Union for indoctrination. This issue was even raised at the UN General Assembly in the Fall of 1984 by the US Ambassador Vernon Walters. Yet, there have been no public reports as to the whereabouts of the children ever since. There was also an issue about how many of these children were actually sent by their (communist) parents voluntarily. Thus, estimating a claim for the damage done to the Afghan families and the society becomes problematic. The same kind of problem exists about the large number of anti-personal mines laid by the Red Army. There have been different estimates some by the Pentagon as high as ten million mines were spread in the rural areas and also mines laid by the Red Army as it was retreating. But, how many are still in Afghanistan from the war of 1979-1989 is unknown. The UN demanded from the Red Army to provide the maps of where the mines were present. However, no maps have become available. Furthermore, given the continued state of warfare and the war since October 2001 following the US led invasion have further complicated any estimates of the Russian era mines laid in Afghanistan. The demining efforts of the UN also seems to have disappeared in recent years in the face of new mines being laid by the US and NATO countries since late 2001 following the invasion.

The approach to the measurement of the harm done to the Afghan population from the Russian led Soviet war can be based on the number of Afghans disabled rather than the number of mines laid for actual compensation. However, this does not address any future casualties and the actual source of the mines. The number of Afghans including children disabled during the Russian led Soviet war has been estimated by the UN at 1.5 million including 300,000 children at the time of the Red Army withdrawal in 1989, which form the basis of the demand for compensation. For Afghan individuals disabled since 2001 the need for discovery for finding out which invasion force had laid the mines becomes obvious. These problems as the outcomes of the two invasions within a generation will be with the Afghan society for generations to come if one looks at the discoveries of mines from WWII in many areas in Europe in recent years,

decades later after the end of the war. Clearly the UN led international community has a responsibility here to reduce the danger from these mines.

The tragedy of the Russian led Soviet war against Afghanistan has been that there has been no assessment of the full scale of damages done. For obvious reasons this is a challenging undertaking. Furthermore, evaluating the costs of the damages in different areas as outlined above require in addition to reliable statistical data specialized assumptions to measure the real costs. Both the data and the assumptions may be questioned. The history of war reparations provide a mix and complex picture in the cases of war reparations from Germany-Austria after WWI and from Germany and its allies after WWII not applicable to draw lessons for the case of Afghanistan. In the case of Afghanistan, the country has to be looked at as the victim of “war of aggression” and as such entitled to compensation. This is a legal and moral issue for the World Court and courts in Afghanistan to deal with. Here the concern is about the fact that the Afghan society and economy were harmed in many ways unjustifiably under all international laws leading to the actual demands for war reparations from the Russian Republic for leading the invasion of Afghanistan. The Russian Republic also inherited all the assets of the former Soviet Union including its nuclear weapons, the seat at the UN Security Council and the entire international obligations of that demised empire.

Several chapters in this book have provided estimates of the damages and losses that have taken place. These studies were carried out separately as part of long term interest in doing research on Afghanistan and the Afghan economy. Here they are pulled together for the purpose of offering collective assessment of what had transpired during the Russian led Soviet war against Afghanistan and the decade long occupation of the country. Chapters with relevant statistical data about the damages inflicted on Afghanistan are referenced in each section below.

The Costs of War Inflicted upon Afghanistan (1979-1989).

Population Losses:

First, let us consider the loss in population estimated by the number of Afghans killed (martyred) in the war. In chapter 9 estimates of the number of Afghans killed are given up to 1987. The estimates are based on an earlier study by Marek Sliwinski referenced in the chapter. In that study Sliwinski points out that 85% of the Afghan refugees because of the war were Pushtuns, which clearly meant that the Russian led war was directed mostly against the Pushtun population of Afghanistan who also suffered most of the casualties. My purpose was to change the assumption of zero population growth in his study with the actual growth rate of the population of 2.5% experienced before the invasion to reflect reality more closely. It was further assumed that these losses were experienced until the end of that year. The study by Sliwinski came out with a population loss of 9% until 1987. With the introduction of the growth rate of population the estimated loss turned out to be 10% of the population base killed due to the war up to 1987. Total population losses was estimated as 1,705,304 from a population base of 15.5 million according to the census released in 1979. The monthly number of Afghans killed during January 1, 1980 and December 31, 1987 was estimated by dividing the total killed over the 96 months during the years 1979-1987 resulting in an average of 17,763.583 monthly losses. Other studies cited in chapter 9 showed a range of 1.24-1.50 million were killed between 1978-1987, averaging between 10,333-12,500 per month. These are gruesome figures not to be lightly treated. Clearly they are mentioned here for the purpose of obtaining some idea about the range and possible actual losses in population suffered by Afghanistan. The war continued until February 15, 1989 when the Red Army completed its withdrawal from Afghanistan. This meant the war lasted another 13.5 months during January 1, 1988-February 15, 1989. This implied that there may have been as many as 239,808.37 ( $= 17,763.583 \times 13.5$ ) more Afghans killed until February 15, 1989. Estimating the actual population losses due to the invasion and the war may require population experts to verify the estimates given here. But, for the purpose at hand we will assume that between December 24, 1979 the date of invasion and February 15, 1989 the date of the completion of the Russian troop withdrawal the number of Afghans killed were:

$$1,705,304 + 239,808.37 + 6,000 = 1,951,112.3$$

$$(1/1,1980-31/12,1987)+(1/1,1988-2/15/1989)+(12/24,1979-12/31,1979)$$

The figure of 6,000 loss was estimated just for the month of December 1979 mentioned in the study by Marek Sliwinski. Most sources among the Afghan people state that Afghanistan lost two million of its population as a result of the Russian led Soviet invasion in defending the country. The above aggregated losses come close to the common guestimate confirming the common belief. If the claim of wrongful death due to the war is made in terms of 2014 prices in a minimum of \$100,000 per Afghan martyred then Afghanistan is entitled to demand the sum of \$ 195. 11 billion from the Russian Federation. It is argued here that any actual compensation should be made to the surviving members of the families of those killed. The same overall principle should apply in all the personal compensations made from harm done by the war. Furthermore, the loss in population due to war deaths included those who had achieved different levels of education and skills that the Afghan society and economy also lost due to their wrongful death. Here a minimum of \$10 billion is assumed to have been the costs of the accumulated human capital to the Afghan society which was destroyed from wrongful death of the educated and skilled segment of the population such as those in the educational institutions discussed in Chapter 8, the judicial and administrative and security forces of the country among others like the clergy and scholars of Islamic studies.

Second, consider the problem of the disabled Afghans. The main aspects of this serious problem faced by Afghanistan are discussed in my earlier study:

See, “ Afghanistan’s Children: The Tragic Victims of 30 Years of War”, in Afghanistan-1979-2009 in the Grip of Conflict, Middle East Institute, December 2009, posted on Google search by open sources, April, 20, 2012.

The earlier UN estimate of 1.5 million Afghans having been disabled among which there were 300,000 children may be outdated. This critical problem has continued to be sidelined both due to the continued state of war and the continued excuse that the overwhelming aspects of other major problems faced

by the country prevent or delay such needed work. Clearly the UN as the responsible body for humanitarian work is expected to find solutions for this critical problem. For the purpose of this study a simplified assumption is made that it will take the very minimum of \$25,000 per disabled individual to compensate for his or her rehabilitation and loss of income from disability. Thus, compensation required for the Afghan disabled amount to:

$$1.5 \text{ ( million ) } \times 25,000 = \$ 37.500 \text{ billion}$$

Third , losses to the refugee population over the years continues to be a major social and economic problem observable among the general population especially in Kabul. Estimating losses suffered by the Afghan refugees over three decades is a complex problem. Aside from any estimation procedure there are other issues such as the fact that the refugee population has not stayed static. New refugees have been added over time and the population of the refugees has grown due to new births among the refugees. These issues require much more research. For the purpose of this study the group of refugees during 1979-1989 is the subject of the compensation model.

The UNHCR reports that between 2002 and 2014 5.7 million Afghan refugees have returned to the country and there are still some 2.5 million refugees left in Pakistan and Iran. The total of 8.3 million refugees outside Afghanistan was from both invasions and the civil wars. However, the majority of refugees sought refuge in Pakistan and Iran during the Russian led Soviet war. Between July 1980 and May 1981 alone one million Afghan refugees were added to the million that were present in the first quarter of 1980. By 1987 the number of refugees had risen to 5.7 million. The rate of outflow of refugees was highest during December 1979-January 1987 shown in the table below:

Flows of Afghan Refugees to Pakistan and Iran:

September 1979-August 1987

Date	No. in Pakistan	% Change	No. in Iran	% Change
9/ 1979	193,000	77.06	400,000/workers	-----

12/1979	400,000	107.25	200,000/migrants	-----
7/1980	1,000,000	150.00	N. A.	-----
5/1981	2,000,000	100.00	N.A.	-----
7/1985	2,635,483	31.77	N.A.	-----
12/1986-1/1987	3,231,500	22.62	1,900,500	216.67
8/1987	3,456,569	6.97	2,241,000	17.95

Source: M. Siddieq Noorzoy, *Afghan Refugees*, manuscript, CMES, UC Berkeley, 1988, adapted from Table 2.

