



Knowledge paper

The future of DFID's Infrastructure Technical Assistance Programmes

Summary

Technical Assistance can increase the capacity of governments to manage their national infrastructure and improve service delivery. Clear lessons can be drawn from existing DFID programmes to better structure future programmes and significantly improve outcomes.

State involvement is necessary for planning, procurement and delivery across the vast majority of infrastructure services. In the coming years, DFID plans to deliver substantial amounts of new infrastructure technical assistance (TA) programming to support state capacity in delivering sustainable, affordable, quality infrastructure services, whether publicly and/or privately financed. There is an opportunity to both learn from and improve the existing DFID set of DFID programmes which deliver development outcomes through better infrastructure.

This paper contributes to informing the design of current and future DFID/UK infrastructure TA interventions that support governments in developing countries. This includes TA to governments to legislate for, set up and manage PPPs, but not interventions that are more directly involved in project finance, or those that do not work directly with governments. Many of the lessons presented in this paper will also have relevance for DFID technical assistance programming in other sectors.

The findings highlight, in particular, the importance of understanding and analysing the broader institutional and organisational context; recognising the strength and continuity of partnerships with partner government agencies; improving co-ordination to maximise the UK's contribution; adopting flexible approaches and relevant impact measurement; clearly prioritising expected results, and identifying exit strategies that increase the likelihood of lasting benefits.

Introduction

DFID hosted a workshop in June 2017, entitled 'The future of DFID infrastructure Technical Assistance: good outcomes and good exits'. The workshop brought together practitioners in infrastructure TA and had two aims:

1. To learn lessons from past and current DFID infrastructure TA programmes, and;
2. To draw on the expertise of attendees – infrastructure experts from DFID and across UK government, academic bodies, and the private sector – to provide guidance on how DFID should design future (and adjust current) TA programming.

The workshop particularly drew upon the lessons learned by three of DFID's existing infrastructure programmes:

- *Accelerating Investment and Infrastructure in Nepal (AIIN)*. Building on the earlier Centre for Inclusive Growth programme, AIIN has three components: accelerating public and private infrastructure investment; financial sector stability, and; an economic policy incubator. With three ex-Permanent Secretaries from the Nepal government leading key workstreams, AIIN has highly benefited from their understanding of the Nepalese political system and strong network of contacts.
- *Climate Resilient Infrastructure Development Facility (CRIDF) in Southern Africa*. Focusing on water resources management, CRIDF targets infrastructure development in

transboundary river basins in the region. Started in 2013, the facility plans projects that increase the ability of communities, policy makers and planners to cope with climate change.

- *The Nigeria Infrastructure Advisory Facility (NIAF).* Started in 2007 to tackle bottlenecks constraining Nigeria's infrastructure development to support more non-oil growth, NIAF initially focused on upstream TA directly to Federal Ministries, notably power. The facility moved to a broader range of sectors and levels of government in phase 2. DFID/NIAF utilised an independent Technical Review Panel to guide implementation and recommend changes to its dynamic logframe bi-annually. DFID has launched a bid process for the implementation of Phase 3.

Design and Implementation of Infrastructure TA Programmes

The workshop identified six key issues that should be taken into account when designing and implementing infrastructure TA programmes. Outlined in more detail below, these are:

1. Understanding the political economy context
2. Building capacity within government ministries and agencies
3. Engaging government counterparts
4. Developing an effective exit strategy
5. Including an integrated inclusion agenda
6. Playing to DFID's/UK's comparative advantage and coordinating with other donors

The six key issues highlighted here all relate, but are not necessarily limited, to infrastructure TA. Indeed, improving the design and implementation of infrastructure TA programming could also benefit from applying broader lessons learnt from other types of TA programming.

> Understanding the Political Economy Context

Infrastructure planning and programming can be especially political. Understanding the money and power relationships that lie behind formal political structures is key in infrastructure TA. Every country has unique political dynamics. Each infrastructure programme, therefore, would ideally have a tailored approach informed by sound and regularly updated Political Economy Analysis (PEA), carried out by governance advisors and other specialists. Maintaining an up to date map of political decisions and decision-makers is important to understand where decisions are really made, and can be used to speedily update TA plans as appropriate.

Documented analysis is useful for designing programmes and perhaps modifying them at strategic points. When it comes to managing programmes, however, the important relationships are between DFID, their implementing partners and the partner government. A programme can be more successful at navigating politics if DFID and the implementing partner share an understanding of the political reality; and where DFID can work with the implementer to adapt programmes pragmatically to step around political problems.

