

THE ECONOMIC EFFECTS OF THE SOVIET WAR IN AFGHANISTAN

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I. Introduction

The war of the superpower Soviet Union (SU) against the people of Afghanistan is still continuing. It began indirectly with the communist-backed "coup" of April 1978. But directly the SU has been involved in this war of attrition since the invasion of 1979/80.

The damage done to the Afghan economy by the Soviets is considerable. During the last nine years of the Soviet occupation of Afghanistan, the structure of an already underdeveloped country has been seriously damaged. It is very difficult to estimate these damages the Soviet war has brought on the Afghan economy through exact figures because there is no possibility of surveying the economy by a knowledgeable team of experts. To be sure, the statistical data presented by the Soviets and their clientel, the Afghan government, is completely unreliable. Even data which is published by the International Monetary Fund is unreliable because it is based firstly on projections of the inadequate figures of the pre-Soviet invasion and secondly it is artificially trimmed by the Afghan Communist government. The Afghan government so far has not been interested in stating the actual data of the country's economic indicators.

The data of the Afghan government presented in 1984 to the Asian Development Bank (ADB) showed, for example, the population of Afghanistan as 17.7 million and placed the total gross national product (GNP) 1982 at \$ 3.4 billion (159.7 billion Afghanies, Afs.). According to President Karmal, the growth rate of the economy in 1977/78 (pre-coup year) was only 1%. He claimed that in the first three years of communist rule (1978-1979/80) the GNP increased about 9.5% p.a. during the first two years and about 4% in 1980.

The World Fact Book (prepared by the CIA) on the other hand gives the GNP figure for 1982 as \$ 2.4 billion and the average rate of GNP increase between 1979 and 1984 as 0.2% per year.¹⁾

1 See K. Rafferty: Afghanistan, Economy. In: The Middle East and North Africa, London 1986, p. 261.

This simple example illustrates the discrepancy between the two assessments and underscores the unreliability of the figures which are issued by the Soviet-backed government of Afghanistan. There are, however, possibilities to estimate the losses of the Soviet war imposed on Afghanistan. They could be derived from a comparison of the pre-coup economic figures with the actual economic data taking into account the total losses which the Afghan economy suffered since 1977, especially since 1979/80.

Attempts to estimate the GNP losses in Afghanistan caused by the Soviet war were first made by N. Kamrany (1985) on the basis of the projection of GNP data. He uses the actual GNP of the pre-coup year 1977, which was calculated at 115.53 billion Afs., as the basis of his projections. He considers two options: Option 1 shows a projected GNP for 1985 based on an average growth rate of GNP at 3.47%, option 2 on 7.7%. He compares these two projections of the total population GNP with the total projected population of 15.2 million for the year 1985 and an estimated population displacement of 5.6 million. The result of his calculations shows an estimated loss in GNP of 53.95 billion and 71.74 billion Afs. respectively for the year 1985²⁾ due to the Soviet invasion.

For economists the figures of GNP losses are self-explanatory, since GNP is nothing else than the total production of goods and services in a nation within a certain period of time, e.g. one year. But as a statistic it does not reflect the suffering of the Afghans who have survived the brutal war. Since 1985 the damages of the Soviet war have been accumulating because the Soviets deliberately followed a "scorched earth" strategy to destroy the economic base of the population outside of the Soviet controlled centres. The Afghans were forced to leave their villages and flee primarily to Pakistan and Iran as refugees.

Obviously the effects of this war, which is felt mainly by the civilian population, are tremendous. This paper gives a short assessment of the damages and losses to the Afghan economy. These losses are divided into human population losses, total material losses, and the losses suffered by the export, transportation and communication and other service sectors.

II. Human Population Losses

The total population of Afghanistan was estimated for 1979 at 18.2 million, of

2 See N. M. Kamrany: *The Effect of the Soviet War on the Afghan Economy* (unpublished paper, March 1985).

which 15.6 million were settled and 2.6 million have been nomads. About 17.3% of the settled population lived in urban areas while 82.7% lived in rural communities. The average growth rate of the population over a period of seven years was given by the government at 2.3% per year.³⁾

Within the nine years of Soviet war massive changes in the population took place. Around six million Afghans have fled the country since 1979. The majority of an estimated 3.6 million refugees have settled in Pakistan in 340 settlement camps, mainly in the North West Frontier Province of the country along the Afghan border. The remaining 2.3 million Afghans fled to Iran.⁴⁾ The majority of the refugees (more than 60%) were ordinary Afghans who fled their country and arrived in Pakistan and Iran without any means whatsoever.⁵⁾ They were largely dependant on the help of their tribesmen, on Pakistani and on international relief organizations.

The financial cost of this biggest refugee concentration of the world is figured at more than \$1 million per day, of which some 50% is paid by Pakistan⁶⁾, a country which is already one of the poorest in the world. The main problem is that these millions of refugees will remain in Pakistan until the Russians have withdrawn their armies from Afghanistan. And even then the refugees might stay in Pakistan for as long as the communist government of Kabul remains in power. In comparison the needs of the 2.3 million refugees in Iran who are struggling for their survival cannot be met by the above-mentioned standard of the refugees in Pakistan. They are strictly politically controlled and to some extent ideologically more indoctrinated by the Iranian government than in Pakistan. Some reports indicate that the refugees are even

3 See Government of the Republic of Afghanistan: First Seven Year Economic and Social Development Plan 1355 - 1361 (March 1976 - March 1983), Vol. II, Kabul 1355 (1976), p. 173.