The outflow of refugees measured by the percentage changes between periods slowed down in the latter part of 1986 when Michael Gorbachev asked Ronald Reagan for 'help' to get out of Afghanistan at their first summit in Iceland in the Fall of 1986. In 1987 this rate further declined and in 1988 the Geneva Accords on Afghanistan was signed under UN auspices creating an exit door for the Red Army which completed its withdrawal on February 15, 1989.

The data about the Afghan refugees cited above numbering 8.3 million refugees in 2014 does not include the number of Internally Displaced Persons (IDPs) which the UNHCR has estimated to be 631,000. The Table above shows that there were 5,697,569 Afghan refugees and guest workers in Pakistan and Iran. Given the statistical information in the Table at least 5 million of these refugees were socially forcefully dislocated because of the Russian led Soviet war during 1979-1987 and others were added to this status beyond at least until early 1989. Aside from any other issue, these refugees have been entitled to compensation related to the Russian led Soviet invasion and war. Further, if it is assumed that the minimum of \$10,000 is required for each refugee to recover the losses income, educational opportunity, any assets lost, and disutility of the refugee status such as suffering endured and other factors such as illnesses experienced during refugee status, loss of ordinary utility ( enjoyment giving) such as living in one's own environment peacefully unavailable as refugees, uncertainty

and fear experienced, etc. then the amount of compensation needed may be estimated as :  $5,000,000 \times \$10,000 = \$50$  billion.

For many among the refugee a figure of \$10,000 would not be enough to compensate them for what they have lost and experienced. However, this figure is an average and perhaps at a very refined level different amounts may be given to different individuals and families taking into account the kinds of factors mentioned above. Such a measure and even the assumptions may be questioned. However, the fact that the millions of Afghan refugees suffered decades in exile cannot be denied and the conditions imposed upon the refugees require compensation, the principle cannot be denied. The amount of compensation and the actual distribution and finding who among the Afghan refugees are actually entitled will require further research work, something relegated to UNHCR.

### **Real Property Losses**

In Chapter 1, Table 8 shows an estimate of the number of houses destroyed during the war. Further, in the same table estimates of the number of villages destroyed and the number of schools destroyed are also given. These real assets were accumulated by Afghanistan over a long period. They had depreciated and perhaps were in need of repairs. But, again since they were destroyed in the war compensations are required according to some measure of replacement. The bases of the estimations and the assumptions involved for these real assets have been discussed in the writings referenced in Chapter 1. The houses destroyed were mostly rural houses since much of the war was against rural Afghanistan and much of the damage suffered was in the southern provinces where the fighting were heaviest such areas as Kandahar, Khost, Paktia, Paktika, Logar, and other provinces and areas such Pansher, Kunduz, Herat, Kapisa, Nuristan, Konar, Farah in different parts of Afghanistan. This does not imply that many other provinces did not suffer; they did suffer significantly, but, the level of fighting differed and where the fighting was heaviest was also the area that most Afghan became refugees and were killed in the war as Resistance fighters ( Mujahideen) or killed as civilians. This information was largely based on conversations with members of different parties of the Mujahideen during



February 1989 Shora-i-Mushwarati Mujahideen ( Consultative Council of Mujahideen) in Rawalpindi, Pakistan, which established the first government of free Afghanistan in exile.

It is assumed here that the replacement costs of a given house destroyed in terms of 2014 prices amounted to a minimum of \$15,000. This estimate may be considered too low given the house prices in the urban areas such as Kabul running in to several hundred thousand dollars. A basic assumption in estimating the costs inflicted upon Afghanistan has been to base the estimates on a cost foundation that would be hard to reject when and if the actual demand for compensations become reality. It is further assumed that a modest sum of \$10,000 would be required for the rebuilding of the infrastructure of each village destroyed, such as mosques, repairing underground water system as contained in the system of village Karezes ( qanats) and repairing roads, planting trees destroyed etc. Further, \$10,000 would be required to rebuild a rural school that accommodated 200-300 hundred students. Thus, the following would yield in terms required compensations in these areas:

Houses destroyed, 1,045,212 X \$15,000 = \$15.67818 billion

Villages destroyed, 11,418 X \$10,000 = \$114,180,000 million

Schools destroyed, 3,261 X \$10,000 = \$32.610 Million

Replacement costs of other infrastructure destroyed such as roads, buildings, forests, environmental cleanup = \$5 billion

### **Animal Stocks Destroyed**

Agriculture and animal husbandry have always been very important and historically have been the largest sector of the Afghan economy. The major part of the Resistance against the Russian led Soviet war originated from the tens of thousands of villages in rural Afghanistan. In order to defeat the Resistance the Russians decided to destroy the basic means of economic support for the rural communities in the country. The destruction of the farm output carried out in the

form of burning of crops and killing the animal stock were part of their strategy. Thus, the campaign of terror against rural Afghanistan was part of an overall policy. This savage policy was most dramatically witnessed in the destruction of the animal stock of the country. In Chapter 1 Table 9 the statistics about extent of the losses of the animal stocks researched by the Swedish Committee for Afghanistan are given. These statistics show that 65% of the sheep, 67% of the Karakul sheep (yielding Karakul skins for exports), 52% of the cattle, and 31% of horses and even higher numbers of mules and donkeys were killed through the campaign of indiscriminate bombardments of the villages.

Clearly it is very difficult to estimate the replacement costs of these stocks historically. In terms of 2014 prices, considering these losses as losses in capital stock, they may range between \$4-5 billion. In estimating the actual losses one would have to take in to account the amount of income these animal stocks would have produced over their life span which were destroyed. Costs of importing new animal stocks that would adapt to the environmental conditions in Afghanistan would have required added expenditures.

### **Losses Experienced by the Afghan Economy**

The overall losses suffered by the economy consisted of the destruction of the growth prospects that was being experienced during the 1970's. Growth in constant prices was measured at 4.5% annual rate of the GDP between 1971/72 - 1977 according to the World Bank. Chapters 1 and 2 provide discussion about GDP data for the peace period. Any growth experienced during the war years is not available for comparison purposes. However, it was clear that many distortions had taken place in the economy especially in the agriculture sector. Then, there were losses experienced by the Afghan economy from trade diversion to the former Soviet Union from the free world which Afghanistan experienced. Any measurement of this is also problematic due to the lack of any statistical data especially on traded prices of commodities which Afghanistan paid for Soviet goods and received for its exports. Such prices were based on bilateral trade agreements which were mostly kept secret; they were not based on international

commodity prices. As a result there is no question about the loss involved in the terms of trade which was loss in real income for Afghanistan, merely the extent of these losses were not known since prices in the flow of traded commodities between Afghanistan and the Soviet Union were largely unpublished. Only in the case of gas exports some estimates of this kind are available discussed in Chapter 6, Table 1. In that Table the losses involved in the exports of gas during 1979/1980 was estimated to have been \$108.6 million and for the year 1980/1981 it was estimated at \$63.9 million, amounting to an average loss of \$86.25 million per year. The kind of statistical data used to obtain these estimates was not available for any other period. However, since a bilateral agreement was in place between the USSR and Afghanistan even before the invasion it is reasonable to extrapolate the average loss per year for the period of war and occupation, if not for the prior years.

In Chapter 6, Table 2 the statistics shows the historical values of Afghan exports to and imports from the USSR. In 1978/1979 exports from Afghanistan to the USSR jumped from 36.9% of the total exports to 63.6% increasing by 72% which showed the export trade diversion for the year establishing a trend that continued at least to 1990 shown in Chapter 1, Tables 5 and 6. The value of imports from the USSR increased from 34 % in 1977/1978 to 60.8% of the total imports in 1978/1979 a rise of 79%, again establishing a trend that continued to 1990 and later years until the collapse of the last communist regime in 1992. These trade diversions undoubtedly involved adverse terms of trade for the Afghan economy since in any bilateral trade agreement with the USSR Afghanistan had a weak position and the terms given by the USSR were essentially enforced. This was the case with exports of natural gas, the largest export item by Afghanistan to the USSR. The Russians had gained control of the export volume, which in addition to the lower prices for gas exports the quantity of gas exports was not simply a function of the agreed quantity, but, given the fact that Afghan sources reported that the meter for the control of gas exports was placed inside Soviet territory outside Afghan border control the actual quantity of exports could not be verified. Afghanistan started exporting natural gas to the USSR in 1967. In terms of the price differential, many losses were experienced as measured by the

difference of the international gas prices and the prices paid to Afghanistan. There were differences in gas prices paid to Iran by the USSR in comparison with the prices paid to Afghanistan, which were lower. This problem is discussed in Chapter 6. Here the focal point is the losses during the war and occupation years as well as the communist rule.

