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Case Studies: Delivering Inclusive Growth Through Infrastructure Programming in FCAS:
Afghanistan – Roads and Power Sectors

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Contents

1 Preface and acknowledgements

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This document does not represent official views or policy of the UK Department for International Development or other HMG departments. Responsibility for accuracy of information and the opinions and analysis presented rests solely with the authors.

The authors are grateful to interviewees and reviewers who kindly offered their time to contribute to the work. A list of those formally interviewed is included in an annex. Further helpful commentary and feedback was provided by DFID colleagues at presentations in late 2018.

Please contact the ICED facility using connect@icedfacility.org if you wish to provide feedback on this report.

2 Acronyms

AITF	Afghanistan Infrastructure Trust Fund
ARTF	Afghanistan Reconstruction Trust Fund
DABS	Da Afghanistan Breshna Sherkat (Afghan national power utility)
DFID	UK Department for International Development
FCAS	Fragile and/or Conflict Affected State/Situation
GDP	Gross Domestic Product
GoA	Government of Afghanistan (aka GIRoA/GoIRA)
HMT	Her Majesty's Treasury
HoP	Head of Profession
ICED	Infrastructure and Cities for Economic Development
ICR	Implementation and Completion Results (Report)
IEG	(World Bank) Internal Evaluation Group
KfW	Germany's development bank
MDTF	Multi-donor trust fund
MW	Megawatt
NAO	UK National Audit Office
NATO	North Atlantic Treaty Organisation
ODA	Overseas Development Assistance
ODI	Overseas Development Institute
OECD	Organisation for Economic Cooperation and Development
PFM	Public Financial Management
PPP	Public-Private Partnership
USAID	US Agency for International Development
WB	World Bank

3 Executive summary

Early efforts to rebuild and extend Afghanistan's devastated infrastructure have been relatively highly studied and well documented. Many assessments have criticised efforts as ineffective and a poor use of development funding. Afghanistan following 2001 was an extremely challenging environment, with security a major risk. A multiplicity of actors – civilian and military – sought to bring about change, adopting a combination of military tactics and 'hearts and minds' approaches. This mix of actors, with different agendas, objectives, and modus operandi added hugely to the confusion in the years following 2001.

Infrastructure development was an important part of the offer. Many hoped and expected that this combination would bring peace and security. However, almost two decades later, Afghanistan remains a fragile, conflict-affected state. Armed anti-government groups control large areas of the country and levels of insecurity are increasing.

This report focuses on the roads and power sectors. Despite years of investment in infrastructure with limited positive impact, the case study team has identified some indications that longer-term development approaches are having positive results. This is particularly evident in the improved access to, and quality of, electricity supply. Roads continue to be more problematic, although the extent of the usable roads network is now far greater than in 2001.

Other positives include a more coherent and co-ordinated approach between donors and other funding agencies. For example, despite their challenges, Multi-Donor Trust Funds (MDTFs) are an important co-funding instrument. They have helped strengthen donor co-ordination and alignment with government priorities, and pooled resources have provided levels of capitalisation for larger and more strategic infrastructure investments.

As well as the positives, the study team also found evidence that many of the earlier challenges remain:

- The continuing pressure for fast spending projects, and institutional incentives to encourage this, increases the risk of decisions that are prejudicial to the successful delivery of programmes
- Optimism bias continues to be a major risk to rational project identification and delivery.
- Most assignments for staff in donor agencies are short term, because of the challenges of the living and working environment. This leads to limited contextual knowledge and understanding. It also contributes to a low level of institutional memory, since staff completing assignments are reassigned and their experience and knowledge of Afghanistan is lost.

The importance of getting the basics right is a clear emerging thread running through this research. An important starting point is a sound understanding of the infrastructure project cycle. This covers the sequence of activities from project identification, preparation (feasibility and design), procurement, construction, handover and delivery of services (with related operations and maintenance in place).

There has been evidence from past evaluations of infrastructure development in Afghanistan, reinforced by findings in this case study, of internal and external pressures to expedite various stages of the process – whether feasibility, design, bid processes or construction. Although this may lead to some apparent early progress, it risks significant problems later in the process if basic good practice at any stage has been short-circuited. One interviewee, who is involved in major project development in Afghanistan, emphasised the importance of investing in the early stages of project preparation having seen the results of this being done without sufficient resources or attention. This echoes concerns raised in a UK National Audit Office (NAO) investigation into project delivery in the UK: 'Organisations which really understood the inherent challenges and complexity of the project, at the earliest stages of design, created an environment for

success. Those who did not, set themselves up for failure at a later stage.'[1] This is even more important for infrastructure development in a situation of fragility and conflict. The literature review that forms part of this research highlights the fundamental importance of understanding the context prior to undertaking any infrastructure development in a situation of fragility and conflict. A trend in US development aid to Afghanistan[2] which has been a common theme across most aid projects in the country is that projects frequently pay little attention to understanding the context – in particular the history and culture of Afghanistan. This links with the point above about the short length of assignments and lack of institutional memory. This is compounded with, in many cases, the lack of any substantive handover process between the outgoing and incoming post-holders.[3]

There are a number of practical recommendations emerging from the case study. These include:

1. Fully assess a range of options to achieve an objective. A particular example is the shift from building power stations, to building transmission lines to import surplus power from neighbouring Central Asian countries.

2. Invest in good project preparation, resisting the pressure to start construction early and spend money quickly. One interviewee gave an example from the roads sector, where the original design was for bridges across streams, but a subsequent review showed that culverts were sufficient. This was changed, with substantial cost savings resulting.

3. Ensure appropriate specifications. There are examples of some being inappropriately onerous for the context, leading to significant delays. Conversely, these can be too lax, resulting for example in early break up of road surfaces.

4. Seek, above all, to understand the context and operating environment, and assess the likely perspectives of different stakeholders. For example, understanding perceptions of winners and losers from a tarmac road into a remote area: will this be of greater benefit to insurgents,[4] drug networks or government security forces?

5. Ensure from the start that there are plans in place for operations and maintenance of the asset.

Finally, ODI's 2016 guidance paper on political settlements[5] provides relevant advice: "work in an adaptive entrepreneurial way – seeking to learn quickly from mistakes." The larger and more complex the infrastructure asset, the more difficult to adapt to changes in context. If security conditions, and other problems, mean that it becomes impossible to finish the project, it will become a stranded partially completed asset. This does not imply the avoidance of all large infrastructure projects. It does, however, mean that at the feasibility stage there should be a full unbiased consideration of whether there is sufficient peace and security, and prospects for this to continue, before any decision to proceed.

It is of course possible to mitigate some of the risks during construction with a cordon of security (at significant cost). However, the level needed, and the associated costs, should also be an indicator of whether the security environment is sufficiently stable for a recommendation to proceed. If the infrastructure is a major target during the construction phase, it is also likely to continue to be vulnerable to sabotage, or capture, post completion - by which time levels of security may well have been reduced or withdrawn, making it an easy target.

[1] NAO (2013) DECA, Understanding Challenges in Delivering Project Objectives
[2] The point is made regularly in SIGAR reviews of spending, particularly about military-driven aid. A colourful article on ProPublica (Fingers in Ears – Ignoring History, Advice and Culture; https://projects.propublica.org/graphics/afghan#afghan-FE) may be somewhat one-sided, but identifies this common trend in a full reading of SIGAR documents.
[3] From interviews for this case study
[4] The term 'insurgent' is still the most common term for anti-government militant groups in Afghanistan. It has fallen out of use in some subsequent conflicts (e.g. 'rebels' in Yemen and Syria).
[5] Kelsall, T. / ODI, 2016. Briefing paper: Thinking and working with political settlements

4 Introduction – objectives and methodology

Afghanistan has been, and continues to be, an extremely challenging operating environment both generally, and in relation to infrastructure development. This case study seeks to draw both from the literature, and also from recent experience, to identify approaches that could result in the development and financial support for infrastructure projects having a greater chance of success.

The study forms part of a larger research project on infrastructure programming in Fragile and Conflict Affected States, with three further case studies planned at country level. It examines infrastructure programmes in Afghanistan in the period since 2001. The report summarises the findings and key learning points on infrastructure programmes for DFID.

The focus is on power and roads, two sectors where donors have placed significant emphasis. The review will examine all forms of support: investment, technical assistance and policy dialogue.

Specific issues derived from the broader literature review that were examined in Afghanistan included:

1. **Understanding the context** - to what extent was this adequately considered in planning and design, and was the fluid nature of the context recognised and monitored in order to adapt/modify approaches and develop contingency plans to a changing context?

2. **Delivery of infrastructure** - were basic good practice and principles applied throughout project cycles, including assessment of Afghan capacity to deliver and sustain infrastructure - or were these overridden by other political and political imperatives or for other reasons?

3. **Impact of Infrastructure** - were services delivered and outcomes from completed infrastructure consistent with theories of change/intervention logic? Were there unexpected positive or negative consequences?

4. **Donor modalities, instruments and approaches** - how did these influence the success or failure of infrastructure projects?

5. **The role of other actors** - private sector, non-traditional donors - how was this affected by/did this impact on the operating environment?

There have already been a number of investigations of project performance in Afghanistan on behalf of DFID and others and the study will aim to build on the results of those projects (see below section summarising some existing findings). Both the World Bank and ADB have carried out formal evaluations of their country programmes in recent years and these have also been reviewed.

The objective is to consider the impact of all interventions and not just those from DFID. However, there will be particular emphasis on projects in the power and roads sectors with which DFID has been involved, for example through AITF.

The main approach was through interviews with key staff who had been involved in Afghanistan infrastructure programmes since 2001. The focus was on officials who had worked in Afghanistan with DFID, the World Bank and the Asian Development Bank both as employees and as consultants.

A list of those interviewed is at Annex A. In order to encourage frankness in interviews all interviewees were advised that their individual views would not be disclosed in the report.

This report is based on the interviews with those personnel as well as the knowledge of Afghanistan of study team members and reading and reference to programme documentation, reviews and existing research whose conclusions are being built upon by the study.

5 Background Afghanistan

5.1 Infrastructure - historical perspective, pre-2001

Efforts to modernise Afghanistan can be traced back to the late 1800s following Afghanistan's establishment as a British Protectorate in 1880. This included development of hydropower on a relatively small scale, with larger irrigation, roads and bridge construction through to the 1950s. However, despite these and other efforts to encourage industrialisation there were less than ten industrial units operational in Afghanistan by 1945.[6]

However, Daud Khan used his tenure as Prime Minister (1953–63) to give stronger impetus to construction of national infrastructure through the first two five-year plans (1956–61 & 1962–67). The priorities were roads, power plants and large-scale irrigation. The third and fourth five-year plans included similar infrastructure priorities. Daud's return as President in 1973 saw a seven-year plan started in 1976. However, his assassination in 1979 and the subsequent communist coup largely halted this.

By the 1970s Afghanistan had made significant progress:[7]

Roads	17,000 Km total of which 2,700 Km paved
Power	408 MW total generating capacity of which: 256 MW hydropower; 48 MW gas and the remainder diesel generators

The investments were heavily dependent on external funding – mainly from the Soviet Union and the US.

The progress made, through the push for modernisation, went into reverse over the following 20 years, during the Soviet era, civil war and the Talban insurgency. Infrastructure became a target for widespread damage and destruction.

[6] Christensen, A (1995), Aiding Afghanistan, The background and prospects for reconstruction in a fragmented society.
[7] Op cit.

5.2 *Donor engagement – development assistance and security trends*

Afghanistan received US$50.7 billion in official development assistance (ODA) between 2002 and 2012, including US$6.7 billion in humanitarian assistance.[8] Although the allocations to development efforts have been substantial the annual cost of military operations and building security forces was estimated at more than US$130 billion in 2012.