4 Dupree estimates the number of refugees in Iran 1.5 - 2 million. See L. Dupree: The SU and Afghanistan in 1987. In: *Journal of Current History*, October 1987, p. 334. The latest report given by the UN shows the number of refugees in Iran 2.3 million. See Office of the United Nations Coordinator for Humanitarian and Economics Assistance Programmes Relating to Afghanistan: First Consolidated Report, Geneva 1988, p. 60f.

5 See T. Roger: Refugees - a Threat to Stability? In: *Afghans in Exile, Conflict Studies* No. 202, London 1987, p. 3f. D. Wiebe: Vom Flüchtlingslager zur Fluchtsiedlung. Sozio-ökonomische Wandlungen in den afghanischen Flüchtlingslagern. In: E. Grötzbach (Hrsg.): *Neue Beiträge zur Afghanistanforschung*, Liestal 1988, S. 47ff.

6 See D. Braun/K. Ziem: *Afghanistan: Sowjetische Machtpolitik - Islamische Selbstbestimmung*, Baden-Baden 1988, p. 167.

forced to join the Iranian army and have been sent to the Iran-Iraq war front.⁷⁾

Another problem is the displacement of the Afghan population and its migration within the country. Due to the destruction of the villages around 2 million of the rural population moved from rural areas to towns, cities and to more remote mountainous areas. Within the last ten years the population of Kabul grew from 600.000 to 2 million or more, in a city which is heavily guarded by the Soviets and without any major industries that could provide employment for the rural immigrants.

In addition, the figure of the civilian Afghan casualties in this nine-year war is reported to be around 1.2 million dead. The total number of dead (1.2 million), refugees (5.9 million), and otherwise displaced population (2 million) has accumulated in the last eight years to around 9.1 million (see Table 1).

Table 1: Estimated Total Losses and Displacements of Population (Dead, Refugees and Inner-afghan Migration, in million)

Year's End	Refugees			Dead	Inner-afghan Migration	Total Dead and Refugees
	Pakistan	Iran	Total			
1980	1.2	0.2	1.4	0.1	0.2	1.5
1981	2.5	0.2	2.7	0.3	0.4	3.0
1982	2.5	0.3	2.8	0.4	0.5	3.2
1983	2.6	0.3	2.9	0.5	0.6	3.4
1984	2.8	0.6	3.4	0.6	0.8	4.0
1985	3.1	0.7	3.8	0.8	1.0	4.6
1986	3.5	1.2	4.7	0.9	1.2	5.6
1987	3.6	2.0	5.6	1.1	1.5	6.7
1988*	3.6	2.3	5.9	1.2	2.0	7.1

Sources: Estimates are based on different sources. See footnotes 4, 5 and 6

* May 1988

7 See N. Shansab: Soviet Expansion in the Third World. Afghanistan: A Case Study, Silver Spring 1986, p. 114.

The current losses of GNP in Afghanistan caused by the Soviet invasion of the country could be derived from population losses on the basis of the per capita GNP estimation as follows: the total GNP in 1979 (pre-Soviet invasion year) amounted to some 105.37 billion Afs. The population was estimated at 17.85 million including 2.6 million nomads. The actual average growth rate of the GNP for the 10 year period preceding the war (1969 - 1979) was given at 3.8%.⁸⁾ The natural long-term population growth was 2.3%.⁹⁾ According to this information, the per capita GNP for 1979 amounted to 5.975 Afs. Considering the exchange rate of 43.733 Afs./\$ 1 as a period average given by IMF¹⁰⁾, the per capita GNP amounted to \$ 136.6. This information has been taken as the basis for the projection of the potential GNP, potential per capita GNP and GNP losses, respectively for the years 1980 - 1988. The results of these projections are summed up in Table 2.

The calculation shows that the current GNP losses in 1980 - 1988 accumulated to \$ 5.8 billion.¹¹⁾ Since the projection was based on the dollar value of 1979 this figure would be much higher if the current \$-value is considered.

III. Material Losses

Material losses consist among others of losses of industrial and agricultural production and equipment as well as the destruction of livestock, crops, homes, and the material infrastructure.

8 According to the data of the pre-communist government the average annual growth rate of GNP for the period 1969-76 was given at 2.7%. The projected average growth rate for the period 1976-79 was given at 6.3%. See Government of the Republic of Afghanistan, First Seven Year Plan, I. c., p. 3 and p. 27.

9 Ibid.

10 According to the agreement of the government of Afghanistan with IMF, the "Da. Afghanistan Bank" (Central Bank) should adjust the official dollar exchange rate to the free market exchange rate. This rate stood 1979 according to IMF at 43.733 AFS/\$ as the period average. See IMF, International Financial Statistics, Washington 1987, p. 82.

