Integrity in Reconstruction

Afghan roads reconstruction: deconstruction of a lucrative assistance

Afghanistan 2007
Report Author

Lorenzo Delesgues

Tiri

Tiri is an international NGO based in London that partners with civil society, governments, and business to create networks of committed change agents dedicated to strategic integrity reform. Tiri is an incubator and facilitates innovative reforms and provides a critical learning platform to disseminate cutting-edge experiences.

This paper is part of a series of eight studies of post-war reconstruction countries commissioned by Tiri and funded by the Norwegian Ministry for Foreign Affairs and the Foundation Open Society Institute. All studies are accessible on www.tiri.org

Eight local policy centres undertook research using a shared terms of reference. The countries covered are Afghanistan, Bosnia Herzegovina, Kosovo, Lebanon, Mozambique, Palestine, Sierra Leone, Timor Leste. The research is the basis for an advocacy and monitoring agenda to promote integrity in reconstruction both within the eight countries and internationally. Together, these groups form the Network for Integrity in Reconstruction (NIR).

All material contained in this survey was believed to be accurate as of January 10th, 2007. Every effort has been made to verify the information contained herein, including allegation. Nevertheless, Tiri does not accept the responsibility for the consequences of the use of this information for other purposes or in other contexts.
Integrity Watch Afghanistan

The goal of Integrity Watch Afghanistan is to "increase transparency, integrity and accountability in Afghanistan through the provision of policy-oriented research, development of training tools and facilitation of policy dialogue” putting corruption under the spotlight so that society and policy makers can engage in dialogue and develop solutions. IWA has already produced the first research on integrity issues specific to the Afghan context and has also been able to put together a competent and committed team composed mostly of highly skilled Afghan researchers. IWA is committed to function as an independent and accountable organization and thus all strategies and programmatic activities of IWA will be directed by an executive under the guidance of a board composed of well-respected Afghan and international personalities of high integrity. IWA’s board is composed mainly by Afghans who represent two thirds of its members and internationals representing the other third.

For further information see: www.iwaweb.org
Introduction

Road reconstruction is the second absorber of aid money after security expenditures. This can be explained due to the high priority that was given to the construction of roads as a catalyst for economic growth, security improvements and, more specifically, integration of isolated parts of the country.

Due to the insecurity, high political pressure was exerted for road construction, as illustrates Lt. Gen. Karl Eikenberry, American military commander in Afghanistan: "Wherever the road ends, that's where the Taliban starts." This political strain has led to pressuring the contractors and donor agencies to achieve quick results for symbolic roads like Kabul-Kandahar or Kabul’s airport road Bibi Mahro. The major consequence of this policy has been the tolerance of less-cost effective road constructions programs. This tolerance could be acceptable if the pace of work or the quality of the final products were effectively higher; this has not been the case for most of the road projects. In the first part, this case study analyzes how the design and marketing of a road construction project sometimes paved the way for wasting aid money or serving private interests. We will further identify the perverse effect and additional derivative costs caused by the Afghan post-conflict situation, factors contributing to an increase in the final costs of the roads. Finally, we will shed light on the impact of the sub-contracting chains on the real cost and sustainability of road projects.

Public documents, reports and in-depth interviews with staff from the public and private sector who worked on constructing roads have been used for our analysis.

Objectives of the study:

- Analyze the marketing techniques used by contractors in order to justify inflated expenses to the donors;
- Evaluate post-conflict factors impacting road construction cost;
- Evaluate the consequences of subcontracting and monitoring weaknesses in roads construction.

1) Marketing techniques used to justify higher costs:

The construction companies use public consultations with beneficiaries as a marketing technique to attract donor support. The road construction companies have to satisfy and consider stakeholders such as the communities living along the road, the government and the donor agencies in order to gain support for their projects. The construction companies, in the first stage of selling the project to the donor community, try to show that all the beneficiaries of the project have been consulted prior to the initiation of the project and that they have their support for the project. With greater buy-in or interest among the beneficiaries, there is greater interest among the donors to support the specific project. Once this is achieved, the company has ensured the donor support and can easily justify higher costs for the projects. Some illustrations of these marketing techniques and their potential impact on the costs of the project are:

- Various companies often use new construction techniques and technologies as a marketing tool to illustrate that quality roads can be built quickly and effectively. In Afghanistan, certain companies have apparently developed new types of paving materials and new techniques to do de-mining as incongruous as it may seem:
"The extremely short time for construction and limited maintenance budgets required Berger to develop long-lasting paving materials. In response, the Team designed an asphalt treated base using screened river run gravel treated with Chemcrete."

"Afghanistan has more landmines than any other nation, and one of Berger's most difficult challenges was clearing the highway and surrounding areas. To swiftly secure these areas, Berger used an innovative method of mine detection. Team members collected air samples from the site and sent them to a lab, where mine-sniffing dogs identified high-priority areas for de-miners."

