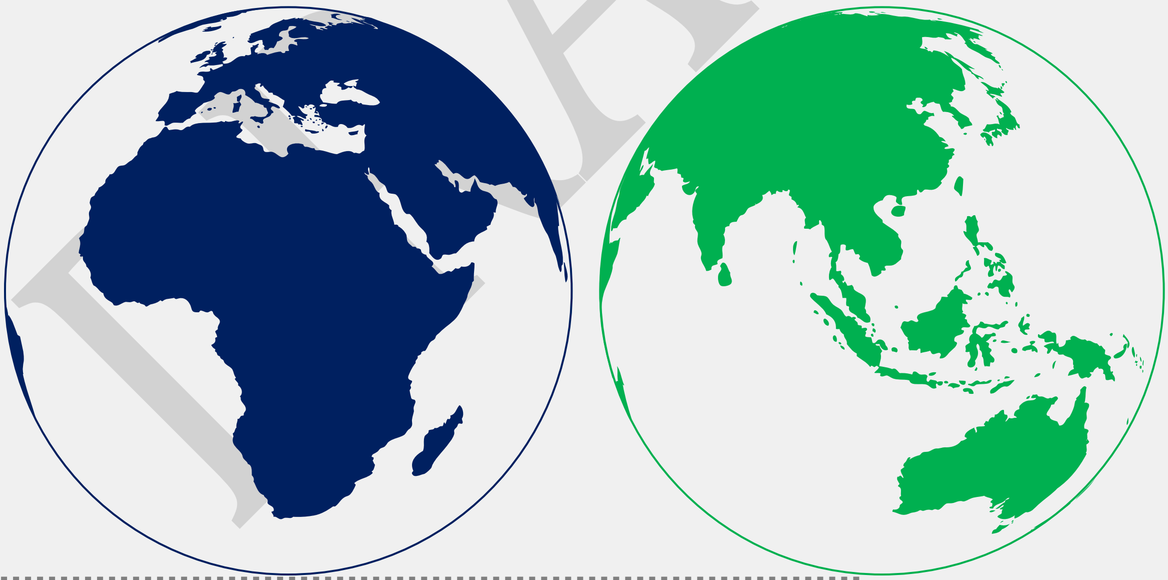
ICED

Infrastructure & Cities for Economic Development

‘How to’ guide

Using equity to improve VFM in infrastructure programming in FCAS

Produced for: DFID GRD
Version: v3.0
Date: 19 March 2018



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1. Introduction

1.1. Purpose of this guidance note

This 'how to' guide provides practical advice for considering equity issues in infrastructure programming, in order to achieve good Value for Money (VFM) outcomes in FCAS.

The guidance is aimed at those in DFID, other donor organisations and service providers who are responsible for programme identification and design, business case development, and managing and implementing infrastructure programmes in FCAS. It provides practical guidance and prompting questions to help formulate equitable programming approaches that are good VFM, at each stage of the programme lifecycle. It provides advice on how to manage the trade-off that exists between optimising results for the poorest and most marginalised groups, and the costs of doing so.

The guidance is informed by DFID general principles, with a focus on learning from previous DFID infrastructure programmes. It is also informed by DFID guidance, including the 2011 *DFID Business Case Guidance*[1] and the 2017 *Equity in VFM Guidance Note,*[2] as well as a range of literature on VFM and infrastructure programmes in FCAS.

1.2. Why equity is important for VFM in infrastructure programmes in FCAS

Equity is one of four defining characteristics of value for money (the '4 Es' framework). It is defined by DFID as *'equivalence in life outcomes for different social groups, recognising their different needs and interests, and requiring a redistribution of power and resources'*. In terms of programme design, it is usually considered as the extent to which interventions reach and benefit the poorest and most marginalised, even if they might be harder or costlier to reach.[3]

DFID considers equity to be a valuable goal in itself, and therefore worthy of spending more to achieve, where this is necessary, and at the expense of focusing exclusively on maximising technical outcomes. This could include explicitly targeting women and girls; those at risk of violence; the youth demographics of a population; those with disabilities; and minority groups, often defined by clan or ethnicity.

In FCAS inequity can be both a root cause of conflict and a natural result of it (where parties to the conflict aim to control economic and social resources at the expense of other parties). Promoting equitable development can help to heal division and tackle the root causes of conflict. In contrast to low conflict contexts, equity in FCAS can also involve promoting fair and transparent distribution of resources to pursue peacebuilding goals,

[1] DFID (2011) A How to Note: Writing a Business Case. A DFID Practice Paper.
[2] Downs, A & McGowan J, (2017) Equity in VFM, an Internal DFID Guidance Note.
[3] ibid.

even where this requires targeting groups which are *not* the poorest or most marginalised (this relates to conflict sensitivity in programming – see Box 1 on page 8).

The impact of fragility on programming also raises the importance of equity to VFM of programming in FCAS. Compared to more permissive contexts, fragile states tend to have greater barriers to accessing marginalised communities (including costs), deeper development problems faced by those communities (damage and neglect to infrastructure, services and social cohesion) and stronger political pressures on donors to allocate aid benefits inequitably.

While there are significant challenges to infrastructure provision in FCAS, due to poor governance, low capacity and general insecurity, infrastructure can provide a foundation for stabilisation and economic development. Infrastructure delivery in both urban and rural contexts is a core pillar of DFID support. This involves delivering physical infrastructure, and / or providing technical assistance to build government capacity or to work with community groups as well as the private sector to better plan for, deliver, and maintain infrastructure and services.

There are many challenges in achieving equity which must be understood and mitigated in order to maximise the VFM of infrastructure programming. The main challenges can be summarised as:

- Accessibility to infrastructure both in terms of where it is located and physical access for all individuals,
- Affordability of using and maintaining infrastructure,
- Equitable allocation of construction jobs during an infrastructure programme,
- Procurement of international and local contractors who can understand and enhance equitable outcomes,
- Following recognised standards and safeguards to ensure equitable design.