11 This equals 17.1% of the projected accumulated total GNP (col. 4).

Table 2: Potential GNP and GNP Losses 1980-1988^{a)}

Year	Cumulative losses of population in mio ^{b)} (1)	Potential estimated population mio ^{c)} (2)	Potential ^{d)} GNP		Potential GNP CAP ^{e)}		GNP losses ^{f)}	
			bn Afs (3)	bn US-\$ ^{e)} (4)	Afs (5)	US-\$ ^{e)} (6)	bn Afs (7)	US-\$ (8)
1980	1.5	18.260	109.89	2.51274	6.018	137.60	9.027	0.20641
1981	3.0	18.679	114.06	2.60809	6.1063	139.62	18.318	0.41886
1982	3.2	19.108	118.40	2.70733	6.1963	141.68	19.828	0.45338
1983	3.4	19.547	122.84	2.81000	6.2843	143.69	21.366	0.48856
1984	4.0	19.996	127.56	2.91676	6.3792	145.86	25.516	0.58346
1985	4.6	20.455	132.41	3.02769	6.4732	148.01	29.776	0.68087
1986	5.6	20.925	137.44	3.14270	6.5682	150.18	36.781	0.84105
1987	6.7	21.406	142.67	3.26229	6.6649	152.39	44.654	1.02107
1988 ^{h)}	7.1	21.898	148.09	3.38623	6.7627	154.63	48.015	1.09887
Total							253.28	5.7915

Notes: a) based on population losses

b) see table 1

c) estimated population growth rate 2.3% p.a. 1980: population end of 1979 (17.85 mio) + population growth

d) GNP growth rate at 3.8%. 1980: GNP end 1979 (105.87 bn Afs.) + 3.8%

e) in 1979 US-dollar (period average), 1 \$ = 43.733 Afs.

f) col. (3): col. (2) and col. (4): col. (2) respectively

g) col. (1) x col. (5) and col. (1) x col. (6) respectively

h) estimated until the end of the year, since there will be no return of refugee back home

Agricultural Production

Agricultural production in the year 1975/76 can be considered as normal average. There were no extreme weather conditions damaging the production of major crops. This year has also been chosen as the basis for the projection of the First Seven Year Plan. The country showed signs of political stability after the Daud Coup in July, 1973. There was also no fundamental restructuring of agricultural holdings etc.

The country was practically self-sufficient in grain production and exporting many agricultural items. The share of agricultural export to the total export was more than 65%. It is important to keep in mind, that there is no reliable data available from the Russian-backed government of Afghanistan. The government of Afghanistan still claims that no major changes in grain and fruits production have taken place. However the damage to the original dams and irrigations canals, the displacement of approx. 35-40% of the rural population, the destruction of crops and seeds, and the permanent war situation during the last ten years must have led to a decrease in agricultural production of at least 40-50% of the 1975/76 production level. The development of the prices on the main market centers of the country prove that this assessment roughly holds.

According to the report of the United Nations \$ 332.4 million is needed for agricultural inputs, for rehabilitation of traditional and modern irrigation systems, agricultural extension and rural development for 1988/89 only. Due to severe losses of this sector the total cost for the replacement of the damage are considered to be much higher.¹²⁾ Moreover, out of about 3.9 million ha of cultivated land¹³⁾ some 2.6 million ha are irrigated annually.¹⁴⁾ Due to destruction of dams, canals and Kareses (underground water) and due to population exodus from the rural area within the last ten years nearly 60% of the whole land are seriously or totally damaged. Possibly, about half of this land could not be properly irrigated within the next 10 - 20 years. At the beginning of the Soviet invasion the price of one Jirib (0.185 ha) irrigated land was varying

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- 12 This estimation conforms with the estimations reported by the UN which gives the losses of rural population with well over 30% and the negative changes of wheat yield (as major crop) with -54%. See UN: Background Information of Programmes and Projects. Report prepared by the Coordinator for United Nations Humanitarian and Economic Assistance Programmes relating to Afghanistan, New York 1988, p. XII.
 - 13 The total area of the "crop land" figured by the UN as 8 million ha is highly exaggerated.
 - 14 See Government of the Republic of Afghanistan: l.c., p. 59.

between 4000.- to 8000.- Afs. depending on the quality and the location of land. If we assume the average of land price 1979/80 as 6000.- Afs. per Jirib (= 5.4 x 6000.- = 32400.- Afs.) and the loss of the land as 30% of the whole irrigated land, the total losses of land amount to 25.27 billion Afs. which is equivalent to \$ 551.7 million.¹⁵⁾

Although the number of the total population has decreased by over 40% and larger quantities of grain were supplied to Afghanistan each year by the SU, the prices for grain increased to some 600 to 800% in 1987.¹⁶⁾

The production of the country's two main industrial crops, cotton and sugar beet, shows even more drastic changes. The production of cotton in 1982/83 decreased - even according to official figures given by the communist government - to 1/3 of the 1976/77 level and that of sugar beet to 1/5 of the 1976/77 level. It is possible that this production level has been maintained, due to the fact that these production areas are in the northern part of the country in which the Soviet controls have been tighter than in the rest of the country. Another reduction of 5-10% caused mainly by population displacements might show the up-to-date production figures (see Table 4).