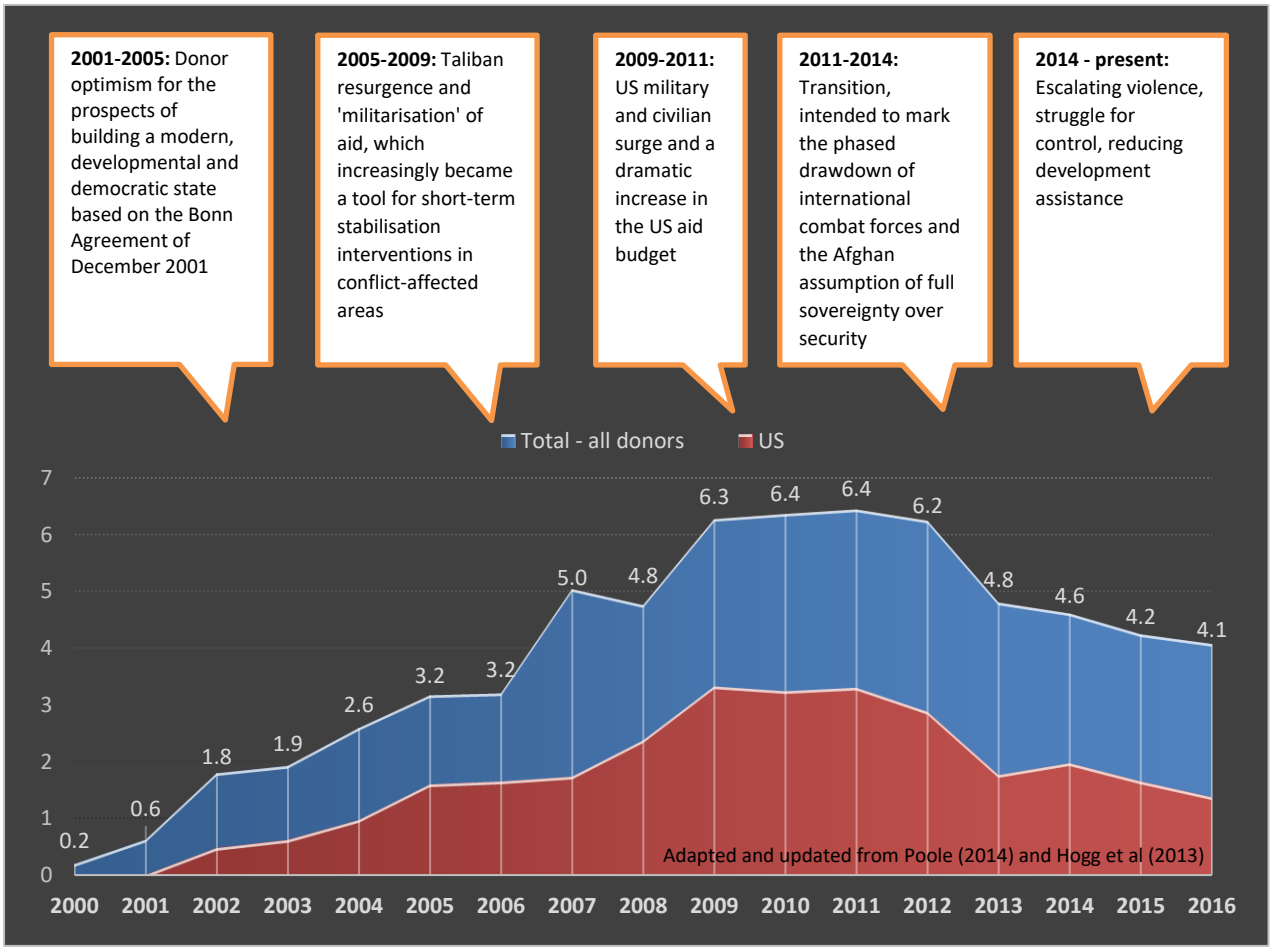


Figure 1: Development Assistance to Afghanistan (2000-16)

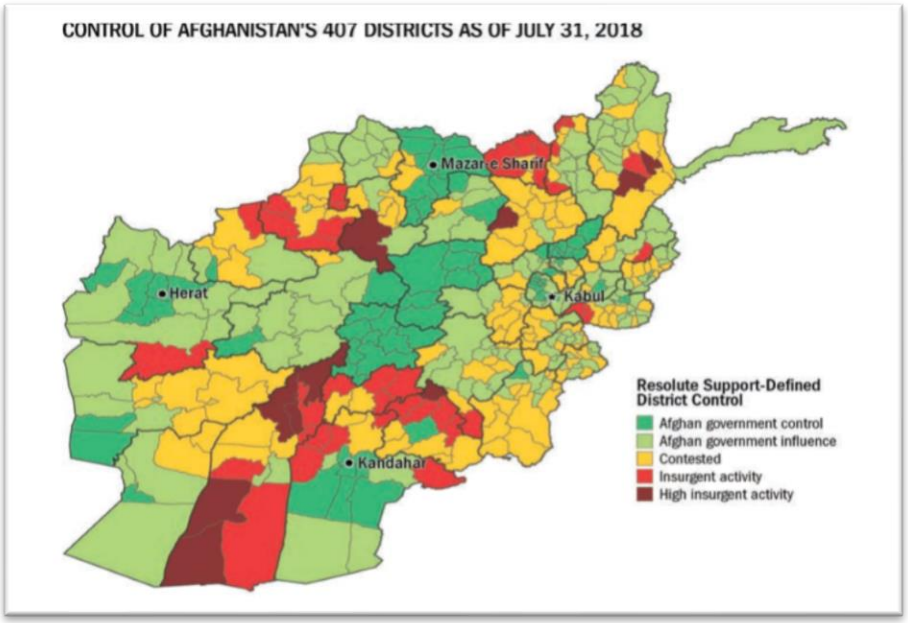
ODA levels have been progressively falling since 2011, from a high of $6.43bn in 2011. This has coincided with a renewed surge in violence as security responsibilities have been progressively handed back to GoA (see box).[9]

[8] Data compiled in Poole, L. / Development Initiatives (2014), Afghanistan Beyond 2014
[9] The box discusses territorial control among other conflict indicators. Territorial control is an imprecise concept and various estimates exist, however all show a similar trend over time. A nuanced discussion of conflict indicators and trends in Afghanistan can be found at this link: https://www.afghanistan-analysts.org/more-violent-more-widespread-trends-in-afghan-security-in-2017/

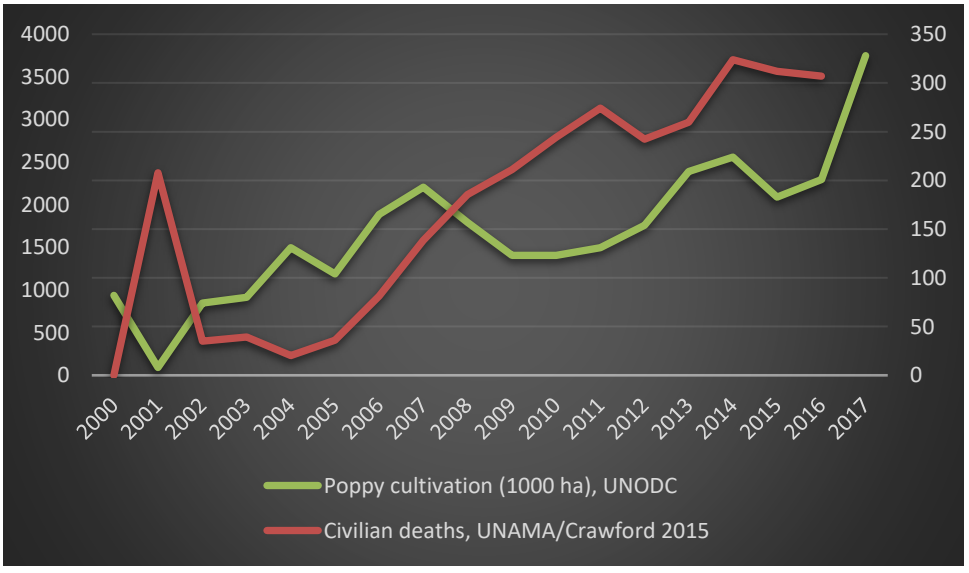
Context: worsening conflict

The move after 2014 by the international community towards Transition to Afghan-led security and governance was intended to mark the beginning of a Transformation Decade, during which development impacts would be sustained and Afghanistan would move from conflict to a sustainable economy with a government able to provide security and core services to its whole population. The trajectory so far has not been encouraging, and poses difficult operational and strategic problems for infrastructure development.

The latest assessments (SIGAR, 2018) show the government gradually losing control over large parts of the country. It has some level of control over just 55.5% of Afghanistan's territory and 65.2% of its population (a quarter is 'contested' with no clear authority and the rest is under insurgent control).



Proxy measures of conflict and law and order (see below figure) show civilian conflict-related deaths increasing and opium poppy cultivation surging in the post-2011 period.



Over the period 2011–15 (based on OECD data), the ten highest aggregate donors ($US) were:

US	11,034 m	**EU**	1,421 m	**Sweden**	588 m
Japan	3,047 m	**Australia**	910 m	**Denmark**	395 m
Germany	2,492 m	**Canada**	614 m		
UK	2,044 m	**Norway**	596 m		

$3.5 billion has been invested in the **energy sector** since 2003; with $4.5 billion invested in **roads and transportation**.

Funding for economic infrastructure from 2011-2015: for energy has been $1.93 billion; and transport and communications $1.23 billion. For **energy**, the largest donors are USAID, KfW, the World Bank and the Asian Development Bank.

Although the government and donors have been paying more attention to the issue in recent years, asset deterioration remains a serious concern, "with much (85%) of the road network in Afghanistan believed to be in poor condition."[10]

5.3 Involvement of countries from the region providing funding assistance

Afghanistan has also received substantial financial support from a number of the regional states including Pakistan, India, Turkey, Saudi Arabia, Iran, and the Central Asian States have been providing assistance to Afghanistan, especially in infrastructure and construction.

India[11] is involved in economic development both as a donor and through private investment, and has funded a number of major infrastructure projects. Some notable projects include Salma Dam in Herat Province, Delaram Zaranj and Kost to Gardez highways, and the installation of a transmission line linking Uzbekistan with Kabul.

5.4 Foreign direct investment

In addition to development aid, Afghanistan has also been receiving foreign investment since 2003. Levels are very low and have reduced from a high of $270m in 2005, to $60m in 2013. This implies an increasing lack of confidence due to levels of insecurity and future prospects for investments.

5.5 Multi-donor trust funds

There are two multi-donor trust funds that include significant infrastructure investment. One, the Afghanistan Infrastructure Trust Fund, administered by the Asian Development Bank as trustee. The other is the Afghanistan Reconstruction Trust Fund (ARTF), supervised by the World Bank. A broad characterisation from interviews for this report noted that the mandates of these two funds have tended to

[10] Aid Effectiveness in Afghanistan, ATR Consulting, 2018
[11] Building Legitimacy and State Capacity in Protracted Fragility – the Case of Afghanistan, Bizhan, IGC, 2017

focus on strategic infrastructure and social infrastructure, but there has been a **gap in financing for productive infrastructure** to take advantage of strategic infrastructure improvements.

5.5.1 Afghanistan Infrastructure Trust Fund (AITF)

ADB commissioned a review[12] of the impact of the AITF from 2011-16. The AITF was established in November 2010 with pooled funding from the UK, Japan, US and NATO - with commitments of $530 m. As of the end of 2016 the AITF had received $466 m. Of this $301 m represented committed funds, based on signed construction contracts. However, according to the impact assessment just $138m had been disbursed. An overall finding of the assessment was that although the AITF is a useful tool, it had not fully met donor expectations over the first five years of operation. It also concludes that some recommendations extend beyond AITF, and impact the way in which ADB operates in other FCAS and more generally as a trust fund manager. A summary of findings from the AITF review is included as Annex B.