If it is simply assumed that the Afghan economy experienced the average loss per year in the exports of gas comparable to the average of \$86.25 million for 1979/1981 for the whole period of direct interest comprising the years 1979/1992 when the last communist regime collapsed, then cumulative losses for the years of war and communist rule probably amounted to \$1.039 billion alone from the export of natural gas. The measure of the losses from the trade diversion for the rest of the traded commodities between Afghanistan and the USSR cannot be calculated due to the lack of prices for the traded commodities comparable to the case of gas exports. However, clearly these losses were not insignificant during those years. Furthermore, significant losses were also probably experienced by the Afghan economy when the war whipped out the 4.5% annual rate of growth of GDP experienced during the peaceful year in the decade of the 1970's. For both of these losses together it is assumed here that they amounted to a minimum of \$5 billion for the years 1979/1992. These estimates should be considered as a baseline measure and as such are preliminary. However, much of these estimates are founded on actual losses in different areas based on years of research and findings. Any new findings will in all likelihood show that the losses were greater than estimated in this study. For this reason the estimates here should be considered as the minimum for any legal proceedings for the demand for war damages.

The Estimated Costs of War Inflicted upon Afghanistan during 1979-1989

The Human Costs:

Estimated Losses in Income from Wrongful Death- \$195.11 billion

Estimated Costs Experienced by the Disabled Persons-\$37.50 billion

Estimated Costs of Population Dislocation and Resettlement-\$50.0 billion

Estimated Costs of the Losses in Human Capital -\$10 billion

Destruction of Property:

Replacement Costs of Houses Destroyed- \$10.452 billion

Replacement Costs of Villages Destroyed-\$ 114.180 million

Replacement Costs of Schools Destroyed-\$32.61 million

Replacement Costs of Animal Stocks Destroyed-\$5 billion

Replacement costs of the damage to the infrastructure-\$ 5 billion

### **Losses to the Afghan Economy:**

Destruction of the Growth Prospect of the Economy and

Losses from Trade Diversion-\$ 5 billion

Losses from Gas Exports and Mineral Exploitations Estimated at \$1.039 billion.

There are no estimates on the possible exploitation of mineral resources of Afghanistan. However, there are reasons to believe it did take place. First, in Chapter 7, Table 3 shows the knowledge available to the Russians about the mineral deposits which they along with Afghan geologists helped discover and wrote the 1975 report, the Mineral Resources of Afghanistan, Ministry of Planning, Kabul. Information about the mineral resources and the extent of their presence in different parts of Afghanistan is referenced in Chapter 7 Table 3. Second, in that Chapter Table 2 shows the value of machinery and equipment exported to Afghanistan by the Russians noted in the Table totaling \$ 192.181 million for the years 1979-1984. Nowhere is there any published information in Afghanistan about possible exports of mineral resources to the USSR other than natural gas. This was also the case for the USSR export statistics data to Afghanistan which showed the value of exports of machinery and equipment for mineral exploitation as translated, but, there were no statistics for the years noted on any import of mineral resources to the USSR from Afghanistan. Thus,

the question remains till today, why were there exports of this equipment to Afghanistan taking place, what was the purpose other than mineral exploitation? Clearly, this area requires more research and also if and when the issues are taken to international court of law, the opening of secret trade data between Afghanistan and the former USSR become critical to find out what took place. The surveys for mineral explorations were carried by teams of Afghans and Soviet geologists in prior decades. For the purpose of this study an unknown amount of loss from possible extraction and exports of unrecorded mineral resources is represented by the symbol X and is included in the overall equation measuring losses. All other losses including destruction of institutions, harm from the millions of mines laid, probable use of chemical weapons, tens of thousands of Afghan children kidnapped are given by the symbol Y amount.

Thus, Total losses inflicted on Afghanistan, its economy and society at least amounted to: \$ 319.2478 billion + X +Y. More information in the areas defined by the symbols X and Y are required to monetize the losses experienced by Afghanistan.