Table 3: Production of Grains (in 1000 t)

	1975 / 76 ^{a)} (actual)	1982 / 83 ^{b)} (provisional)	1986 / 87 ^{c)} (estimated)	
			40 %	50 %
Wheat	2850	2860	1140	1425
Corn	780	800	312	340
Rice	435	473	174	217
Barley	384	329	153	169

- a) Government of the Republic of Afghanistan: The Seven Year Plan, l.c., p. 7
 b) The Middle East & North Africa, l.c. p. 268 (These statistics are based on figures given by the Afghan government)
 c) Own estimate

15 As follows: 30% of 2.6 million = 0.78 million ha. 1 ha = 5.4 Jirib at average price of 6000.- Afs/Jirib or 32400.- Afs/ha x 0.78 million ha = 25.27 billion Afs at the rate of 45.8 Afs/\$ (January 1980) = \$ 25.27 billion.

16 According to informations given by the Bazaris of Kabul.

Table 4: Production of Industrial Crops (in 1000 t)

	1975 / 76 (actual)	1982 / 83 (provisional)	1986 / 87 (estimated)
Cotton	160	45	35-45
Sugar beet	100	20	15-20
Sugar cane	57	70	30-40
Oil seeds	40	45	25-30

Sources: see sources of Table 3

There have also been considerable changes in the number of livestock and in the quantity of the livestock products accordingly. Livestock products (especially furs of Karakul sheep) traditionally have been one of the major items of hard currency earnings. Here again, the communist government tries to argue as if everything were normal. It still publishes figures of the pre-invasion time of 1976/76 with no changes. In fact, in 1979/80 the number of livestock decreased considerably due to bad weather conditions as well as to the domestic communist government's agricultural and land tenure policies. However, the livestock population rose 1978 to some 25 million sheep (out of which 7 million were Karakul sheep) and 3.6 million cattle.¹⁷⁾ Since the Soviet invasion the losses have been 32% of the total stock of 20 million. Furthermore, some 10% of cattle and other livestock were taken across the border to Pakistan and Iran by the refugees.¹⁸⁾ The total losses are estimated to some 6.25 million sheep (ca. 30% of the total stock), 0.3 million cattles and 0.15 million other livestock (donkeys, horses, camels etc.)¹⁹⁾ The average price for a sheep is presently (December 1988) 13000,- Afs. for an oxen 70000.- Afs. and the average price of the third group of animals about 60000.- Afs. per head. Considering this average prices the total livestock losses amount to 111.9 billion Afs. which are equivalent to \$ 2.21 billion.²⁰⁾

17 See Government of the Republic of Afghanistan: First Seven Year Plan, l.c., p. 87.

18 See UN: l.c., p. XII.

19 Ibid.

20 $6.3 \times 13000 = 81.900$ billion Afs.

$0.3 \times 7000 = 21.000$ billion Afs.

$0,15 \times 60.000 = 9.000$ billion Afs.

total: 111.9 billion Afs, at 50.6 Afs/\$ = \$ 2.21 billion

Industrial Sector

The material losses of the industrial sector have been relatively minor, since its contribution to the GNP is small. The pre-communist government of Afghanistan declared the share of this sector in the GNP for the year 1975/76 at 3.3%. However, due to the ambitious programs of the government, the production of this sector grew in the periode 1968/69 - 1976/76 at an average rate of more than 9%.²¹⁾

The total investment in this sector during the first four 5-year-plans and the planning investment during the first 7-year-plan amounted to 37.1 billion Afs. (see Table 5).

Table 5: Actual and Planned Investments in Mines and Industries, 1956/57 - 1982/83

Period	billion Afs	in % of plan-expenditure	Rate of exchange ^{a)}	million US-\$
1956 / 57 - 1961 / 62	2.7	26.2	32.35	83.46
1961 / 62 - 1966 / 67	8.5	33.9	32.35	262.75
1967 / 68 - 1971 / 72	5.8	28.9	45.00	128.88
1971 / 72 - 1976 / 77	9.8	31.7	45.00	217.77
1976 / 77 - 1982 / 83 ^{b)}	10.3	6.5	45.00	228.88
Total	37.1			921.74

a) official rate of exchange used by the government

b) planned investments

Sources: A. G. Ghaussy: Grundzüge des vierten Entwicklungsplanes in Afghanistan. In: Afghanistan Journal, Bd. 12 (1976), p. 112ff.; Government of the Republic of Afghanistan: First Seven Year Plan, l.c., p. 19

Although the communist government took over the planning policy of the previous government, the results of its achievements have been negative. After the Soviet invasion of the country, industrial production fell sharply. Although the Soviet-backed government admits the shortage of the production, the figures which are submitted to the Asian Development Bank (ADB) are more than exaggerated.²²⁾ Even this optimistic data shows a considerable decrease of

21 See Government of the Republic of Afghanistan, First Seven Year Plan, l.c., p. 10ff.

22 Rafferty: l.c., p. 269.

Table 6: Major Products of the Industrial Sector

Product		1975 / 76a) (actual)	1982 / 83 ^{b)} (provisional)	1986 / 87 (estimated)
Sugar	1000 t	13.6	1.1	--
Cotton Textiles	million m	64.5	38.6	30
Rayon Textiles	million m	32.4	6.7	--
Woolen Textiles	million m	0.3	0.2	0.1
Vegetable Oil	1000 t	13.5	2.8	--
Cement	1000 t	166.0	107.8	90
Fertilizer	1000 t	62.5	48.3	40

Sources: a) Government of the Republic of Afghanistan: First Seven Year Plan l.c., p. 11f.
b) The Middle East and North Africa, l.c., p. 269

industrial output, especially of sugar, cotton, rayon textiles, and vegetable oil ranging between 40-90% (see Table 6).