DFID provided £35m to the AITF when it was established. The DFID business case[13] recognises the priority of infrastructure for GoA, and the importance of addressing the infrastructure deficit. The long-term objective of the support was increased growth and poverty reduction in the areas covered by the AITF. The business case also makes links between infrastructure, security and stabilisation through, for example, enabling alternatives to poppy production, and enabling security services faster access to narcotics networks. It also suggests that it will improve public perceptions of the government through delivery of public services. It considered the alternative option of funding through the ARTF rather than AITF. However, the recommendation was for the AITF on the grounds that the ARTF focused mainly on small-scale community led infrastructure that is complementary to the AITF's ambitions.

Unfortunately, with no developed pipeline of projects ready to start on site, early levels of disbursement were very low.[14] As a result, a large part of DFID's contribution, held on the ADB/AITF account, was neither committed nor disbursed. As noted by ICAI in a recent review: to avoid being in violation of Treasury rules on payment in advance of need, DFID requested the return of $36m in 2016, being the undisbursed balance of its earlier contribution.[15]

There were lessons learnt on both sides – particularly with regard to realistic expectations of the pace of infrastructure planning and delivery in complex environments. This led to a process of engagement between DFID and ADB to understand those lessons, and through this DFID and ADB have jointly published a co-financing guide[16] to inform future arrangements.[17]

Similar fiduciary rules affect some but not all bilateral donors. A broad lesson from this experience is that careful analysis of the risks associated with different administrative arrangements and the consequences of delays and setbacks associated with fragile operating contexts should be conducted when using pooled or delegated funding instruments for large infrastructure investments.

In addition to issues of funding rules in relation to donor instruments it also exemplifies some of the challenges of developing infrastructure in FCAS generally, and particularly in Afghanistan. Large infrastructure requires significant planning and preparation, usually taking a minimum of 1 – 2 years from

[12] Mik, J. (2017), AITF Impact Assessment 2011 – 16, ADB
[13] DFID (2011) Business Case of Support to AITF (2010-15)
[14] According to ICAI (2018) DFID's transport and urban infrastructure investments: A performance review. "The first phase [of AITF] performed poorly. The trust fund underestimated the delays and costs associated with working in an insecure environment. It was also unable to coordinate donor contributions into the fund with its disbursement needs, leading to delays in procuring and paying contractors."
[15] Ibid, page 26.
[16] ADB/DFID (2017) ADB-DFID Cofinancing Guide. Reviewed in hard copy but accessible at this link: https://www.adb.org/documents/adb-dfid-cofinancing-guide
[17] DFID was not alone in its concerns about the performance of the AITF. This was the subject of an external impact assessment in 2016. A summary of the findings is included for reference at Annex B.

inception, through feasibility, design and the bid process before construction begins on site – and significant disbursement starts - as is now happening with the AITF.

The literature (some referenced in this report) emphasises the fundamental importance of not allowing the pace of infrastructure development in Afghanistan to be determined/forced by the imperative to disburse funds. This presents a dilemma for a fund such as the AITF that is seeking to work with and through government systems – given the time that this will take, while at the same time hopefully building ownership and capacity through the process. Particularly given the desire of funding agencies to see their funds deployed to address immediate and pressing needs.

An alternative approach is initially to limit commitments to support a trust fund to build a pipeline of fundable projects. This clearly has merits – and avoids the disbursement problems outlined above. However, when the process reaches the point of funding for construction, it is quite possible that funds previously earmarked for multi-donor trust fund will have been committed elsewhere.

5.5.2 Afghanistan Reconstruction Trust Fund (ARTF)

The World Bank established the Afghanistan Reconstruction Trust Fund (ARTF) in 2002 as a means to quickly and effectively support the government's reconstruction efforts. It has two funding windows: channelling donor resources to GoA's recurrent budget, and providing capital funding for priority investments. Since its inception 34 donors have contributed a total of $10.3 bn to the fund. DFID's 'unpreferenced' commitment was £319m (2007-2014) and for £678m (2014-21).

The current ARTF Financing Programme[18] has allocated $258m to infrastructure (transport, energy and water) over this 3-year period. This is from a total of $2.4 bn for both funding windows – split almost equally between recurrent and investment funding.

Assuming infrastructure expenditure has been similar throughout the ARTF's implementation, DFID's contribution to infrastructure development through the ARTF has been approximately £105m over 15 years.[19]

The recent external review of the ARTF[20] conducted by Scanteam recognises the different set of constraints that the AITF faces in implementing large-scale infrastructure in a volatile context – and the resultant low spend profile. It considers whether AITF could be more effective as part of an enlarged ARTF given ARTF's greater flexibility, and broader portfolio. However, this is left as an open question, since the GoA position is not clear. It also recognises the donor complexities of such an arrangement.

Reviews of the ARTF and its main published reports have very little to say about infrastructure specifically. Most of the findings in reviews are applicable to the entire mechanism, not just the 10-20% that involves infrastructure.

According to Scanteam interviews, the WB administrator and donors admit to having had a 'testy' relationship for some time.[21] Donors feel unhappy about the responsiveness and transparency of the administrator, and the confused and sometimes dysfunctional governance of the fund means it is a hard task for a single donor to fully engage at a strategic level. The fund administrator in its turn finds donors ill-prepared and unable to contribute strategically to management fora – increasingly so as donor interest in Afghanistan wanes. However, donors have few or no other options for disbursing large amounts of funding in a manner that is fully coordinated (with government planning and with other donor contributions) and on-

[18] World Bank, ARTF Partnership Framework and Financing Programme (2018-20)
[19] This is a conservative estimate, as additional infrastructure work will have been undertaken within programmes not classified as infrastructure at the strategic level. Looking programme by programme gives a high-level estimate closer to £200m.
[20] Scanteam (2017), ARTF External Review for World Bank
[21] It should be noted that DFID in particular has been actively improving its capabilities to constructively oversee UK aid funds invested in multilateral delivery channels and progress on this issue has for example been highlighted in ICAI's followup review in 2017 examining DFID's response to the wide-ranging 2015 Multilateral Aid Review.

budget. This experience may be causing donors to pause before making large commitments to upcoming new MDTFs in other FCAS environments.

The Scanteam review notes broad agreement among development actors that the ARTF works and is mostly reliable. It has had a lot of sustained attention from a large number of interested parties over a long period of time and has been able to adapt its approach.[22] On the other hand, it is now 16 years after the fund was established and it is still being directly criticised for poor oversight leading to high fiduciary risk. 'The corruption issue' is repeatedly flagged in reviews, alongside 'ineligible expenditure' issues which are seemingly linked and worsening with time (SIGAR, 2018).[23] While these are broad governance and PFM issues which affect the entire government and donor relations, trust funds are particularly vulnerable.

Conflict and political economy are strategic challenges that ARTF does not have a mandate to tackle directly. More worryingly, the agendas of the donors are somewhat different from the agendas of the country which inform ARTF strategy.

> *"Conflict sensitivity in part requires acceptance of harsh realities on the ground. Local elites in contested areas have shown they can accommodate various concerns, including continued central government service provision, but typically based on local bargaining and rent sharing,* ***posing issues regarding ethical boundaries versus realistic choices, for ARTF partners****." (Scanteam, 2017, ICED emphasis)*

Donor criticisms of the ARTF (both in the third-party reviews and donors' own reports) contain regular mentions of the growing gap between donor priorities and ARTF ones. The US, for example, is urgently seeking improved geographical preferencing to address concerns about legitimising militant territorial control by providing central government services to populations in non-government areas.

The ARTF has been praised in reviews for enacting predictable and transparent fiduciary procedures, but also criticised for the institutional complexity that makes its instruments inflexible compared to some bilateral arrangements. This inflexibility is strongly objected to by both donors and GoA.

In spite of close partnership with GoA for implementation, security – particularly for monitoring – remains an oft-repeated problem.[24] ARTF programmes do not appear to be less affected by insecurity than other donor-funded programming mechanisms.

The future of the ARTF and the donor response in general is somewhat unclear. The ARTF is quite unusual for a post-conflict MDTF. Other MDTFs in the past have generally shut down and transferred responsibility to national authorities as societies recovered from war and returned to some form of normality. This situation is still a long way off in Afghanistan and ARTF has become the world's longest continuously running MDTF. In fact, the deteriorating security situation and continuing inability of GoA to take over responsibilities from the WB is leading the ARTF administrator to question whether the current operating model remains sustainable.[25]

[22] Although SIGAR (ARTF review, April 2018) points out that the amount of time and effort spent on external scrutiny is disproportionately low when considering the very large amounts of funding in question.
[23] SIGAR 18-42-AR/Afghanistan Reconstruction Trust Fund Audit Report, April 2018.
[24] E.g. Scanteam (2017) "the Monitoring Agent visits only about half the sites outside Kabul that they were expected to, due to security and budget constraints"; SIGAR (2018) "The World Bank states that security issues still prevent the Monitoring Agent from visiting certain locations to perform physical verification and sampling… in 2016, the Monitoring Agent could not perform physical verification on 44 percent of the government employees it randomly selected for testing"
[25] Scanteam interviews.

5.5.3 Are MDTFs useful for developing infrastructure in FCAS?

MDTFs are clearly a useful tool when there are challenges with government ownership, multi-donor strategic coordination, and strong incentives to engage in on-budget mechanisms to support the development of a stronger legitimate national government in a post-conflict scenario.[26] These are not infrastructure-specific concerns, however.

With the ARTF there has been more of a focus on social sectors and the latest review suggests that the ambition to build a more productive economy – partly by focusing on major infrastructure projects – has so far proved unsuccessful. This has pushed the focus to areas such as education, healthcare and local and rural development. The oft-mentioned lack of transparency seems to have led to there being little specific to say regarding the £100-200m infrastructure funding that DFID has channelled through the ARTF. This does not mean MDTFs are a poor tool for developing infrastructure. In fact, the long-term mandate and much higher capital pools available to trust funds make them an attractive option for a coordinated longer-term approach to development major projects. However, MDTFs which are structured like the ARTF (i.e. with a very wide mandate, high levels of independence from donors and complex governance arrangements which confound attempts by donors to influence strategy) are not necessarily the right tools for pursuing infrastructure development strategies that require flexibility, alignment with bilateral (e.g. UK) priorities or a rapid or ambitious theory of change.

AITF is a more purpose-built vehicle, however the lessons learned from DFID involvement are primarily about process, preparation and mutually understood governance systems rather than strategic lessons concerning the use of MDTFs for infrastructure development.

When taking a long-term approach to strategic infrastructure development in an FCAS context, based on the Afghanistan experience there is no reason in principle to recommend or not recommend the use of an MDTF. The details of how the MDTF has been set up, how it is governed, how credible its investment pipeline is and how it is currently (and can continue to be) aligned with DFID's own strategy will affect the decision about whether and how much to use MDTFs compared to other instruments. MDTFs are not the only financial vehicle available to pool capital funds for larger projects.

[26] A case for MDTFs is put in more detail by former Afghanistan WB country head Alastair McKechnie in his 2011 paper "Post-war programme implementation and procurement: Some lessons from the experience of Afghanistan", ODI. He was also interviewed for this research.

6 Case study findings – power and roads sectors

Reviews of investments in these sectors since 2001 have raised significant concerns about the delivery of infrastructure projects and concluded that many have not delivered expected results. Some projects have experienced extreme delays, others were abandoned prior to completion. Evidence also strongly suggests that of projects that have been completed, many have not provided the expected levels of service, or have not performed to the level expected. An overall conclusion is that many have not represented good value for money. The literature review and the programme of interviews also confirm numerous failings in development partners' programmes. However, the following assessments of the power and roads sectors suggest that despite the many specific failures, a wider and longer-term perspective suggests evidence of positive progress in both the power and roads sectors.

6.1 Power development

As referenced earlier in this report the state of infrastructure in 2001 was extremely poor, following two decades of civil war.