Political imperatives and financial interests often mean that governments wish to focus on delivering new projects and require TA to support these. Caution should be exercised to ensure TA is supporting the most efficient economic solutions and not facilitating neglect of more important but lower profile work. Operation and maintenance is also often attached with low importance, insufficient funding (from tariffs or government budgets) and inadequate institutional arrangements in place for this. Ensuring effective operations and maintenance is a central priority for TA, which is touched on in more detail below.

> Building Capacity within Government Ministries and Agencies

Building partner government capacity is becoming an important part of TA programming, instead of merely filling capacity gaps. However, before deciding to support capacity building,

donors need to analyse and fully understand the barriers preventing governments from managing infrastructure (on a sectoral or broader basis, depending on the context). The wider context is of equal importance to an early assessment of the capacity deficit. These assessments should shape the appropriate style and approach to the TA support.¹

Analysis should consider the priority areas in which capacity needs to be built, e.g. technical, managerial, analytical, and/or governance and the priority Ministries/Agencies to target. It should also consider the approaches most likely to generate success, e.g. training programmes or embedded advisers working alongside government staff.

The effectiveness of both individual and institutional capacity building depends upon a blend of expert knowledge, a mix of softer skills (e.g. interpersonal, cultural and political awareness and patience), and the structure and context of the programme.

Capacity building of individuals and institutions is central to ensuring that the impacts of TA interventions continue beyond the lifetime of the programme and to supporting countries on the path to ending aid dependence. However, there is also criticism of the effectiveness of TA, and findings based on research² and experience suggest that designing and implementing programmes to achieve lasting impact is challenging.

The roundtable highlighted a number of critical issues as well as suggesting some effective responses to developing successful capacity-building programmes:

Critical issues	Responses
Power and politics are at the root of many problems that appear to be about capacity, meaning that capacity building programmes may be misdirected³.	Designing capacity building programmes not only for individual staff, but also for institutional systems. Ensuring capacity building programming is backed by sound analysis and that it accompanies broader TA.
Governments in many developing countries face severe coordination challenges, with high levels of fragmentation beyond the Cabinet. Capacity building in one part of government may therefore fail to address systemic challenges that are at the root of the problems faced.	Working with local consultants to build their capacity as well as that of government staff. Government Ministries and Agencies will often draw on national consultancy staff to support their operations, particularly where salaries are too low to attract staff of the required calibre.
Standalone training programmes cannot substitute for quality education and a productive work environment, which may not be present in countries with limited capacity.	Taking a broader view. Rather than being discouraged by the likelihood of trained government staff moving on to higher paid post outside government: <ul style="list-style-type: none"> ○ Find ways to recognise the broader benefits of the capacity building to society, e.g. a stronger private sector. ○ Consider expanding capacity building to training staff who could replace those who leave, e.g. through apprenticeships and improved higher education.

¹ Ubels et al, 2010, Capacity Development in Practice (p.59)

² Governance and Social Development Resource Centre, 2009, Changing Approaches to Technical Assistance (<http://www.gsdrc.org/docs/open/hd586.pdf>)

³ Secure Livelihoods Research Consortium, 2017, Service Delivery and State Capacity: (http://securelivelihoods.org/publications_details.aspx?resourceid=461)

Where individuals in government are provided with high quality training, they tend to use their improved qualifications to find work elsewhere with better remuneration, e.g. the private sector or Multilateral Development Banks.	Supporting the development of a pipeline of skilled staff through education and training (e.g. apprenticeships), specifically ensuring that the learning provided is suited to building the skills required in infrastructure today. This would require broader institutional capacity building support to take into consideration cross-sector development strategies – education in this example – to further sustainable infrastructure development objectives. DFID could also consider a tighter portfolio approach to enable sequenced programming across different sectors to support overall longer-term inclusive growth objective.
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> Engaging Government Counterparts

TA programming depends on building effective partnerships with counterparts in the partner government agency. Important aspects include:

- Clearly specifying and communicating the simple objectives of a programme of TA, and with objectives aligned so that a programme is supporting the partner government's priorities, rather than focusing on those of DFID.
- Embedding TA within the implementing agency to build strong relationships with key stakeholders, while recognising the risk that embedded TA can substitute for weak capacity rather than building new capacity, or can become a 'gatekeeper' to decision makers.
- Obtaining buy-in from high levels of government as far as possible, with a programme able to re-engage at periods of change (e.g. elections).
- Taking a medium-term view if DFID priorities (e.g. around gender, disability) are not reflected in recipient government policies. However, there may be some DFID/UK policies, for example around inclusion and environment, where it will be important to find ways to ensure these are reflected in recipient government policies in the short-term.
- Building trust by initially delivering the early results sought by the recipient. Once this trust has been established, it is easier to open conversations about inclusion of DFID priorities (e.g. around gender, disability) that are not reflected in recipient government policy.