New figures are not available. However, according to Western press information, the Mujahedeen and tribesmen have blown up the textile centers of Gulbahar and its electricity networks several times. This industrial center was built by the Germans, who could not repair the damages, since there were no German equipment deliveries to Gulbahar because of the Soviet invasion of Afghanistan.

In the field of mining and mineral resources, the exploitation of solid mineral has been limited. Afghanistan, however, is rich in mineral resources of iron ore, chromium, magnesite (30 million t), copper, uranium, silver, gold, barite, fluorite and a number of other minerals. The reserves of iron ore (2 billion t), copper (7 million t) and chromium are considerable. While the pre-communist government could not exploit many of these important reserves due to the lack of an infrastructure, a large copper melting project was initiated at Logar enabling the country to produce some 2% of the world's copper production. The copper fields are now battlefields since they lie on the Mujahedeen's route to Kabul and the Soviet army's to the south.

The Soviets have started to mine and to transport newly discovered uranium to the SU. The quantities of these shipments and of other minerals are kept secret.

The production of natural gas has been very promising. The figure of its known reserves was given by the pre-communist government at 120 billion

cbm. Some 18.54 billion cbm of natural gas was extracted and exported to the SU until 1970.

Since the invasion of Afghanistan the Soviets have been eager to export large quantities of natural gas to the Southern Republics of the SU. Although the pipelines have been blown up several times by the Mujahedeen, the Soviets could maintain the natural gas shipment to Central Asia at officially declared quantities between 2.5 and 2.8 billion cbm p.a. These shipments have always been beyond Afghan control. According to Western experts the quantities of gas which were pumped from Afghanistan to the SU were more than four times the figures given officially by the Soviet-backed Afghan government.²³⁾ This permits the SU to export gas from the Caspian Sea and Siberia to Western Europe. It needs the cheap Afghan gas as compensation for the lack of development suffered by its Southern Republics. Occupied Afghanistan is considered by the Soviets as a vassal state, whose survival depends on Soviet priorities. This policy is emphasized by the fact that the SU no longer pays for the shipments of Afghan gas to the SU. It deducts the estimated value of the gas from the heavy debts which are owed by the Afghan government and which have accumulated since the invasion.

The SU considers the cost of its military supplies to Afghanistan as new debts of this torn country. These costs have not been published by the Soviets, but due to large shipments of weapons to Afghanistan for the compensation of the losses suffered, and due to heavy losses of the Soviet military actions²⁴⁾, these costs were estimated by Western experts at \$ 12 billion in 1983. In addition the expanded military aid since 1983 has amounted to more than about \$ 2 billion per year²⁵⁾, bringing the total debt of Afghanistan for 1988, according to Soviet

23 See *The Middle East and North Africa, l.c.*, p. 263. This estimation, however, seems to be exaggerated since the capacity of the pipeline was constructed at 5 billion cbm/year.

24 The material costs of the Soviet war in Afghanistan is estimated from 30 to 48 billion until 1986. Its annual expenses runs at about \$ 12 billion. With the delivery of the American Stinger missiles the cost of Soviet helicopter and aircraft losses mounted quickly. According to *Economist Foreign Report* of June 11, 1987 another 600 Stingers had been shipped to the Mujahedeens. A protracted war would ultimately cost the SU \$ 100 billion to \$ 150 billion. See M. Strmecki: *Gorbachev's New Strategy in Afghanistan*. In: *Strategic Review*, Summer 1987, p. 39.

25 See "Sowjetische Ausbeutung afghanischer Bodenschätze". In: *Neue Zürcher Zeitung* vom 18.02.1981. According to this source the price is nearly half of the price of Mexican gas exported to the US in 1979. Iran asked the Soviets to pay for its gas the price of \$ 160 per 1000 cbm, which was rejected by the SU.

interpretation, to more than \$ 22 billion.

The Soviet exploitation of uranium and natural gas from Afghan fields shows the disastrous situation of an occupied country by a super power. While nothing is mentioned by the Soviets relating to uranium shipments from Afghanistan, it is known to the West that in 1980 the Soviet priced the Afghan natural gas at the rate of \$ 83 per 1000 cbm. This was only half of the world rate at that time.²⁶ According to the pre-communist Afghan government, some 18.5 billion cbm of gas were exported to the SU between 1968/69 and 1975/76, which averages to a shipment of 3.7 billion cbm per year.²⁷ From 1976/77 to 1979/80 the officially stated gas exports to the SU were 3.2 billion cbm per year²⁸, totalling for the three year period an export of 9.6 billion cbm.