In 2002 there was no national power utility. The power supplies that were available were restricted to the major cities and towns and there was no central coordination of operations with each area operating as an individual fief. Operational and financial performance was poor. While supplies are still unreliable and further institutional improvements are vital, the extent of progress is considerable and advances have been made not just in extending electrification, but also in the commercial aspects of operations.

The initial focus was to construct power stations in Afghanistan to increase the installed capacity in the country. The approach faced many difficulties and setbacks – with construction sites becoming targets for attacks by insurgents. This compounded the other challenges of operating in a situation with very limited capacity. Examples of some of the projects to develop generating capacity in Afghanistan are summarised below.

The **Kajaki hydro-electric facility** was rehabilitated and expanded but with considerable delays. For example, a new turbine was delivered in 2008, following a British led operation to transport it from Kandahar to the dam site at Kajaki. There was a battle with Taliban troops close to the dam site. Subsequently, the Chinese contractors responsible for laying concrete foundations for the new turbine fled due to security concerns. The 700 tonnes of cement needed to complete the project could not be brought to the site because of attacks by the Taliban and the project was not commissioned until 2016. General David Petraeus, the commander of NATO forces in Afghanistan, described the project as an object lesson in, "overpromising but under-delivering".

The **Gereshk hydro power project** was estimated to cost US $76.5 million, shared between DFID $20 million (26%); Denmark $12.4m, (16%); ADB $43m (56%) and; GoA $1.1m (1%). Financing was available from 2010 but the project was not completed successfully. The main contractor was a Joint Venture between Aravali Infra-Power Limited of India (AIPL) and Hunan Allonward of China (HA) – known as AHAJV. The contractor struggled to develop the required knowledge of the local construction market and identify potential sub-contractors for the works. The companies had not worked in Afghanistan before and did not have a good understanding of government regulations. In addition, the security situation in Helmand remained unstable and both the contractor and sub-contractors found it difficult to maintain reliable security in order to continue work on site.[27]

[27] DFID's 2015 review of the project indicated that it was still unfinished, with ADB seeking to remobilise the Indian/Chinese contractors.

Tarakhil Power Station

Located just outside Kabul this was designed to increase generation capacity for the capital. Construction began in 2007. However, the project was plagued with problems - cost overruns, poor contractor performance and delays. With an original target date for completion of 2009, the plant was not fully completed until 2016.

Independent investigations found a number of lessons connected with similar power projects in Iraq were not heeded:

- US planners chose to ignore other ongoing reconstruction projects that were cheaper and more likely to succeed, or to pay attention to alternative recommendations from Afghan government officials.
- They chose expensive technologies that the city of Kabul could not afford to maintain or utilise.
- USAID asked for the plant to be built in record time - by a complex system of multiple contractors - causing costs to soar.
- By the time the project started, the price for the fast-track turbines and multiple layers of contractors was $259m, two-and-a-half times that of similar projects.

By comparison a power line to Kabul from Uzbekistan was completed, with funding from the World Bank, German and Indian governments. The construction cost was just 35 million dollars, providing greater capacity than Tarakhil, with operating costs estimated at 6 cents a kilowatt hour compared to the 22 cents a kilowatt hour that it will cost to run the diesel plant.

Quote from: Power Engineering International, June, 2015

6.1.1 Shift to transmission lines to import power from the region

Given the security situation and vulnerability of power station projects to attack, the focus shifted from power station construction to erection of transmission lines to import power from the Central Asian States, in particular Tajikistan and Uzbekistan. This was both the quickest and the least cost means of expanding supply. Hydro-electric power was immediately available from central Asia. In addition, these schemes are lower cost than developing thermal capacity in Afghanistan. Afghanistan has hydro-electric capacity, and some of it was developed in the past and has been rehabilitated in the past fifteen years. Notably, however, rehabilitation efforts have encountered security difficulties, particularly in the south of the country.

6.1.2 Issues in grid expansion

This approach was also not free of problems. There were several issues with the expansion of the power grid that were only identified at a late stage in scheme development.

First, there were plans to extend the transmission grid from Kabul to the South of Afghanistan. However, these were abandoned when it was realised that this would lead to substantial increases in technical losses and only contribute limited power to the South while reducing the reliability of supplies in Kabul.

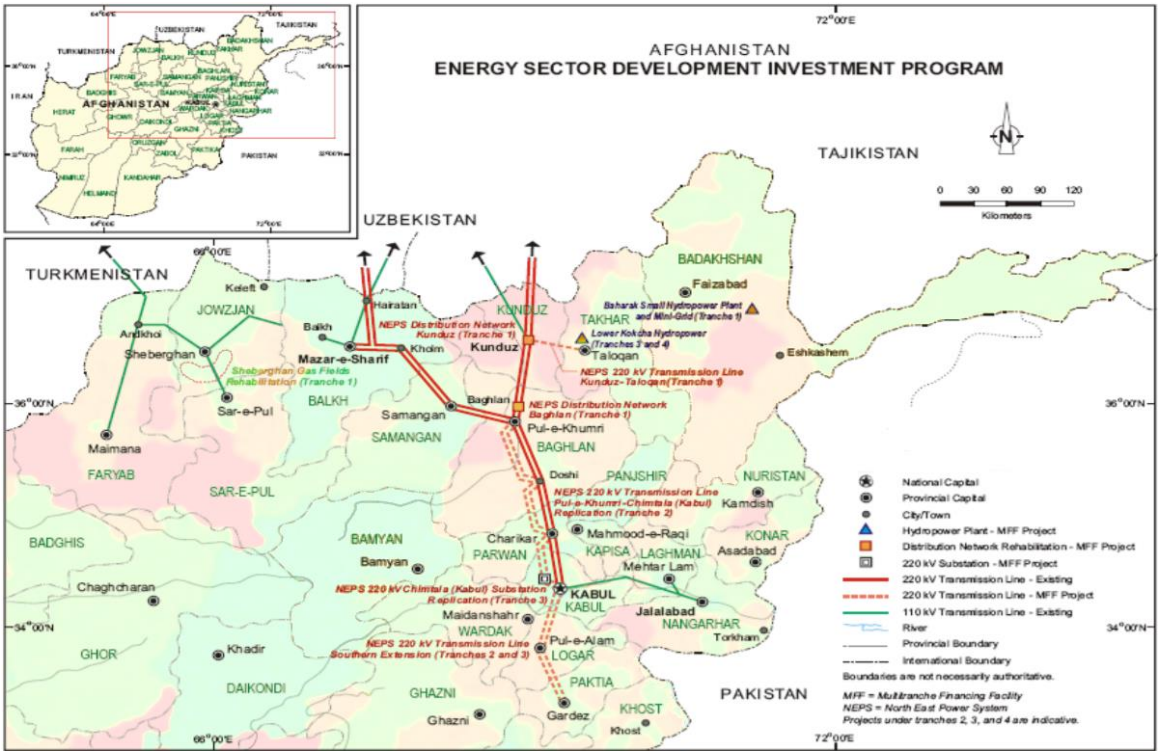


Figure 2: Regional transmission network, with conflict data overlaid. Sources: energy map World Bank 2012, coloured with 2018 conflict data from SIGAR (red=insurgent control, orange=contested)

	Installed capacity of transmission lines (max. in MW)	% of total installed capacity
Uzbekistan	326	33
Iran	164	16
Tajikistan	433	43
Turkmenistan	77	8
Total	1000	100

Table 1: Installed capacity of transmission lines (source: World Bank)

Second is the issue of synchronisation between different internal and external systems. Afghanistan effectively had 10 isolated grids, with asynchronous systems supplying these from Tajikistan, Uzbekistan, Turkmenistan and Iran[28]. This has proved a major challenge, to find technical solutions to enable the development of an interconnected grid that will enable load balancing and greater efficiency across a unified system. The current level of security of supply is lower than it could be with a fully synchronised system.

Finally, inadequate consideration was given to the necessary technical arrangements for starting up the transmission line from Uzbekistan and as a result, technical modifications had to be made in some substations before the lines could be brought into use. The equipment needed for the frequency and voltage transformation equipment is expensive, and has resulted in significantly increased project and systems costs.

[28] ADB, 2015, Power Sector Assessment Summary (www.adb.org/sites/default/files/linked-documents/47282-001-ssa.pdf)

These sorts of problems require sound basic technical skills in order to identify the problem and devise solutions to them. In an environment such as Afghanistan it is inevitable that these skills are lacking in the power utility itself and as a result the issues are identified later than they would be in a more well-developed utility. This emphasises the need for donors to have high quality and a high capacity of resources working on projects in a fragile environment where local capacity is limited. Additional due diligence on projects and programmes is needed to ensure that they work effectively.

The transmission grid has generally performed well and in accordance with expectations post construction. There have been interruptions, arising from insecurity, when towers have been demolished but the overall performance has been good and the system has delivered stable and reliable electricity.

Regional Integration

The Central Asia – South Asia Power Project (CASA 1000) was developed to transfer 1300 MW of surplus power from The Kyrgyz Republic and Tajikistan to Afghanistan and Pakistan. It will include over 1200 km of transmission lines – high voltage AC and DC – with DCAC converter stations. The current cost is estimated at around $1.2bn USD with funding totalling just over $0.5bn from the World Bank, with Islamic Development Bank, IBRD, EIB, US and UK co-funding. Expected completion date is currently 2020.

Pakistan will take the bulk of the power, and Afghanistan's offtake may be limited initially because of low demand. Critics of the scheme have raised concerns about the ability of the Kyrgyz Republic and Tajikistan to deliver the power, due to the condition of the power plants, which will only be during times of surplus in the Summer months. Another significant concern is the risk of sabotage along the line through areas controlled by the Taliban.

The Turkmenistan – Uzbekistan – Tajikistan – Afghanistan – Pakistan (TUTAP) is a parallel ADB funded project to integrate power in the region. The ADB recently signed an agreement with the Government of Afghanistan for an allocation of $75m from the AITF to close one of the missing links to the transmission route.

Funding agencies hope that these projects will lead to a regional power pool to enable a more integrated approach to power trading across Central and South Asia.

Information from: World Bank 2014 Central Asia South Asia Transmission and Trade Project Summary and ADB news 20 November 2017.

6.1.2.1 Targeting of transmission infrastructure

Transmission towers are vulnerable to sabotage and very difficult to secure against guerrilla insurgency tactics. A recent ADB review reports[29] that there has been popular outrage in the past when the Taliban have cut transmission lines, including one incident which cut power to Kabul during winter, and appears to have dissuaded further attacks due to their effect on popular support for the insurgency. However, attacks have since resumed. Earlier in 2018, the Gulf Times[30] reported a major power cut in Kabul as the result of the Taliban bringing down a transmission tower with explosives in Baghlan Province. The Taliban then attacked the DABS team when they went to the site to inspect the damage. In a departure from earlier policy, the Taliban are reported to be demanding power for areas under their control in Baghlan and Kunduz provinces. They are also reported to have threatened that they will continue to cut power to Kabul

[29] Mik, J. (2017) Afghanistan Infrastructure Trust Fund Review (2011 – 16), ADB
[30] Gulf Times, 15 April 2018

until GoA agrees to this demand.[31] Figure 2 in section 6.1.2 above shows the vulnerability of the regional transmission links, which pass through districts currently under Taliban control.

It is noteworthy however that these are currently relatively isolated incidents, particularly given the ease with which insurgents could disrupt supplies if they chose to do so. The political calculus behind this approach is not fully clear, but appears to be informed by views on the extent to which areas under their control are included in access to electricity services or receiving other forms of development funding. **This is troubling in the context of the growing disagreement between donors and GoA about using donor funds to provide services in insurgent-controlled areas** (see section 5.5.2 on the ARTF: the reference to US geographical preferencing).

In the absence of further data, it is difficult to draw conclusions from this which might aid planning in similarly fragile contexts in future, other than to observe that under some circumstances the vulnerability of distributed infrastructure does not automatically lead to its targeting by insurgents. The precise parameters of the conflict and motivations of various involved actors will presumably dictate the frequency and extent of damage from sabotage that can be expected.