Achieving an appropriate mix of local (including diaspora) and international consultants within a team is important to ensure that a mix of local knowledge, cultural understanding, and international best practice can be drawn upon as required. Including local consultants in the team with political/institutional standing can also have a significant positive impact. AIIN secured three ex-Permanent Secretaries to lead three of its key workstreams. Their understanding of the Nepalese political system and strong network of contacts makes them highly valuable additions to the programme. Meanwhile, international consultants are often able to challenge the status quo and influential political figures in a way that local consultants cannot. DFID and its implementers also have a responsibility to ensure propriety in such cases, as in similar situations within the UK civil service.

Where possible, working with local communities can bring the added benefit of local ownership of projects, which is a success factor for infrastructure sustainability in particular.⁴ As local capacity is often limited, this will generally need to be supported by local NGOs, Community Organisations, INGOs or consultants.

⁴ Supporting Infrastructure Development in Fragile and Conflict-Affected States: Learning from Experience, DFID / OPM, Mott MacDonald 2012 – citing evidence from DFID programming in Nepal and South Sudan among others. <http://www.gsdrc.org/document-library/supporting-infrastructure-development-in-fragile-and-conflict-affected-states-learning-from-experience/>

> Developing an Effective Exit Strategy

Developing an effective exit strategy at the start of infrastructure TA programming, and revisiting it throughout the delivery, will help ensure sustainability of development results. DFID standalone TA programmes generally target ambitious sector reform processes which take many years to implement. The long lead-times in infrastructure programming further accentuates this results lag and it is unlikely that objectives will be fully achieved within the lifespan of a DFID programme. Because expectations are often set too high during the business case and procurement process, exit strategies are often only seriously considered in the tail end of large programmes, often when the original objectives are unlikely to be met before completion and when the original assumptions about sustainability are outdated or inapplicable. This is more pronounced for fragile and low-income countries, where the task of building up adequate national capacity is more challenging, and longer timescales should ideally be built into programme design.

A range of measures and actions to improve exit planning and sustainability can be considered, including:

- Embedding maintenance and operations procedures to ensure that infrastructure is managed sustainably.
- Ensuring that the programme leaves behind standardised procedures and approaches to guide staff, as well as improved capacity.
- Seeking to ensure that partner ministries have budgeted, staffed and resourced plans for maintaining and building on progress achieved through the TA.
- Creating a legal entity to continue the work of a programme. This approach has significant potential benefits, but donor agencies need to be aware of the risk that they may be left with residual reputational risk without any corresponding management oversight.
- Providing tapering support – remote TA and periodic short visits – and coordinating with other agencies to manage the exit or pass on programmes.

> Including an Integrated Inclusion Agenda

The integration of pro-poor benefits to ensure inclusive growth from the start is fundamental for effective infrastructure TA programmes. Experience shows that applying these retroactively is far less effective.

Poverty reduction is DFID's mandate and remains the central objective even where this is achieved primarily through economic growth, or where the government partner is focused on benefits other than poverty reduction. In infrastructure TA programming, it is important for ensuring that poor people will directly or indirectly benefit from infrastructure projects and services – particularly through jobs and employment.

Likewise, approaches that develop a genuinely comprehensive approach to gender inclusion are essential. These may need to be developed and implemented at a range of levels: through regional structures to provide an overarching framework, at national planning level, and in relation to the individual infrastructure investment.

Infrastructure TA programmes should seek to promote inclusive growth through positive reinforcement, using recognisable economic growth and job creation arguments, and leveraging the existing political commitments and legislation of host governments and agencies. DFID may lose traction if it tries to push its own agenda too overtly, or through a particular set of programmes. Gender and inclusion issues may not be understood by counterparts as being overtly relevant within

infrastructure programmes, particularly if other agencies normally hold a mandate in this regard, so their concept and importance will need to be clearly communicated.

> Playing to DFID's/UK's comparative advantage and coordinating with other donors

Assessing and recognising DFID/UK agencies' areas of strength (and weakness), and those of other donors and MDBs involved in the delivery of infrastructure TA, is important in considering opportunities for further collaboration with other partners. Collaboration is particularly relevant where the other partners have complementary skills.