The political pressure and the abundance of money for emergency reconstruction could justify the cost of these new techniques. These "innovations", taken from public documents, illustrate a phenomenon which results in additional spending rather than cost effective road building. They allow the prime contractor, who is paid a percentage of the total sum of the contract, to earn more money.

- Another method often used for attracting the donors and local authorities’ support is to show appealing but unrealistic project simulations. Film and 3D documents with attractive backgrounds have helped in the awarding of the costly project. The Bibi Mahro road, a 2.83 km long strategic and symbolic road, which was originally built a couple decades ago, was re- asphalted in 1991, after the fall of the Taliban. This road, which connects the Centre of Kabul to its International airport, was one of the best-conserved roads in Kabul. The following screen shots of Bibi Mahro road (Fig.1-2) are taken from public documents available on the Internet site of a construction company showing successful projects. For the Bibi Mahro project, the construction company seems to be showing a futuristic road most likely designed for a place like Dubai, instead of developing a model for Kabul. Figure 3 is a picture of the road showing the completed work. The final picture of the road does not shed light on the quality of the road execution. A digital picture (Fig 4) of the road, however, shows that the final product is nowhere close to the stimulation that was developed for this road.

According to various informants, the cost of upgrading the Bibi Mahro road was higher than USD 2,400,000 per kilometer. The total project cost was apparently higher then USD 7 million. Apparently the cost of upgrading Bibi Mahro road was ten times the cost of other road construction projects in Afghanistan. The average cost of road construction in Afghanistan is between USD 123,000 and USD 589,000 per kilometre. These variations are due to technical difficulties (isolation, mountains) and security constraints. In the case of Bibi Mahro, however, none of the factors contributing to high costs existed, as the location of the road is in the centre of Kabul city, close to the diplomatic area.

---

2 Ibid.
4 IWA Interview, 30/10/2005. According to high government official the Bibi Mahro road was asphalted in one week in 1991.
5 The higher end of cost for building Kabul-Kandahar highway was USD 589 000 per kilometer. This cost has been heavily criticized. See the W. Byrd, Managing public finance for development, World Bank, December 2005.
Figure 1-2: Future visions for the Bibi Mahro road to Kabul airport marketed as "the Gateway to Afghanistan".  

Source: Louis Berger web page.

Figure 3: Picture of Bibi Mahro completed work  

Source: Final USAID update report of Bibi Mahro Road

The road was constructed with USAID funding. The Louis Berger Group (LBG) was the prime contractor. The contract documents were signed at the United Nation Office Project Support (UNOPS) office on the 21st of June 2005. Apparently, the role of UNOPS in this project was to hire the staff. The project was completed in April of 2006 and handed over to the Kabul municipality in mid-April 2006. Very few public reports exist about this project and no project evaluation has been made public.

2) Post-conflict factor, an argument affecting the final cost of roads:

The cost factor of building a road is dependent on its geopolitical environment. The security threat due to the post-conflict situation is considered a major element contributing to increasing the cost of road construction. The cost of security can represent up to 15% of the total expenses of a road construction. For example, one of the major factors for the high cost of building the Kabul-Kandahar road was attributed to security risks control. Apparently, the security systems on the road construction were not able to create an island of security

---

6 USAID, Road Update, March 30-April 19 2006, p.2
8 World Bank, W.Byrd, Managing Public Finance for development, Volume IV, December 2005, p.107
around the building sites. In order to achieve this goal, it appears that security companies and road contractors have paid local commanders and warlords to ensure temporary security along the road construction sites. These unaccounted transactions directly nourished the Afghan parallel illicit economy.

Another factor contributing to the high cost of road construction is the import of construction materials and equipment from distant places rather than regional markets, sometimes due to strict deadlines or political considerations. The unit cost, at the bidding level, for materials in Afghanistan is 32% higher than in Central Asia and 45% higher than in Pakistan, suggesting an inflation of construction costs starting at the bidding level. The low level of quality materials available in Afghanistan, due to the post-conflict economic settings, is a pretext for exportation abuses even for basic materials. For example, USAID is prohibited from importing liquid asphalt from Iran but may import the material from Egypt. In another example, a World Bank financed project, the asphalt was imported from Turkey.

3) Sub-contracting chains

A World Bank study clearly identifies the sub-contracting impact on the final cost and quality of the construction. The time pressure is one of the main factors encouraging subcontracting chains. The multiplication of actors reduces the funds available for the construction work and results in the use of scarce quality materials. These intricacies, as well as the lack of oversight and poor project monitoring mechanisms, lead to inefficacies in the sub-contracting chain.