6.1.3 Overall Assessment of Progress

The following extract from a recent ADB report[32] illustrates well the extent of progress: “Despite impediments, the power sector has reduced the technical, fiscal, and governance deficits. Access to electricity increased from 5% in 2001 to 32% in 2017,[33] system losses dropped from 70% in 2002 to 23% in 2017, collection rates increased from 50% in 2002 to 90% in 2016, revenues have increased 15% every quarter since 2009, and the sector was corporatized through the formation of corporate power utility Da Afghanistan Breshna Sherkat (DABS) in 2009 and the Afghan Gas Enterprise in 2011. The power subsector in Afghanistan made substantial progress in meeting the strategic objectives and milestones set out in 2012, including:

(i) greater efficiency from existing operations (rehabilitation of hydropower plants and transmission and/or distribution networks);

(ii) improvement in sector governance (formulation of electricity services law, renewable energy policy and autonomous power utility, and institutionalization of operations and management system);

(iii) promotion of rural electrification (development of off-grid networks); and

(iv) investments in new capacity (development of additional generation, transmission, and distribution systems).”

[31] Eynde, (2015), as referenced in the literature review, cites evidence of the Maoists in Orissa, India, taking a similar approach in demanding the government to provide power to areas under their control.
[32] ADB, 2017, Energy Supply Improvement Investment Programme (Tranche 4)
[33] This figure is at variance with the SDG7 data on the ESMAP website (https://trackingsdg7.esmap.org/) which gives access coverage at 83% for Afghanistan. Based on information available the ESMAP data appears to be incorrect.

Although Kabul has been the primary focus for improved access to, and quality of, electricity supplies the coverage is now widely distributed. A recent ADB project completion report[34] confirms the construction of 216 km of transmission network and the rehabilitation of the associated substations and distribution systems in 11 secondary towns in the northern, eastern, and southern provinces. In addition to the transmission line to the major load centres the funding included grant-financed portions to support the development of low voltage distribution networks. This was aimed at connecting nearly 90,700 new households, mostly living below the poverty line.

> "Overall the coverage of the distribution network is low. While over 75% of the population in large urban areas like Kabul, Kandahar, Herat, and Mazar-e-Sharif have electricity, less than 10% of the rural population has access to grid-connected power."
>
> *ADB, 2015, Power Sector Assessment Summary*

Levels of revenue collection and tariffs are fundamental to DABS revenue stream and ability to operate and maintain the system. Building up connections in major load centres is an important part of their strategy to achieve this.

6.1.4 Remaining Challenges

Despite the progress, many challenges remain. A recent energy security report highlighted:[35] "

a) Afghanistan is not an energy self-sufficient country. Its domestic power generation capacity accounted for only 22 percent of its total consumption balance in 2015.

b) Many Afghans perceive dependence on power from neighbouring countries as a threat to energy security.

c) Afghan consumers suffer from an uneven distribution of energy within the country. While currently around 70 percent of consumers in Kabul enjoy a nearly uninterrupted supply of electricity, up to 75% of Afghans don't have access to the electricity grid.

d) Households currently account for over 90 percent of the total power consumption balance. This implies almost no industrial production.

e) The Afghan government is struggling to keep up with the rapid growth of energy demand in the country. Power demand in major cities increased by 25 percent from 2014 to 2015.

f) Beyond electricity, 85% of Afghanistan's energy demand is met through the consumption of environmentally damaging sources of energy (biomass). This has significant negative health impacts, with women and children generally more exposed, and most vulnerable to its effects."

6.2 Roads Development

The rate of progress in the roads sector has been slower than in the energy sector.

Since 2001, multilateral and bilateral agencies have support transport infrastructure, in particular priorities such as the Ring Road (see Figure 3 below). Their total investment is $4 billion to improve transport infrastructure, and institutional support.

[34] ADB, 2016, Afghanistan Power Transmission and Distribution Project Completion Report
[35] Aminjonor, F. (2016), Afghanistan Energy Security, Friedrich Ebert Stiftung

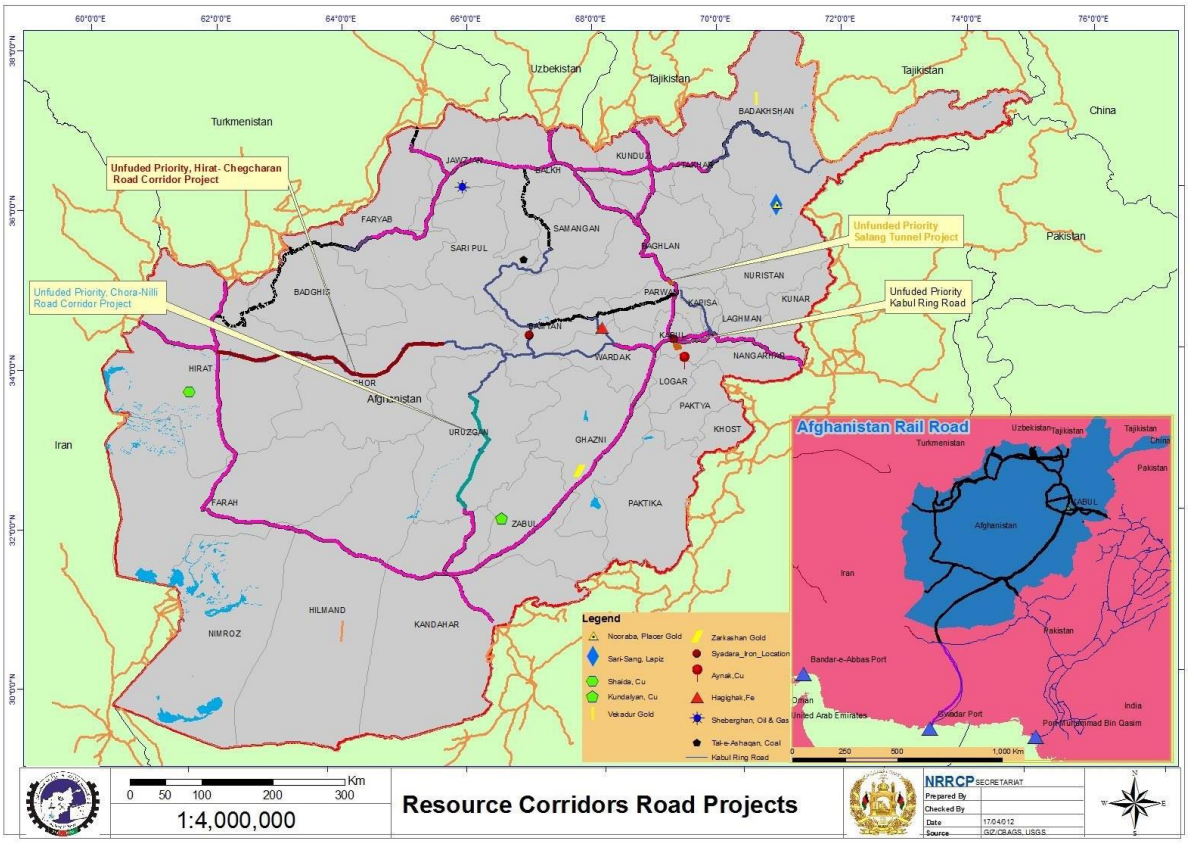


Figure 3: Afghanistan's road corridors[36]

Despite substantial investment in the country's infrastructure over the past 15 years, an ADB report[37] found that 90% of transportation modes are unconnected and in poor condition. At only 4 km per 1000 km2, Afghanistan's road density is significantly less than its neighbours (20% that of Pakistan). A DFID funded scoping study[38] found that there is no nationwide mapping of roads. This study gives the following data for Afghanistan's road network:

Regional Highways	3,300 km
National Highways	4,900 km
Provincial Roads,	9,700 km
Rural Roads	17,000–23,000 km
Urban Roads	3,000 km of which 1,060 km in Kabul
Cross-Border Roads	700 km

Roads also suffer from regular attacks. Research[39] into insurgent tactics concluded that 'In Afghanistan it is a core characteristic of Taliban tactics to target roads built by the coalition'.

[36] Cardno (2017) Rural Roads Scoping Study for DFID
[37] ADB Transport Assessment (2015)
[38] From Cardno (2017) op cit.
[39] Mayerle, J & Carter, M. (2009) Insurgent Tactics in South Afghanistan 2005-08

However, despite many challenges, progress in the roads sector has also been significant. ADB has coordinated activities and a recent report stated that "Resources mobilized by ADB have helped improve 1,725 km of regional and national roads."[40]

The World Bank makes a similar claim related to rural roads: "Since 2001, the Government and international partners, including the Bank, have been working on rehabilitation and reconstruction of transport infrastructure. The World Bank provided about US$165 million for an Emergency Transport Rehabilitation project, which rehabilitated about 4,000 km of rural roads."[41]

While there has clearly been substantial construction effort, **the key challenge in this sector is longer term sustainability, and this is where the majority of the pessimism emerges in sector assessments.** Many interviewees commented on roads that had been poorly constructed or rehabilitated, by a range of donors, and had deteriorated far more quickly than should be expected.

Roads that were resurfaced sometimes broke up again within five years or even shorter periods. This reflects a number of factors. Roads need to be built with a proper base and sub base and an adequate level of surfacing. However, when roads are built in a hurry, technical standards are often not adhered to. The military built some roads where the key priority was availability for short term operations not long-term durability. Contractors saved money by building to lower technical standards than planned. Supervision and construction were both hampered by insecurity.

A related problem is the weight of vehicles using the roads. Based on interviews for this report, heavy vehicles have been using roads designed to lighter load specifications, causing long term damage. This problem could be attributable to a number of causes:

- Under-design for the size of trucks likely to use the road as a result of lack of information or inadequate codes;
- Larger trucks now using the road than expected at the time of design, due to lack of controls;
- Poor quality construction not meeting the specification;
- Lack of adequate maintenance…

…or a combination of the above.

> "[The US] assessed the condition of 1,640 kilometers of U.S.-funded national and regional highways, or approximately 22 percent of all paved roads in Afghanistan … Most of these highways need repair and maintenance …
>
> Inspections of 20 road segments … found that 19 segments had road damage ranging from deep surface cracks to roads and bridges destroyed by weather or insurgents. Moreover, 17 segments were either poorly maintained or not maintained at all, resulting in road defects that limited drivability.
>
> MOPW officials acknowledged that roads in Afghanistan are in poor condition. In August 2015, an MOPW official stated that 20 percent of the roads were destroyed and the remaining 80 percent continue to deteriorate … USAID estimated that … 54 percent of Afghanistan's road infrastructure suffered from poor maintenance and required rehabilitation beyond simple repairs."
>
> *SIGAR, 2016, Afghanistan Roads Infrastructure: Sustainability challenges and lack of repairs put US Investments at Risk.*

Based on a decade of expertise in Afghanistan the US Corps of Engineers[42] has called for 'adjusted standards and procedures that take account of the terrain, local skills and local standards of design and construction'. This followed concerns that standard quality benchmarks might preclude that infrastructure is 'fit for purpose' in specific FCAS contexts. The authors call for establishing 'adaptable engineering

[40] ADB, 2017, Sector Assessment Summary – Road Transport
[41] World Bank, 2015, Trans Hindu Kush Connectivity Project
[42] Affleck, R & Reed, F. (2010) Challenges for Engineering Design, Construction and Maintenance of Infrastructure in Afghanistan) US Army Corps of Engineers.

design and construction standards with cultural and local consistency and acceptance'. This call resonates with findings from a 2012 DFID funded case study[43] that focused on Helmand (summary in Annex C), and interviews for this case study regarding differences between DFID and ADB approaches for a road design.