If - due to the war situation - one takes a minimum of an average export quantity of 2.65 billion cbm (2.5 + 2.8 : 2) per year, the total gas exports to the SU amount to 23.85 billion cbm for the nine years of the Soviet occupation of Afghanistan. Thus, the total shipment of natural gas from Afghanistan to the SU during the whole period of 1976/77 to 1988/89 amounted to some 55.9 billion cbm.

Since the prices of gas vary from year to year, it is very difficult to calculate the exact losses of the exploitation of gas from Afghanistan. Taking the official export figures, they might roughly range from \$ 200 - 350 million.

Apart from these losses to the Afghan economy, the SU follows a deliberate policy of exploitation that damages the future of the Afghan economy. Here again, the energy resources of Afghanistan present a clear example. The SU has given Afghanistan loans for the exploitation of oil and natural gas. But the total actual domestic consumption of natural gas in Afghanistan was given at about 150 million cbm for 1975/76. The projection for 1982/83 had been 240 million cbm²⁹, only. This means an annual domestic consumption which adds up to some 5 - 7% of the officially quoted export quantities to the SU. The domestic consumption represents the use of natural gas for production of fertilizers and the thermal power plant in Masare Scharif. But according to informations received from within the country both plants are not producing at full capacity.

26 See "Russia and the Afghan Economy". In: Wall Street Journal, September 19, 1987. The well informed MEED, London, gives for 1983 a figure of \$ 120 per 1000 cbm, which is considerably lower than the price the SU received from its exports to Western Europe. See *The Middle East and North Africa, l.c.*, p. 265.

27 See Government of the Republic of Afghanistan: First Seven Year Plan, l.c., p. 12.

28 Ibid: p. 141.

29 Ibid.

The construction of pipelines transporting the natural gas for heating purposes to the capital Kabul (with a present population of 2 million people) had been rejected by the Soviets earlier. Kabul is short of energy resources for industrial production as well as for household use. The temperature in Kabul drops to nearly -20 to -30 degrees Celsius (-4 to -22 degrees Fahrenheit) in Winter. In the past the exclusive use of wood and charcoal led to irreversible ecological damages to the whole region of the country from which wood and charcoal was obtained. Plans to built pipeline connections from the production areas of natural gas to the main consumption center, Kabul, has been rejected by the SU. These pipelines could have releaved the exploitation of wood and charcoal resources and at the same time solved the problem of Kabul's energy shortage.

As previously stated, the presently known reserves of natural gas come to 120-150 billion cbm. According to our calculation, the Soviets pumped about 51.9 billion cbm of gas to the SU.³⁰⁾ Thus, for the whole period since beginning of the extraction of Afghan natural gas, some 33 to 45% of the total reserves have been exploited by the SU.

Since there is no possibility to construct a pipeline to Kabul within the next future³¹⁾, and since the country's obligation to repay the Soviet loans from the proceeds of the gas remains, only limited quantities of natural gas which could finance the future development of the country remain. The result is that the SU, even in the pre-war period, invested to explore and to extract natural gas for its own needs, at the expense of Afghanistan, leaving the Afghan people with a huge burden of debts.³²⁾

30 As follows: 1968/69 - 75/76 18.5 billion cbm. 1975/76 - 79/80 12.8 billion cbm. 1979/80 - 88/89 23.8 billion cbm = 55.1 billion cbm

For export figures of 1968/68 - 1979/88 see Government of the Republic of Afghanistan: First Seven Year Plan, I. c., p. 141.

31 After the withdrawal of the Soviet troops, the main problem is to meet the relief and rehabilitation needs of the population and to focus the financial means to the voluntary repatriation of the refugees, to food aid, to immediate repair and reconstruction of the damaged sectors of the economy.

32 One of the main economic reasons for the creation of the new province of Sari Pul (March 1988), which is supposed to be newly created from the flatter parts of the existing northern provinces, is the Soviet attempt to keep the rich energy province of Juszjan & Balkh under the control of a possible new Soviet-backed puppet communist government of the province. This possibility - which would injure the Geneva Agreement - could be actualized in case of the communist loss of the central government of Kabul during or after the agreed withdrawal of the Soviet forces from Afghanistan.

IV. Losses of the Export Sector

Since the beginning of the economic activities of the SU in Afghanistan, the Soviets have tried to shift the mainstream of Afghan trade from the world markets to those of the SU. The share of Afghan exports to the SU rose from around 30% in the 1950s to some 60% in 1980, and Afghan imports from the SU rose in the same period from 34% to more than 54%.³³⁾

After the communist coup in 1978, trade relations with the SU were intensified. The Soviet invasion finally brought the bulk of Afghan exports and imports under Soviet control. According to Afghan officials, more than 60% of Afghan foreign trade is now with the SU. The country imports 84% of its machinery, some 65% of its cotton fabrics, around 95 to 100% of its petroleum products and of sugar from the SU.³⁴⁾

The major markets for hard currency earnings of Afghanistan have traditionally been West Germany, Great Britain and the USA. In 1980, exports to West Germany came to \$ 37 million and to Great Britain to \$ 41 million. Exports to the European Community (EC) amounted to well over \$ 101 million, constituting some 30% of the total exports of \$ 336 million. Its imports from EC for the same period were approx. \$ 58 million, leaving a comfortable surplus of \$ 43 million.³⁴⁾ Afghanistan's foreign exchange reserves (minus gold) which reached their peak with \$ 445 million at the end of 1979 fell in 1987 to \$ 261 million.³⁶⁾

While today only carpet exports to West Germany are worth mentioning, the rest of the other main items for hard currency earnings such as Karakul furs, cotton etc., are forced to be sold in Soviet auctions or channeled through the Soviet agencies to Western Europe. These hard currencies are then proceeds of Afghan commodities for the Soviet government, which needs this foreign exchange badly.