Coordinating DFID's interventions to complement the activities of other actors – especially the World Bank Group (WBG) – is key to ensuring that DFID's infrastructure programming delivers maximum impact. The WBG carries out significant infrastructure TA and may be scaling up its TA portfolio as part of the recently announced 'Cascade' strategy. World Bank sector experts are generally based in Washington DC rather than in-country, which makes it harder to form strong working partnerships with government counterparts or related TA initiatives. The WBG's business model also makes it more challenging to use an adaptive, flexible approach to delivering TA. However, the use of World Bank staff to deliver the TA can bring a higher level of credibility. In contrast, DFID is capable of delivering adaptive, in-country TA and can draw on well-qualified experts.

It is also important to consider how to utilise the skills and capabilities of different UK government departments active in infrastructure in developing countries, which include DFID, FCO, DIT, and the Infrastructure Projects Authority (IPA)⁵. There is an opportunity to step up coordination and collaboration to maximise DFID/UK impact. In the future, DFID can explore how to collaborate more with key partners, both to ensure that TA programmes operating in the same country are complementary and to develop opportunities to link its TA offer with partners' investment programmes.⁶

Considerations for Programmes

The workshop also identified six considerations to take into account when delivering infrastructure TA programmes. Outlined in more detail below, these are:

1. Adopting a flexible approach
2. Dealing with long timescales to deliver results
3. Easing procurement and re-tendering bottlenecks
4. Prioritising operations and maintenance
5. Evaluating and measuring impact
6. Clarity of Programme Purpose

> Adopting a Flexible Approach

TA programmes benefit from having the flexibility to negotiate with and choose the partners that they work with, as well as being able to change this as the political environment shifts.

Infrastructure TA programmes are more effective where they can adapt. This involves taking a broad portfolio approach which can include an experimental approach to interventions in areas with potentially high returns, as well as swiftly recognising where approaches are not successful and stopping these activities. For example:

- AIIN was able to switch from direct support to the Investment Board of Nepal (IBN) to supporting particular projects within Ministries when political economy shifts reduced the effectiveness of direct support to IBN.

⁵ The IPA is currently working on a Prosperity Fund business case to share UK expertise in infrastructure

⁶ There are already examples of this, for example through the Dar Es Salaam Port Improvement Programme.

- The Rural Access Program (RAP) in Nepal began with a focus on rural roads but has shifted over time to deliver a much broader set of objectives.

When adaptive programming is built into a programme from the design phase, benefits can be reaped during implementation. These include:

- *Adaptive funding*: this enables programmes to examine a number of activity areas with relatively small budgets at the outset and then to scale up where they are successful.
- *Adaptive approaches to logframes and impact measurement*: logframe indicators should be changeable to enable a programme to achieve objectives in ways that may not have been anticipated at the design stage. For example, AIIN set outcome targets from the start but output indicators were established during programme implementation. However, adaptive logframes require independent verification, for example from a Technical Review Panel.
- *Adaptive timescales*: trying to shape the timetables of the ministries and agencies receiving TA to fit the lifespan of DFID programmes may be detrimental to the performance of a programme, especially in highly fragile countries. Programmes can benefit from flexing timescales to fit with the existing timetables of partner government ministries and agencies, and to ensure programme objectives meet prevailing political economy dynamics.

> Dealing with Long Timescales to Deliver Results

Given most infrastructure TA programmes require long timelines to achieve substantive results, designing programmes to deliver a combination of short-term and longer-term outcomes can help. When done well, quick-win results build the credibility and reputation of the programme with key in-country stakeholders.

Expectations of early wins can, however, also be distorting and detrimental to longer term outcomes. Although development partners may want to use capital budgets to achieve quick-win results, these can also have a negative impact on the nature of the partnership if the emphasis is immediately on an imperative to spend quickly.

Working in upstream aspects of an infrastructure project (e.g. on feasibility studies) is important for effective TA programming, as capacity for this type of work in partner governments is often limited, meaning that it can be a key constraint to the development of projects. However, upstream work requires long timescales and creates risks as it relies on others to deliver projects downstream.⁷ It also creates a tension with the understandable desire by donors to showcase how their funding is providing tangible infrastructure results on the ground. The long timeframe required to deliver benefits in these situations should be factored into measurement and evaluation processes.

Another way to meet the challenge of delivering rapid results is through incorporating an inception period during which performance is monitored via process indicators (e.g. “24 Ministries assessed as potential partners for collaboration, 6 selected”). If there is instead pressure to deliver results from the very start of the programme, the development partner will be under pressure to quickly find ministries and agencies willing to work with them. This could risk affecting the power dynamic with the selected ministries and agencies as relationships are formed. An inception period provides time to carefully assess which ministries and agencies present the greatest chances of implementing a successful programme.