- Multiplication of intermediaries

Increasing the cost of the road construction allows the prime contractor to increase the sum of its overhead. The overhead is calculated as a percentage of the overall cost of the project. As a consequence, if the project is then subcontracted, which has often been the case during the construction of roads in Afghanistan, each contractor of the subcontracting chain will keep their part of the “overhead” and the final amount of money effectively used to construct the road will diminish.

In the case of USAID provincial roads, UNOPS was contracted to act as an intermediary between USAID and the prime subcontractor. For this role, UNOPS would apparently get an overhead of 10 to 15%. The role of UNOPS would mainly be to hire the engineers and pay their salaries. There is deep questioning regarding the procedures used to hire these engineers and their qualifications. It appears that, in certain cases, the hiring process is subcontracted to private companies creating opacity and presenting opportunities for lack of accountability in the hiring process. The subcontracting chain also affects the capacity of the donor to properly monitor the project and impose accountability measures on the subcontracted implementing partners.

---

9 World Bank, Ibid, p. 114
10 World Bank, Ibid.
11 World Bank, Ibid.
12 IWA interview UNOPS 7/11/2005 and 21/10/2006
• Reduction of funds available and scarce quality of the road construction

The presence of independent intermediaries or multiple companies reduces the amount of money available to do the work, but it may also have a positive impact on the quality of the project. The presence of different actors increases the detection of possible mistakes. In certain cases, like the Kabul-Gardez road, the work was apparently supervised only by LBG, no other monitoring was conducted. As a result, the asphalt did not resist the first winter and cracked, and most of the road had to be rebuilt. In this case the low quality of the material used was apparently the cause of the problem.

The poor quality of the material used has serious implications for the sustainability of the road maintenance. In most of the district roads, companies have used Double Basement Surface Treatment (DBST), whose life expectancy is not more than 3 years. With the use of asphalt, the life expectancy of the road could reach 15 years. The future expenses for road maintenance will certainly be outsourced to international contractors due to their size and to the limited capacity of the local construction companies to invest in expensive equipment. The low quality of certain sections will certainly result in high maintenance costs for the Government in the first few years. As in the case of European Commission road projects, the maintenance cost are being fragmented in order to be outsourced to local companies.

• The weakness of the monitoring mechanisms supports the waste of unaccountable intermediaries

Ineffective external monitoring mechanisms or lack thereof contribute to increasing the cost of the project by not allowing for the detection of mistakes on time. The presence of strong independent monitors could help the donor to gain control over the subcontracting chain. Changes in the thickness of the asphalt for the LBG construction of the Kabul-Kandahar road (Fig.5) have been detected by the US Government Audit Office. These changes, which correspond to a 20% reduction of the asphalt thickness, have been justified by a test done

---

13 USAID, ibid, p.11
14 IWA interview with UNOPS, 12/11/2005
on load bearing by the company itself\textsuperscript{15}, apparently not in accordance with industrial standards. This implies that the contractor, for the sake of its private gain, easily circumvented and redefined its own contractual rules.

If the donor tolerates a subcontracting chain then, the prime contractor should have monitoring responsibilities over his sub-contractors. Apparently, this has not always been the case in Afghanistan. An audit report by USAID accuses a prime contractor of “not fully carry[ing] out an effective quality control and assurance program as required by its contract”. Apparently, the prime contractor claimed that his lack of monitoring is related to the complexity of hiring qualified staff in sufficient numbers to proceed with databases to track unit costs and inventories\textsuperscript{16}. The monitoring mechanisms contractually imposed by the donors are not rigorously applied and the results of the evaluations have shown rare repercussions on the project as the evaluation team lacks enforcement power\textsuperscript{17}.

\textbf{Conclusion}

The real dilemma in the road reconstruction is their symbolic use as evidence to show the progress of assistance. In the case of Afghanistan, the two roads described in this study, Kabul-Kandahar and Kabul-airport road were highly symbolic in that sense. They illustrated the reconstruction success of the post-Taliban intervention. As a result, the symbolic use of road construction increased the amount of money available for it and fuelled the capacity to waste assistance, making it lucrative for private companies specialized in physical reconstruction. Only very weak procedural constraints were set up on the donor side in order to control these risks. In addition, the implementers gained more recognition for their contributions to the reconstruction if the work was done quickly, exclusive of quality or cost effectiveness. With such time driven constraints, preparation of highly effective maintenance mechanisms after the handover to the government would at least help to preserve the fragile and highly symbolic road, which, according to current standards, may soon need a second reconstruction.

\textsuperscript{16} USAID, Memorandum, November 2003
\textsuperscript{17} IWA interview with UNOPS, 7/11/2005
References


USAID, Road Update, March 30-April 19 2006

USAID, Memorandum, November 2003

World Bank, W.Byrd, Managing Public Finance for development, Volume IV, December 2005