The nearly complete isolation of Afghanistan from the Western markets bears big problems for the future exports of the country to the West, because

33 For the figures of the Fifties see E. Rhein and A. G. Ghaussy: *Die wirtschaftliche Entwicklung Afghanistans von 1880 - 1965*, Opladen 1965, p. 205; for 1980 see "The Middle East and North Africa", *l.c.*, p. 265.

34 *Ibid.*

35 The Economist Intelligens Unit (EIU), *The Quarterly Economic Review of Bangla Desh and Afghanistan*, Annual Supplement 1981, No. III/35, p. 27.

36 IMF: *International Financial Statistics*, Vol. XL, No. 12, Washington D.C. 1987, p. 82.

experiences show that it is very difficult to regain the Western markets once they have been lost to competitors. Exactly this has happened to Afghanistan during the last ten years.

V. Other Sectors

Apart from the losses suffered in the agricultural, the industrial, and the export sector, damages which were caused to the transportation system by the Soviet war should be mentioned. The investments of the three Five-Year-Plans and those of the first Seven-Year-Plan concentrated mainly on the construction of road systems, airports, and communication systems. The investments helped to build a road system of a total length of 17.000 km, out of which 9.200 km were allweather-roads.³⁷⁾

The total investment in the road system amounted to 76.5 billion Afs. during these Plans (\$ 1.82 billion). But even these investments do not represent the correct total expenditures in the road system, because they were invested before the First Plan (1956/57 - 1961/62), and the investments after 1982/83 are not included in this figure. Furthermore, many of the asphalted roads were donated by foreign governments as foreign aid. The USA, for example, donated the Kabul - Kandahar Highway (480 km). The USSR donated the major part of the Kushka/Kandahar Highway (680 km).³⁸⁾ The same could be said about the communication system which was partly financed by development credits and partly by the donation of the German government.

It is again very difficult to estimate the losses suffered by these two sectors. The road system and the smaller airfields have been damaged primarily by Soviet tanks and bombing. Its maintenance was impossible due to the war situation. At least 30% of the total investment is needed in order to help a recovering of the losses suffered, and to repair the system so that it can be maintained in its original stand. These estimated costs amount to a minimum of \$ 584 million.

37 See Government of the Republic of Afghanistan: First Seven Year Plan, l.c., p. 187.

38 This highway - popular as tank route - was constructed with a loading capacity of 80 tons, while some 85-90% of the Afghan trucks had a transport capacity up to 8 tons. Larger trucks with a capacity of 10 - 20 tons were in service after 1970 only.

Table 7: Actual and Planned Investments in Transportation and Communication Sector 1956/57 - 1982/83

	billion Afs.	in % of plan expenditures	rate of ^{a)} exchange Afs/\$	million US-\$
1956 / 57 - 61 / 62	5.1	49.5	32.35	157.6
1961 / 62 - 66 / 67	9.6	38.5	32.35	296.7
1966 / 67 - 71 / 72	3.4	16.0	45.00	75.5
1971 / 72 - 76 / 77	2.9	9.4	45.00	64.4
1976 / 77 - 82 / 83	55.0 ^{b)}	26.8	45.00	1222.2
Total	76.5			1816.4

a) Official rate of exchange used by the government

b) planned investments

Sources: A. G. Ghaussy: Grundzüge des Vierten Entwicklungsplanes in Afghanistan. In: Afghanistan Journal, Bd. 112 (1976), p. 112ff.; Government of the Republic of Afghanistan: Seven Year Plan, l.c., p. 45

Another of the important losses suffered by Afghanistan is the loss of foreign exchange revenues resulting from tourism. In the past, the climate and the natural beauty of the country attracted many tourists from abroad. The foreign exchange revenue from tourism before the communist coup amounted to some \$ 15 million a year. With the construction of new tourist facilities and services, the former government projected an income of nearly \$ 20 million a year.³⁹⁾ This whole projected income has not been proceeded, because the Soviets do not permit any foreigners to enter the country. The losses during the past ten years may have come to some \$ 200 million.