### **Some Conclusions**

The human and material losses experienced by the Afghan people and Afghanistan as a result of the Russian led Soviet invasion and war for nearly a decade ( 1979-1989) are summarized here. They cover a wide range of areas. The estimates of these historical losses have been based on past careful research by the author and by others cited in the chapters referenced here. In this Appendix the losses are measured in monetary terms in current prices in 2014. Because of the complexities and the time period involved and other undefined factors affecting, such as emergence of new information, both the estimates of the physical losses cited in this book and the attachment of monetary value to them may be questioned. The first line of defense in such a case is that if better and presumably more accurate information can be provided this author would be happy to incorporate them in a newer edition of the book. In the absence of any such new findings we can still continue to consider these figures preliminary as a

cautionary note until such time as Afghanistan decides to sue for war reparations from the Russian Federation and all others that were involved voluntarily in the invasion and war and no new information has come forth. In the meantime the author would be happy to know about any critical assessments of the arguments and figures presented here.

The arguments for demanding war damages from the US and NATO are also being raised privately by the Afghans. But, there are no concrete data for this kind of scenario. Such demands are complicated by the fact that the war is still going on and the fact that the US has contributed some \$120 billion for the reconstruction of Afghanistan which mostly has gone to waste due to fraud, corruption and mismanagement as widely recognized both by the Afghan people and sources discussing this issue on numerous web sites. For official US statements on these issues see the quarterly reports by the US Special Inspector General for Afghanistan Reconstruction (SIGAR).

---

#### Notes:

- 1) Dan Murphy, "Why Closure of Kyrgyzstan Air Base is Point of no Return for Afghan War", Christian Science Monitor, June 5, 2014.
- 2) There are a number of studies on this topic. See, Bruce G. Richardson, "From the Archives: Biological Warfare in Afghanistan" , "Of a myriad of indignities visited upon the people of Afghanistan by the USSR during their decade-long war, perhaps the most criminally-egregious was the use of biological weapons". Article by the late Bruce Richardson privately circulated during his life time and published by the Afghan media, such as Afghan Post, Dawat.com, and Afghanistan Mirror. These articles were also circulated among the Afghan diaspora.

See, also, Bruce Richardson, "Bacteriological Warfare" , 1/29/2015

[www.Larawbar.com](http://www.Larawbar.com)

- A) On the costs to the environment from the first war was carried out by the UN. See, the Office of the UN OCHA, November 29, 2012.
- B) Costs to the Environment [ in Afghanistan ] UNEP 2003, Nairobi Kenya
- C) Environmental Costs: Watson Institute, Brown University

“The wars in Iraq, Afghanistan, and Pakistan have had a serious impact on the natural environments of these countries. Military vehicles consume petroleum-based fuels at an extremely high rate, with the vehicles used in the war zones having produced many hundreds of thousands of tons of carbon monoxide, nitrogen oxides, hydrocarbons, and sulfur dioxide in addition to CO<sub>2</sub>. Air pollution from military vehicles and weaponry has adversely affected public health among civilians in the war zones and US service members.”

Key Findings: Destruction of military base garbage in burn pits and other military operations have exposed soldiers and civilians to dangerous levels of pollutants.

Deforestation in Afghanistan as a result of illegal logging, particularly by warlords, has destroyed wildlife habitat.”

D ) <http://www.counterpunch.org/2010/01/07/the-war-on-afghanistan-s-environment/> reports on the use of depleted uranium weaponry.

E ) BBC. World News, Wednesday, 29 January, 2003, 09:55 GMT “War 'has ruined Afghan environment” .

(3) UN : Office of the UN OCHA, November 29, 2012

(4)[http://watson.brown.edu/costsofwar/files/cow/styles/figureimage/public/imce/figures/costs-budgetary\\_101416.png?itok=qYekCgok](http://watson.brown.edu/costsofwar/files/cow/styles/figureimage/public/imce/figures/costs-budgetary_101416.png?itok=qYekCgok)

(5) For further study on the costs of war see, **The Three Trillion Dollar War: The True Cost of the Iraq Conflict** , Linda Bilmes, Harvard Kennedy School, and Joseph Stiglitz. Also a follow up article by Linda Bilmes, “The Financial Legacy of Iraq and Afghanistan: How Wartime Spending Decisions Will Constrain Future National Security Budgets”, and, <http://www.hks.harvard.edu/news-events/news/articles/bilmes-iraq-afghan-war-cost-wp>.



(6) See also, <http://www.globalresearch.ca/us-wars-in-afghanistan-iraq-to-cost-6-trillion/5350789>.

( 7) M. Siddieq Noorzoy, **The Afghan Economy during the Soviet War**, [www.Xlibris.com](http://www.Xlibris.com). , April 22, 2016 also on Amazon.