In some cases, projects were abandoned when half built and experienced damage before contractors returned to complete them. A recent World Bank appraisal[44] on a project to rehabilitate one of the most important roads in Afghanistan, across the Hindu Kush, made the point clearly: "During the past 15 years there have been several major repair and rehabilitation projects for the Salang road, tunnel and snow galleries. Under the World Bank funded Emergency Transport Rehabilitation Project about US$67 million were spent on the Salang pass between 2003 and 2005". The ICR for the project (prepared in 2008) found that "…the infrastructure rehabilitation part of the Project was completed successfully but there was a lack of progress in areas relevant to the project's long-term sustainability. Maintenance of the country's road network so far has been minimal. Continued financing is essential for the sustainability of the roads component. An example of the urgent need for maintenance is the Salang Tunnel. Rehabilitation of the tunnel has been completed, but due to snow and freezing temperatures in winter and a lack of maintenance in the drainage system, the road surface condition has severely deteriorated. Maintenance is urgently needed to protect the tunnel's operating condition." The ICR also stated that "…after this emergency phase of development, a next project, if any, should focus more on sector reform and capacity building, and on building up the sustainability of the sector's development."

Road maintenance

DFID advisers working in the roads sector recognised the lack of maintenance as a major issue. The led to the DFID funded Roads Rehabilitation and Maintenance Programme (RRMP), which ran from 2011 – 16. In addition to rehabilitation of Route 601 and Bolan Bridge, it included a £4.5m component providing technical assistance through UNOPS to the Ministry of Public Works (MPW) staff in Kabul, Helmand and Balkh. The programme faced a number of challenges – in particular lack of access due to insecurity. Despite this and delays with procurement it did undertake a roads condition survey in three provinces – as well as training of MPW staff. RRMP was set up in the expectation of a follow on ADB programme, which unfortunately has been delayed, demonstrating again the difficulties of coordinated sector approaches in Afghanistan.

There is also renewed interest in railway development. The Asian Development Bank (ADB) financed Hairatan to Mazar-e-Sharif rail link (75 km) was completed, the first new railway in Afghanistan in over 100 years.

Despite the progress, the ADB Transportation Masterplan[45] gives indicative overall investment requirements for the period 2017 – 36 as $25.9 billion (more than $1.25 bn/yr). With $13bn required for roads and $11bn for railways.

6.3 Institution building

Efforts to build effective local institutions have been undertaken in both power and roads. In power, DABS was created as a public sector organisation operating on commercial lines and has improved its performance over time.

Again, the roads sector seems to be lagging with new institutional structures now being planned. The latest ADB country strategy identifies a range of proposed developments: "ADB will help establish sustainable

[43] Scott, R. (2012). Supporting Infrastructure Development in FCAS – Afghanistan Case Study, Mott MacDonald/OPM for DFID
[44] World Bank, 2015, Trans Hindu Kush Connectivity Project
[45] ADB, 2017, Afghanistan Transport Sector Masterplan (2017 – 36)

road management practices—specifically in road asset management and road maintenance—and through classroom and on-the-job training build the technical capacity of the Ministry of Public Works to operate and maintain roads. ADB will support the establishment of an autonomous national road authority, a transportation institute, and a road fund, which is being led by the United States Agency for International Development. ADB support in establishing the road fund will improve the sustainability of the roads subsector, which has seen network expansion but received insufficient O&M funding. The road fund would be vital in the introduction of a road asset management system that would facilitate recurrent maintenance."[46]

6.4 Optimism Bias

Optimism bias is a subject that has been examined extensively in project appraisal in the UK. It is covered a number of times in HM Treasury's Green Book,[47] formally titled "Central Government Guidance on Appraisal and Evaluation." It defines optimism bias (paragraph 2.16) as "the proven tendency for appraisers to be too optimistic about key project parameters, including capital costs, operating costs, project duration and benefits delivery."

The focus of adjustments for optimism bias has focussed on techniques for adjusting cost estimates to reflect likely cost and time overruns and this has been applied in Afghanistan. However, there are other types of optimism bias. Extensive research[48] on the transport sector has established that optimism bias also applies to demand forecasts and in particular to demand forecasts in the rail sector.

It is clear that there has been another form of optimism bias in Afghanistan, which relates to the security situation. Development partners have invariably been over optimistic about the likelihood of improvements in the security situation, which have not transpired in practice. ADB classified Afghanistan as a post conflict situation and maintained this classification for many years in spite of the fact that calmer countries such as Nepal were regarded as conflict affected. Donor strategy documents from the period 2003-2005 in particular use the term 'post-conflict' even while detailed evidence submitted to home country government committees over this period continually cited the ongoing security challenges constraining aid delivery.

Further to the effects of security *on* development work, donors also believed they could help to *bring* security to Afghanistan through development efforts. Both the military and development partners were working on the premise that economic development was the key to long term reductions in insecurity and Taliban activity.[49] The power and roads sectors were regarded as major priorities to attract and enhance economic development.

In recent years there has been substantial questioning of the fundamental premise that economic development will automatically improve security, including conclusions drawn from the development effort in Afghanistan.[50] In the case of Afghanistan, substantial sums have been invested in development and the security environment has continued to be poor in spite of strong GDP growth and improvements in infrastructure and social development. In this environment, it is clear that some types of project worked better than others. Research suggests that small projects worked better than large ones. Iyengar et al. state: "smaller may be better … smaller projects can be targeted at important, specific gaps and seem less likely to fuel instability. Small projects have a variety of beneficial features: they are often easier to manage by staff on the ground; they are less likely than large infrastructure projects to attract attention from corrupt

[46] ADB, 2017, Country Partnership Strategy 2017 – 21, Achieving Inclusive Growth.
[47] HMT, 2018, Green Book – Central Government Guidance on Appraisal and Valuation. HMG
[48] Flyvbjerg, B. 2014. What you should know about mega-projects. Project Management Journal.
[49] See for example Fishstein & Wilder (2012) 'Winning Hearts and Minds? Examining the Relationship between Aid and Security in Afghanistan.' and a parallel paper by Gordon (2011) examining similar motivations relating specifically to UK involvement in Helmand province.
[50] Iyangar, R., Shapiro, N., and Hegarty, S., 2017. Lessons learned from Stabilisation Initiatives in Afghanistan: Systematic Review of Existing Research. RAND

officials or to become targets for enemy sabotage; and outputs are small and less likely to become a source of conflict."

The World Bank has reached a similar conclusion: "The Bank's Internal Evaluation Group (IEG) has carried out a large number of ex-post project assessments and has been able to extract as one of the fundamental lessons that the likelihood of a project's failure to achieve its development objectives increases proportionally with its complexity. This is especially true in fragile and conflict-affected countries such as Afghanistan, where the capacity of State institutions is limited and governance constraints exist."[51]

This conclusion was borne out by interviews. Many interviewees commented that the best results were often obtained through projects that offered benefits at community level. Such projects were likely to obtain acceptance from beneficiaries, regardless of their view of the government or its opponents. In environments of this sort, development partners need to evaluate the robustness of their plans against a range of security scenarios, *including those which do not foresee a reduction in conflict*.

6.5 Staff turnover and capacity

Operating in Afghanistan is difficult, and it is often impossible to visit project sites. This limits the effectiveness of staff. It also means that donors and contractors have to offer special incentives to staff to work in the country under restrictive security rules which prevent them from interacting with most normal Afghan citizens and place severe restrictions on social activity outside work. Even with additional incentives, this can still lead to lower quality staff in positions of higher responsibility than would be merited elsewhere.[52]

Some donors, including DFID, have encouraged staff to regard a tour of Afghanistan as a career enhancing option. This can attract qualified staff but this tends to be only in the short term. In practice, tours are short, few are willing to extend their inputs and many eventually transfer to positions in other regions. As a result, their experience is lost to Afghanistan. Compounding the turnover issue, there is also a built-in incentive for staff who are in country on short assignments to focus more on outputs and project delivery than on longer term strategic outcomes which only be seen years after they leave.

The quality, availability and continuity of staff affects both donors and the consultants and contractors which they and the government employ. At the most basic level, many firms are unwilling to consider Afghanistan as a market or to bid for work there. This limits the level of competition and hence detracts from quality standards. In the power sector, Indian firms have been the only bidders for many projects with inputs from time to time by firms in Pakistan and Iran. The position has been slightly better in the roads sector where some projects are suitable for local bidding but overall the picture is problematic.

Even when firms do win jobs, they often put forward their lower quality staff. Many high-quality staff have alternative career options both within and outside their firms and firms will not force them to work in Afghanistan.

The problems with donors and contractors are compounded by the lack of capacity of GoA and its institutions. While there have been improvements since 2002, capacity remains limited.

These problems are well known to donors and contractors and many have defied easy resolution. There are a few possible mitigation measures that may be worth considering, in particular for DFID and other donors. These include giving senior staff part time roles that cover Afghanistan but also allow time to be devoted to other more permissive parts of Asia. It is also possible to have senior technical specialists who

[51] World Bank, 2015, Trans Hindu Kush Connectivity Project Appraisal.
[52] This point has been noted mainly in interviews, as organisations tend to be wary of criticising their own or others' capacity in public reports. We do not intend to imply any specific criticism of particular companies or donor offices. There are many highly capable and committed individuals who have worked or are working in Afghanistan.

provide technical input to particular sectors over a long period working on a visiting basis rather than a full-time role in Kabul.

6.6 *Cross cutting issues – gender, social inclusion, climate and environment*

Climate change is considered in both the power and roads sectors as a real and current challenge in the design of infrastructure. However, the case study team found comparatively little reference to the issues of gender and social inclusion in relation to infrastructure development in Afghanistan among the analytical and strategic reports reviewed.

A significant and quite recent exception is the ARTF's evolving approach to gender, which is informed by the World Bank's global 2016-2023 Gender Strategy. This, along with a joint letter from donors to the ARTF in November 2017,[53] has driven an increasing focus of the ARTF on gender mainstreaming across its portfolio, overseen by the ARTF Gender Working Group (established in 2012). This includes analysis and monitoring (e.g. requiring a gender analysis to be in place in the early stages of each project; disaggregated results measurement) but also a requirement to translate these into action: designing and implementing activities that respond to issues identified in the gender analysis. The increasing visibility of gender in the ARTF is a positive change, and there are clear entry points in the infrastructure development process where gender issues can be addressed with concrete action, understood by the World Bank more broadly.[54] Whether this has yet had a clear impact on the way infrastructure projects are selected, planned and implemented within ARTF programmes will remain unclear without additional commissioned analysis.

However, the general impression remains that infrastructure tends to be seen as not particularly relevant to addressing gender gaps, and the lack of focus on this outside the ARTF is concerning. Afghanistan is one of the countries with the most serious and ingrained gender inequality issues globally.[55] Donor experience since 2001 trying to address these issues in Afghanistan has been mixed and there is a sense of caution against unwary application of what can be seen as externally imposed values. As the World Bank noted in its recent Country Diagnostic: "From a fragility perspective … gender is an extremely sensitive issue as possible backlash on gender issues could contribute to greater fragility or even a rolling back on gains made to-date."[56]

Tackling some of the deeply engrained and sensitive issues in relation to gender roles is clearly outside the direct scope of infrastructure projects. However, a lack of attention to the needs of both men and women in relation to infrastructure development and the services this delivers is a short-term strategy – and potentially ignores some real opportunities to reduce levels of exclusion and lack of opportunity.[57]

[53] Text included in Scanteam ARTF external review (2017) accessed at http://www.artf.af/images/uploads/ARTF_External_Review_Final_Report_2017.pdf
[54] World Bank. 2015. World Bank Group gender strategy (FY16-23) : gender equality, poverty reduction and inclusive growth. **See page 42**.
[55] Afghanistan is not ranked in the WEF's annual gender inequality index, due to unavailability of data, but neighbouring Pakistan which faces similar culturally ingrained inequality is ranked 143 of 144 countries.
[56] World Bank Country Diagnostic, 2016
[57] For practical guidance on planning and implementing infrastructure development with a positive impact on gender equality and wider social inclusion, see ICED's publications at http://icedfacility.org/?s=women, http://icedfacility.org/tag/inclusion/

7 Summary of Main Findings and Lessons from Case Study

This section of the report examines the results of the interview programme and literature review to identify lessons learned.