⁷ See pp 12-14 on success rates in project preparation TA in: Measuring and Maximising Value for Money in Infrastructure Programmes, DFID / ASI, 2012 <https://www.gov.uk/government/publications/measuring-and-maximising-value-for-money-in-infrastructure-programmes>

Finally, DFID could consider reporting the results of its portfolio of infrastructure programmes as a whole, demonstrating the success of established programmes and reducing the pressure on new programmes to deliver rapid results.

> Easing Procurement and Re-Tendering Bottlenecks

Establishing smaller pre-cursor or interim programmes can help ease procurement and re-tendering bottlenecks and ensure the smooth ramp-up and delivery of infrastructure TA programmes. Procurement delays can clearly affect inception timelines. DFID could consider specifically factoring in interim measures or pre-cursor programmes, which can be smaller, easier to procure and provide inception work ahead of full programme inception. Such measures can also help to bridge the gap between two implementing organisations when a programme is re-tendered, and help to avoid loss of the previous programme cycles' progress, including embedded TA, the contact base and host government goodwill.

Procurement processes can have a significant impact on partnerships. For example, a lengthy procurement can mean that the partner government's agenda has moved on by the time the TA is put in place. One way of mitigating this is to consider a pilot, or an in-depth scoping mission to assess the political economy and identify potential entry points (as with the Cities and Infrastructure for Growth (CIG) programme). This can enable a fast start once consultants are appointed. Delays in re-procurement risk that existing relationships are lost once embedded TA is removed and then has to be built up again, or that imperfect interim measures are needed to bridge the delay in tendering (e.g. NIAF III, which is currently delayed).

> Prioritising Operations and Maintenance

Embedding the importance of operations and maintenance (O&M) within infrastructure TA programming and with its beneficiaries can maximise the value derived from infrastructure. There is often a substantial focus on delivering new infrastructure projects and assets at the expense of maintaining existing infrastructure. This approach means that existing infrastructure often does not operate at levels of maximum efficiency and can degrade quickly. This shortens the lifetime of infrastructure, resulting in an increased need for capital expenditure.

Operations and Maintenance is often left until the end of programming and features as part of the exit strategy of a project or TA engagement. This often does not allow enough time for hand over and capacity building, and is often under-budgeted by donors – often requiring the TA/asset recipient to take on O&M as part of the counterpart funding or conditionality agreements of an engagement. This severely reduces the likelihood of sustainable asset management and its attendant socio-economic benefits – and ultimately leads to early failure of assets and loss of jobs. This can reinforce past failures and undermine previous capacity building efforts. If O&M is an important part of sustainability – ultimately the real value for money of a programme – then it should be planned for and budgeted as a major component with a significant lead time and follow up period.

If a poor maintenance culture exists – which is often the case in developing countries – DFID could consider standalone multi-year TA programming focusing on O&M specifically – which would take in issues of procurement, training, capacity building and lack of budget transparency and corruption. This programme could then support other aspects of DFID's (and indeed other donors') portfolio and M&E.

> Evaluating and Measuring Impact

An effective evaluation framework should be built into infrastructure TA programming from the beginning. Given the nature of technical assistance, evaluation should aim to measure a programme's broad impact, not focus on a narrow set of 'hard' indicators. This should include

capturing the softer benefits of capacity building (using, for example process indicators), as well as progress against a project pipeline (where relevant).

A Technical Review Panel can be of great value in providing expert feedback on TA interventions from an informed and objective perspective. The independent NIAF technical review panel provided expert TA services to the programme delivery team on a biannual basis that brought significant benefits.

The benefits of capacity building can be dispersed and hard to identify (e.g. a strengthening of the private sector achieved by training government officials who then move to private companies), and can take years to materialise (e.g. training engineers of the future). As such, monitoring tools including logframes can be designed to capture these. However, where monitoring and evaluation is more focused on short-term and tangible impacts, programme implementers are also more incentivised to focus on such impacts – rather than long term sustainable ones.

Finally, even if a TA programme is highly successful, it is important to recognise that the main impact of the work may not be fully realised until long after the programme has closed. Investing in long-term impact analysis of prior DFID work (and planning for this while the programme is still running, so that appropriate information can be captured before it disappears) would improve understanding of the real impact of infrastructure TA.

> Clarity of Programme Purpose

Infrastructure Technical Assistance can be a powerful vehicle for delivering more and better infrastructure. This will best be achieved when programme design is clear about the expected and priority outcomes and the programmes' role in achieving those. The relationship between well planned infrastructure and various outcomes such as economic growth, employment, climatic resilience, emissions, connectivity, and poverty are well documented. It is important that the purpose of a particular infrastructure development is well understood and clearly stated, as having too many or changing outcomes or priorities can erode the ability of a programme to succeed against a clear set of priorities.

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