Apart of these sectoral losses some 150.000 homes in the towns were totally damaged and ruined by bombing and levelling of the whole village in the combat areas by the Soviet troops. Considering that 1980 the average value of each home in the villages was around 50 000.- Afs.⁴⁰⁾ and in the towns around 100.000.- Afs., the total losses amount to some 115 billion Afs. which are equivalent to \$ 2.51 billion.⁴¹⁾

39 Government of the Republic of Afghanistan: First Seven Year Plan, l. c., p. 193

40 Consisting of 2 mud rooms providing shelter for an average family of 5 persons and a shed livestock.

41 At the rate of 45.8 Afs/\$ in 1980 as period average.

The damages to schools, hospitals community development centers etc. are very difficult to be figured exactly. The recovery of these social services sector is roughly estimated by the UN to \$ 252 million.⁴²⁾

VI. Summary and Outlook

The material losses the Soviet war has caused the Afghan economy to suffer have been tremendous. As estimated above, the total losses exceed well over \$ 12 billion, as follows:

Current cumulative GNP losses	\$ 5.80	billion
Stock losses in different sectors:		
Land losses	\$ 0.55	billion
Agricultural sector	\$ 2.54	billion
Industrial sector	\$ 0.92	billion
Exploitation of natural gas	\$ 0.20-0.35	billion
Service industries	\$ 0.20	billion
Education & health	\$ 0.25	billion
Transportation	\$ 0.58	billion
Homes	\$ 2.51	billion
Total	\$ 12.75-12.9	billion

Considering, furthermore, the losses suffered by the Afghan government due to its military operations, the total losses to the Afghan economy is much higher. There are, however, no data on such losses.

Apart from these material losses, the Soviets have plundered the historical treasures of tremendous value, e.g. the treasures of the rich Kabul museums as well as the fabulous gold of Tiltapa, of which a selection was taken to the SU. According to L. Zecchini, who reported of this plundering, the value of the whole treasure is inestimable.⁴³⁾ The same is true for other plundered objects of the rich Afghan history and culture.

42 See UN: l.c., p. 14.

43 The treasures of Tiltapa discovered 1978 near the city of Shiberghan are consisting of around 21.000 pieces of gold, some of them ornamented with turquoise. The treasure is dated back to the period of Grecco-Bactrian culture. The value of the golden chamois only is reported to be more than \$ 5 million. The value of few other pieces might be even higher. For this report see L. Zecchini: Die Sowjets plündern afghanische Kunstschatze. In: Rheinischer Merkur / Christ und Welt, May 27, 1988, p. 17.

The destruction of the Afghan economy and culture is caused by the forceful invasion of the Soviet army in Afghanistan. Thus, primarily the SU is responsible for the recovery of the damages caused by their own war. However, the question remains unclear, whether, after the complete withdrawal of Soviet troops from Afghanistan, the present government could remain in power, and in case of its overthrow by the resistance, whether active Soviet cooperation is wanted by a new Afghan government. Therefore, the whole rich international community is asked to contribute financial assistance for the reconstruction and new development of Afghanistan. The USA had supported the Afghan resistance in Pakistan from 1983 - 1987 with some \$ 1.65 billion.⁴⁴⁾ Saudi Arabia contributed some \$ 500 million in 1987 alone. If the war was able to be financed with such sums, then why should the international communities not finance the peaceful reconstruction of a poor country, which was destructed by a superpower.⁴⁵⁾ Immediately after the agreement of April 1988 upon the withdrawal of the Soviet troops from Afghanistan, the Secretary General of the UN appealed to the member countries to contribute to the Emergency Trust Fund for Afghanistan opened on June 24. It was amounted to \$ 1.16 billion which was raised to 1.6 billion. This fund should finance the immediate relief and rehabilitation phase of the first 18 month. The initiative was responded by the donor countries promptly. Their total pledges reached at the end of August \$ 96.7 million.⁴⁶⁾

Even in case of a major financial contribution by the rich countries of the West, the biggest problem for the economic and cultural reconstruction and development of a new Afghanistan is still the human factor. The majority of educated Afghans (who are now in Western countries) had fled their own country. A great number of the "intelligentsia" was killed by the communists. The education of a new generation would take at least 15 to 20 years of time. But the most severe problem is that the country has been torn apart and divided. On the one hand, there are people left with systematic Soviet indoctrination and with faith in the communists. On the other hand, several groups of the Muslim

44 This assistance had increased with strong backing of the Congress to \$ 30 million in 1983, \$ 120 million in 1984, \$ 250 in 1985, and \$ 600 in 1986. See D. Oberdorfer: Pulling Out of Afghan Quagmire. In: International Herald Tribune, April 18, 1988, p. 5. For the year 1987 the assistance was reported to be some \$ 650 million.

45 The German government already announced its readiness to contribute to the reconstruction of Afghanistan after complete Soviet withdrawal. See Frankfurter Allgemeine Zeitung: May 17, 1988.

46 See UN: l.c., p. 4f.

fundamentalists might well take over power as soon as the Soviets withdraw. There is no understanding between communists and fundamentalists at all. The only hope is that the people of the country come together under their domestic leadership and form a joint government for a transitional period that should be led by reason and not by ideological indoctrination. This government could form a new constitution and ask the traditional assembly of the elder (*Loya Jirga*) for the approval of this constitution. In the past history of the Afghans this has been the traditional way of finding solutions. Whether this system will work again, despite the animosities of the different groups which are supported and influenced by the interests of the neighbouring countries (Pakistan, Iran), and despite the born inclination of the Afghan leaders to practice individualism and particularism, remains to be seen. The Afghan people might go on suffering as long as the integrity and unity of the country has not been achieved.