7.1 Adapting to the context

- An essential prior requirement for infrastructure development in FCAS is a good understanding of the political, social and cultural context. This requires the use of relevant tools of analysis – together with an understanding of the history of the context and infrastructure development.
- There is some evidence of funding agencies now having a better and more widely shared and accepted understanding of context; adopting a more consistent policy approach, with less frequent shifts in approach to meet changes in political priorities
- Some agencies are institutionally slower to adapt to conflict contexts (e.g. the ADB when managing the AITF, see page 13).
- Security continues to be major challenge for implementing infrastructure projects, and Afghanistan remains an extremely difficult operating environment.
- The general lack of capacity in government agencies at all levels is a significant constraint.
- Lack of institutional memory within funding agencies, and therefore contextual understanding, continues to be a significant issue
- Optimism bias persists – particularly in relation to security. Afghanistan was prematurely believed to be emerging from conflict with an overly positive trajectory assumed.

How militant groups respond to infrastructure projects

Understanding the possible responses of insurgents to proposed infrastructure is a critical part of understanding the context, not simply an issue of how much project security will cost. There are a number of examples and observations in this case study – particularly in relation to the power sector. Insurgents have sabotaged many of the power stations under construction in the country – and some post completion. Transmission lines, on the other hand, have been less of a target. This may be related to some distribution of electricity along the transmission line, even in areas controlled by insurgents.

Insurgent views in the roads sector are less clear, although they are clearly based on a calculation of risks and opportunities for insurgent group interests during construction and post completion. For example, as observed earlier in this report, the use of faster roads by security forces to control insurgents will be fully understood as a potential threat – and is likely to elicit a response that seeks to exert control.

7.2 Delivery and sustainability

- There is a mixed picture on delivery and sustainability. Some projects are still not well planned, designed or implemented.
- The additional costs of securing a construction site are significant – and could be an indicator of whether the planned infrastructure represents a deliverable asset in the local security context.
- Important to recognise that the likelihood of a project's failure to achieve its development objectives increases proportionally with its complexity.
- There is some evidence that small scale local projects are often the most suitable mechanism for supporting development in this environment. They require less coordination with other donors. They may also be workable in difficult security environments.
- Security has regularly and repeatedly delayed many projects – with some remaining unfinished
- The rate of spend is often a higher priority than the effectiveness of spending and delivery
- Costs continue to be underestimated, and most projects have cost and time overruns
- Corruption remains a widespread issue. This was fuelled by the very high levels of funding spent post 2001 – and is now very difficult to address.
- There are few international contractors willing to work in Afghanistan, due to the security situation, which affects quality and competitiveness of bids
- Bid processes tend to exclude local contractors
- Technical issues - significant problems with quality of road construction and lack of road maintenance:
    - Some resurfaced roads broke up within five years
    - Inappropriate technical standards to meet road loadings
    - Roads often built in a hurry and technical standards often flouted
- Revenue collection in the power sector provides a cash flow to cover operations, maintenance and repair costs. This provides the resources and incentives to maintain the system.
- The roads sector suffers from lack of operations and maintenance funding, which has resulted in deterioration of the infrastructure asset base – in some cases quite rapidly.

7.3 Impact

- Most investment was predicated by a belief that development would lead to improved security and infrastructure investment was an important component of delivering development.
- Those interviewed for this case study were not able to provide any evidence to support the hypothesis that Afghanistan now enjoys enhanced peace and security as a result.
- Many projects overpromise and underdeliver – both large and small

- *However, there has also been positive progress:*

- The achievements in both the power and roads sectors over the past fifteen years are real and substantial.

- The heavy-duty investment in power has shifted from local generation capacity to transmission links to Central Asia, which is proving to be a successful strategy.

- The investments in power, particularly in the transmission grid, appear to have been implemented to higher quality standards than road investments.

- There has been substantial institution building in both sectors but there still scope for significant further progress.

7.4 Donor modalities

- When development partners became involved in Afghanistan in 2002 there was something of an unmanageable free for all. There is now better co-ordination between donors.

- Overall, trust funds have been useful in improving co-ordination amongst funding agencies, aligning with government priorities and reducing the administrative burden.

- The pooling of funding has also made it possible to finance larger infrastructure investments than would have been possible through bilateral arrangements.

- It is also important to recognise the challenges of multi-donor trust funds – particularly in relation to initial expectations of disbursement profile and what is realistic and achievable in an operational environment such as Afghanistan.

- Funding/development agencies need to be clear on ownership of the strategy they may have supported and the infrastructure they have funded – and have a willingness to hand over.

- Do not rush to change procurement rules with which civil servants are familiar – adopt a 'good enough' approach. And do not seek to cut corners with project preparation, or procurement processes, in the hope of expediting implementation and spend.

- Third party monitoring has been shown to be effective, however the risks remain to individuals and reporting is not always reliable.

7.5 Role of other actors

- It is important to see the challenges of operating in Afghanistan as intrinsically linked with the interests of neighbouring countries and regional complexities of Central and South Asia.

- Be aware of particular issues in the border areas – related both to being at the geographical periphery, as well as the implications of cross-border alignments or hostilities.

- Regional players such as Pakistan, India and Central Asian countries, as well Saudi Arabia, UAE and Iran are active in Afghanistan and have all provided funding for infrastructure in Afghanistan.

- Contractors from the region are also active – with Chinese and Indian contractors are implementing a number of infrastructure projects – sometimes as the only contractors qualified and willing to bid.

- The only involvement of the private sector is the implementation of construction projects under contract

- There are currently no significant examples of any 'public private partnership (PPP)' arrangements to deliver services – given levels of risk with the operating environment in Afghanistan. This is consistent with the downward trend of foreign investment into the country.

7.6 Literature Review and additional material

The earlier literature review, which forms part of this overall research assignment, identified some research and other documents that focused on Afghanistan. A summary of the findings is included at Annex C, together with some additional material identified in the course of this case study. The ADB undertook an extensive evaluation of the AITF in 2016 and this also included a set of recommendations, which are summarised in Annex B. These have all informed this case study. However, they are included as additional reference materials to inform future decisions on approached to infrastructure development in Afghanistan in particular, and fragile and conflict affected states in general.

Annex A - List of Consultees

Name	Affiliation	Afghanistan Role
Ifthikhar Ahmad	DFID – Infrastructure Advisor	Based in Kabul 2015 – 16 (previously Pakistan)
Hanif Ayubi	ADB	Based in Kabul - Agriculture and natural resources specialist
Areg Barseghnan	ADB	Currently based in Kabul – resident advisor on the power sector
Andy Budiman	ADB	Currently based in Kabul – AITF roads and power sector
Mark Harvey	DFID – HoP Infrastructure	Based in Helmand for 18 months from January 2009
Bill Kilby	DFID – Head of Asia Regional Team	Deputy Head of DFID Afghanistan from 2016-17
Alastair McKechnie	Current ODI – previously with World Bank	WB Country Director Afghanistan (2003 – 08)
Tim McNeil	DFID	Based in Kabul – Economic Growth Team Leader
Morgan Riley	DFID	Based in Kabul until end 2017
Geoff Robinson	Consultant with SMEC	Power sector specialist working for ADB and World Bank Afghanistan
Patrick Safran	Ex ADB now Professor in South Korea – working on green growth and climate change	Was ADB lead based in Manila on infrastructure development in fragile states
Robert Schenk	Consultant working for ADB	Worked from 2006 on power sector in Afghanistan
Nana Soetantri	ADB	Based in Kabul working in transport sector
Emma Wright	DFID – Programme Manager	Based in Kabul 6 months to April 2018

Annex B - Summary of findings from the AITF Impact Assessment, 2011-16

Principle	Explanation of Principle	Assessment of AITF's performance
1. Take context as starting point	Country strategies and programs (CSPs) are based on in-depth analysis of the country context	Unsuccessful. CPS underestimates challenges (esp., lack of capacity, civil war) and assumes that the Afghan population, which is the ultimate beneficiary of AITF activities, shares donor priorities, particularly political commitment to democracy and social reform. This latter assumption is doubtful given the protracted nature of the conflict and regional support for insurgent groups.
3. State-building is central objective	ADB emphasizes good governance and strengthening institutions. Policy reform as prerequisite for effective aid	Partially successful. Technical assistance has been provided for Inter-Ministerial Commission for Energy, Gas Master Plan, Support for Infrastructure Investment and Policy (SIIP2), and Improving Capacity and Integrity of Procurement. It is doubtful however that gains from all this training are permanent. High turnover has been experienced by all of the Afghan ministries and parastatal agencies.
4. Align with local priorities	ADB helps stakeholders to articulate their concerns and needs.	Very successful. Focus on power, transport and water sectors is crucial to Afghanistan's development.
5. Recognize the political-security- development nexus	ADB's "whole of institution" approach involves relevant departments/offices to jointly support operations in WPCs	Partially successful. Although AITF is not immediately responsible for project design, project design is frequently over-ambitious. Unrealistic budgets and timelines require amendment

Principle	Explanation of Principle	Assessment of AITF's performance
		given security challenges in Afghanistan.
6. Promote coherence between government agencies	ADB recognizes the validity of the whole of government approach and seeks to engage with a broad range of agencies and other institutions	Successful. Technical assistance to the Inter-Ministerial Commission for Energy is perhaps the best example at the national level. Similar efforts are being made at the local level as part of the Northern Flood-damaged Infrastructure Rehabilitation Project. However, in the main, AITF works with a single government agency per project. (It is the project officer who decides which agency to engage.) It has also been suggested that ADB or AITF could engage with the 'shadow' government in 'contested' districts on a 'non-interference basis.' This is a judgment call the author leaves to ADB.
7. Coordinate with international actors	ADB's approach is firmly grounded in strategic partnerships	Successful. The AITF manager is in regular contact with bilateral aid agencies and other donors such as the World Bank. However, additional work is needed to manage expectations. No project should have a timeline of less than 5 years. AITF coordinates its activities with donors at project approval and during implementation through quarterly reporting.
8. Do no harm	ADB takes into account potential risks in all its project designs	Unsuccessful. Risk assessments routinely underestimate the scope for delay and cost overruns. Risks are grouped in two classes, namely, "lack of security" and "lack of capacity." Public documentation rarely if ever describes the circumstances that led to postponements or budget shortfalls. Lessons

Principle	Explanation of Principle	Assessment of AITF's performance
		learned are not incorporated into subsequent projects. AITF has commissioned another consultant to introduce 'conflict sensitivity' into project design by adapting the PBT to Afghan circumstances.
9. Mix and sequence aid instruments	ADB is committed to a sequential approach, considering absorptive capacity and appropriate sequencing	Partially successful. As delays have mounted, AITF project mix has shifted from capital spending on 'hard' infrastructure to technical assistance with a view to removing bottlenecks.
10. Act fast…	ADB interventions when early warning signs of fragility appear	Unsuccessful. With few exceptions, disbursements have fallen short of expectations, resulting in tension with certain of AITF's donors.
11. … Stay engaged long enough to give success a chance	ADB engages with its DMCs on a long-term basis as long as the government requests such support	Successful. ADB entered Afghanistan in 2002 and has remained there ever since. However, the appropriateness of the timing remains in doubt. In contrast to humanitarian assistance in conflicts, reconstruction assistance flows only after the fighting is over.
12. Avoid creating pockets of exclusion	ADB does not move in and out of countries. ADB's investment decisions are not driven by political considerations	Partially successful. ADB remains active in Afghanistan and projects are driven by infrastructure needs. However, pockets of exclusion remain since ADB and AITF operations are not targeted according to geographic equity principles.

Annex C Summary of Afghanistan Related Research

The following are extracts, specific to Afghanistan, from the literature review completed as an earlier output from this assignment, and some additional texts identified as part of this case study. Authors' views have in come cases been interpreted through summarising. Text is partly extracted from the text of original papers.

Gordon, S. (2011). Winning Hearts and Minds? Examining the Relationship between Aid and Security in Afghanistan's Helmand Province. Feinstein International Centre.	• This highlights the challenges of using aid, including Quick Impact Projects (QIPs) as an instrument of security policy. • It concludes that the UK's ability to project a sense of security and development was insufficient to match the Taliban threat in 2006, and subsequent to that to only control limited territory around key district centres. The Taliban, on the other hand, were highly effective at exploiting the dissatisfaction of marginalised groups and controversies around, for example, the poppy eradication programme. • This suggests that the stabilisation model adopted focused on the wrong drivers of the conflict. • The initial 'ink spot' model was not effective. • The UK approach of community identified development of small scale infrastructure projects did not meet expectations of benefits. • The British experience in Helmand highlights a creditable capacity to adapt the strategy to the prevailing situation and unforeseen tactical challenges. • It highlights the severe information gaps in operating within complex conflict environments. • It concludes that the complexities of perceptions of 'stability' and government legitimacy can be derailed where security and controls on development processes are insufficient. • In such situations 'aid' may have as many negative, unintended effects as positive ones. • The evidence also found that aid flows to Afghanistan have inadvertently helped to fuel corruption; large amounts of money have reportedly been spent so quickly as to prevent adequate anti-corruption, transparency and accountability controls and safeguards.
Iyengar, R et al. (2017). Lessons Learned from Stabilisation Initiatives in Afghanistan. RAND.	• A systematic review of 89 projects in Afghanistan • This highlights concerns that despite the amount of research and evidence, and the lessons learnt, which it found were largely ignored in the theatre of a new fragile and conflicted affected context. • The research team concluded: *'It is unsurprising that programmes did not accomplish the desired outcomes: few were designed, implemented or modified to take into account existing recommendations that may have improved their chances of success. It*

	is precisely for these reasons that stabilisation efforts should focus on not simply implementing projects, but also ensuring a mechanism for effectively integrating evidence-based recommendations and, when appropriate, modifying policy and strategy.'

Jones, S. and Howarth, S. (2012). Supporting Infrastructure Development in Fragile and Conflict Affected States: Learning from Experience. OPM, Mott MacDonald.	• Commissioned by DFID, The Afghanistan case study focused on projects in Helmand implemented under a stabilization programin, the context of the Taliban insurgency. These were:
	  ○ Gereshk Electricity Services Improvement Project (GESIP);
	  ○ Lashkar Gah to Gereshk Road Project;
	  ○ Roads in Central Helmand Programme;
	  ○ Helmand Growth Programme: Canals and Irrigation.
	• The researchers questioned DFID's theory of change and found that the DFID log frames were inaccurate and not regularly reviewed.
	  ○ Shifts in political focus resulted in changing requirements.
	  ○ In 2008/09 the priority was developing and delivery of large scale infrastructure projects to demonstrate political will.
	  ○ In 2010, with US troop deployment, this shifted to showing quick results on the ground, with lots of largely uncoordinated small scale infrastructure projects.
	  ○ In late 2011, following the announcement to withdraw troops (UK) by 2014, the focus dramatically shifted to operation and maintenance and training and capacity building of line ministries.
	• These changing objectives were detrimental to delivery on the ground.
	• However, the from relatively uncoordinated short-term small projects to a coherent programme with long-term objectives was considered positive.
	• They concluded that value for money was very difficult to assess in the context of Helmand, where security costs are so high and arrangements uncertain.
	• They also identified several possible negative impacts: particularly as a target for insurgents and becomes a symbol of anti-western sentiment; and too much security around infrastructure causing resentment, particularly where perceived as displacing possible local (low skill) employment.
	• They highlighted issues around selection processes for contractors. Better vetting of contractors

	would help in the delivery of quality products – highlighting the preference to contract to "English speaking" contractors leaving others (who speak no English) at a disadvantage. In their view those who speak no English have the needed experience of construction. **Lessons:** 1. **Develop a strategy, popularise it, build Afghan ownership, get buy-in and implement it.** Lack of a strategy leads to ad hoc piecemeal interventions. Align the strategy with higher-level national strategies, and preferably develop in conjunction with the host government. 2. **Support the strategy with simple, programmatic financing and robust management procedures.** DFID/ADB Lashkar Gah road should have resulted in financing and political benefits gained through working with the ADB - this was not achieved in practice. The approach adopted standards which were too onerous for the context and led to excessive time delays and costs. 3. **Support implementation of the strategy through capacity building and long-term specialist support – "Afghanisation".** It is normal development practice for partner governments to be in the lead, but this was not the initial focus in Helmand. 4. **Be clear on ownership of the strategy and the infrastructure**. A particular problem in fragile states is that many donors, especially non-conventional donors, are reluctant to let go and handover responsibility to host governments. 5. **Manage expectations.** Communities often assume projects will be more comprehensive and far-reaching than is realistic. The risk is a loss of good relations and trust with communities. Good communications with communities and other stakeholders is essential.
McKechnie, A. (2011) Post-war programme implementation and procurement: Some lessons from the experience of Afghanistan. ODI.	• **Donor-delivered construction projects had a reputation for high cost and low quality** and maintenance standards, largely **attributable to the haste of quick-impact projects – QIPs**. This fuelled discontent among the Afghan population, who believed it indicated widespread corruption. In fact, this was not usually the case but Afghans and donors have different conceptions of corruption. This helped to fuel a resurgence in the conflict from 2005-6 onwards. • **Preparations for larger, slower infrastructure projects should start immediately**, even while quicker reconstruction tasks are being planned and implemented. • **Organisational alignment** within donors helps to direct adequate resources and overcome internal hurdles

	• **Work with national capacity and systems that already exist**, rather than damaging this by setting up parallel systems. • **Use of community-based approaches can be more effective than working through local government**, where resources and capacity exist (including technical/financial O&M capability) and local government is weak. • **Do not rush into changing procurement laws and regulations**, as it is preferable to find ways of making the existing systems – with which civil servants are most familiar – work with donor funding in the short and medium term. • **Take time to consider the most appropriate level of fragmentation for procuring large projects**. It can be more effective to split large projects into multiple small projects, which are better suited to the local commercial environment and can be used to manage delivery risks. The capacity of procurement bodies should be factored into these decisions. • **Sustainability was a key failure of wider donor programming in Afghanistan**. The World Bank sought to use government systems. However, other donors created large parallel delivery structures (through which around 2/3 of all aid was channelled) which undermined the authority and capacity of GoA and led to the development of infrastructure that was impossible to maintain after the end of the donor projects which created it. • **The security sector was one of the major implementers of short term projects which had questionable long-term impact**.
MoD. (2016). Shaping a Stable World: The Military Contribution. HMG	• Stabilisation operations may inadvertently exacerbate corruption levels through unintended support for malign local actors • This can fuel the growth of criminal or terrorist networks. • Injecting significant resources into the operational environment (for example, through contracts or military assistance projects), combined with a lack of effective monitoring, can result in wasting scarce resources if project implementation is not verified. • In Afghanistan, a lack of accountability within some military supply chains led to the armed forces' resources being redirected to the insurgents, and directly strengthening those opposing the NATO International Security Assistance Force forces.
Zyck, S.A. (2012). Corruption & Anti-	• Corruption in Afghanistan is a key challenge for governance and rule of law and an obstacle for sustainable, private sector led economic growth.

Corruption Issues in Afghanistan. Civil Military Fusion Centre.	• Despite several commitments to address corruption (including the establishment of an anti-corruption body: the HOOAC), the problem remains widespread. • Consistent with global research findings, the main reported cases of corruption in Afghanistan's infrastructure sector are related to irregular practices during procurement processes. • It cites a Washington Post report, from the US government's Commission on Wartime Contracting, which estimates that between USD 30 – 60 bn in American funding was been wasted due to fraud, corruption and weak reporting and accountability mechanisms in Iraq and Afghanistan. The same article notes that corruption not only involved Afghan officials and private companies, but also foreign personnel within Afghanistan. • Highlights the Gardez to Khost road, in Afghanistan, where the project was jeopardized by insurgent attacks. As a result, the construction company sub-contracted security to a local powerbroker known to have strong connections with the local insurgent group, the Haqqani network. The cost of this informal protection is estimated at around USD 1 million per year, with evidence that part of this money directly benefitted insurgents.

Literature reviewed subsequent to the the summary issued in March 2018

Ball, N. et al., (2016) Development Cooperation in Afghanistan, Lessons Identified 2001 – 14, Landell Mills for DANIDA	**Approaches to Monitoring in Insecure Environments** • Deteriorating security from 2005 meant that donors were less able to visit projects. • A Management Review of the National Area Based Development Programme (NABDP) noted that 'implementing agents and programme officers were quick to point out that effective M&E was not possible in the insecure provinces,' stating that 'the Taliban will kill us if they find us with a camera or a GPS'. • However, some suggested that the inability to monitor was also a disingenuous excuse for utilising project funds without the controls of being monitored. And the review went on to question why any serious investments should be made in priority infrastructure in any area where there is a claim that normal monitoring and reporting tools cannot be used. • Third-party monitoring was adopted by some implementers (including ARTF). This was preceded by a long period during which accountability for expenditure and results was low. • Even when external monitors were contracted they faced the same challenges of insecurity and some of the same risks that reports may not be credible. • Donors have subsequently learned that even third-party monitors also need to be closely monitored. Some programmes have demonstrated that innovative and reliable methods of distance monitoring are feasible. • National Solidarity Programme's community monitoring in high risk areas is a prime example of this. However, the mechanisms employed are very costly and labour intensive and not likely to be widely replicated.
Bizhan (2017) Building Legitimacy and State Capacity in in Protracted Fragility – the Case of Afghanistan. International Growth Centre.	**Main conclusions:** • **Too little investment in the first years after war.** Donors provided little aid for reconstruction and recovery and invested little in building public administration and the security sector in the first years following the fall of the Taliban. In the two years following international intervention, Afghanistan received 5 to 10 times less per capita in aid, in comparison to Bosnia and East Timor.

	• **Overconcentration on short-term objectives.** The war on terror dominated the US and its allies' engagement in Afghanistan. This type of engagement and the subsequent state building strategies did not foster effective state building in the long run. Defeating Al Qaeda, and keeping the Taliban at bay, diverted much of the political attention and financial resources away from building the economy and state institutions. A lack of balance between short and long-term objectives had adverse affects on building state legitimacy and effectiveness as well as the economy. • **An extreme neglect of external adversaries.** A major caveat in the state building process and international support for Afghanistan was the neglect of external adversaries. The support from Pakistan's state in the form of safe havens, impunity, and logistics enabled the Taliban and Haqqani Network to reorganise and fight against the GoA and international troops. • **Ineffective aid modality and aid fragmentation.** Donors and the international institutions in Afghanistan adopted different aid modalities. This unintentionally undermined the development of permanent state institutions, private sector, and in some cases state legitimacy. • **Neglecting the legitimacy of state institutions.** Too much attention was paid to personalised politics and personal legitimacy. • **Underestimating the role of local public institutions.**
Jessica McDiarmid, (2013), Costs of Security on Infrastructure Projects in Afghanistan,	This study reported that Canada spent US$10 million for security measures for an Afghan dam project, which amounts to 20% of the total construction cost. It highlights that "paying for security is a necessity of doing development work in conflict countries…(but) use of private security contractors ate through development funds and undermined the Afghan government's authority, because at times they operated outside Afghan law". And that "paying for security is a necessity of doing development work in conflict countries…(but) use of private security contractors ate through development funds and undermined the Afghan government's authority, because at times they operated outside Afghan law". It also refers to a USAID audit that estimates security costs ranging from 0.5 to 34% of overall project costs with an average of 8.3%.

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