These points are explored further in Sections 2, 3 and 4. Achieving these objectives will require more extensive consultation, design processes and potentially a modestly increased budget. However, the outcomes will lead to more equitable use of infrastructure, greater stability, sustainability and therefore VFM. As well as achieving the 'Leave No One Behind' goal, infrastructure programmes which meet the needs of marginalised users also unlock significant economic potential of those who otherwise cannot escape from social exclusion.

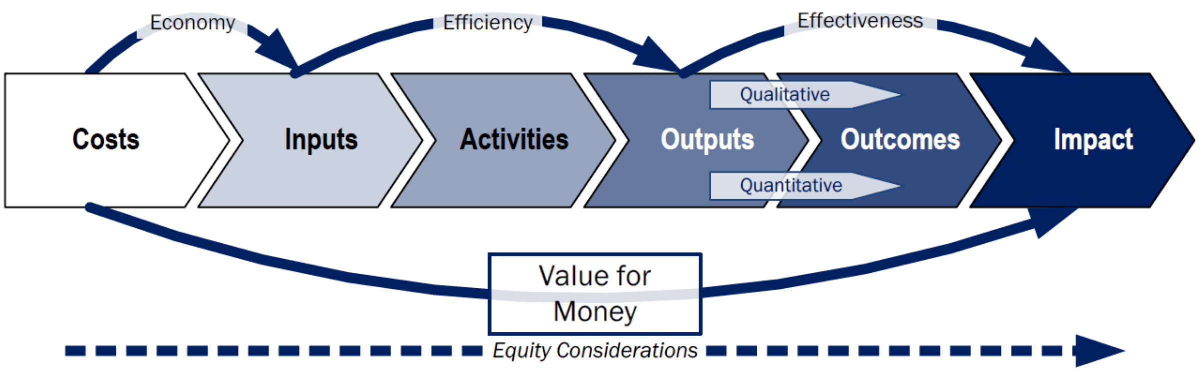
1.3. Equity and VFM: General principles

DFID produced comprehensive guidance in 2017[4] on how to achieve equity in VFM across its broad portfolio of programmes from governance to private sector development. This 'how to' note draws on that guidance but focuses on the critical steps to ensure the outcomes of infrastructure programming in FCAS are as equitable as possible. The DFID guidance sets out several key principles:

[4] Downs, A & McGowan J, (2017) Equity in VFM, an Internal DFID Guidance Note.

1. Assessing equity involves assessing how fairly the benefits are distributed and the extent to which benefits will reach poor and marginalised groups.
2. The different lenses through which to view equity will vary by country as the characteristics and identities of people most at risk of extreme poverty, exclusion, stigma, violence and discrimination varies by context. In order to maximise the impact of interventions on poor people's lives, it is important to consider equity alongside economy, efficiency and effectiveness, which together constitute the four E's.
3. Balancing the four E's can be complex and there are likely to be trade-offs. Considering the fourth E equity alongside the other E's (see Figure 1) does not mean weighting equity higher than the other E's. Important things to take into account for any analysis are:
    - It is proportionate to the scale and risk of the programme.
    - To make decisions transparently and on the basis of the available evidence.
    - That how the E's are balanced and weighted depends on the objective of the programme and the context.
    - Where appraisers decide not to adjust explicitly for distributional impacts, they provide an evidence based and valid justification for this decision.

Figure 1: How equity fits into DFID's Value for Money and programme framework



Source: DFID (2011) DFID's Approach to Value for Money

1.4. Equity and VFM across the infrastructure programme lifecycle

Equity should be considered in relation to VFM across the infrastructure programme lifecycle. Demonstrating the VFM of infrastructure interventions should be done *ex ante* through options appraisal at the business case and programme design stage, during programme implementation (where it is assessed through annual review and internal and external monitoring and evaluation), and *ex post*, through evaluation and lesson learning.

Table 1 shows how equity should be considered as part of VFM at each stage of the infrastructure programme lifecycle.

Table 1 How to consider equity as part of VFM at each stage of the programme lifecycle

Programme Stage	Activity	How to achieve equity
Programme Design	▪ Business Case – Strategic Case and Options Appraisal ▪ Political Economy Analysis / Conflict Analysis ▪ Logframe Design	▪ Understand the context of social exclusion and marginalisation in the selected area/region. Speak to all groups – both marginalised and not. ▪ Identify political and conflict-related barriers to equity and decide on an acceptable balance between feasibility and equity. ▪ Decide which groups form the intended beneficiaries and what disaggregated impacts are desired. ▪ Design a Theory of Change which clearly links programme inputs to equity related outcomes. ▪ Allocate value to equitable outcomes. ▪ Weigh up the costs and benefits of equitable outcomes against other VFM considerations. ▪ Set up smart metrics to measure equity in VFM for the programme. ▪ Include some key targets related to equity-based logframe outputs and outcomes.
Procurement / Mobilisation	▪ Procurement of service provider to implement infrastructure programme. ▪ Inception stage, including detailed design of programme.	▪ Ensure that the Service Provider understands and can implement pro-equity inputs and demonstrates equity in composition of programme team, HR policies, etc. ▪ Consider incentives for equity outcomes through Payment by Results. ▪ Re-visit the disaggregated needs of the beneficiary population. ▪ Undertake further political economy analysis to understand power dynamics and impacts on equity as well as programme entry points and inputs. ▪ Test the equity strategy with target populations – what are the potential unintended consequences? Will your ideas work in practice? ▪ Set up adaptive programming systems to ensure operational flexibility in FCAS while maintaining equity related outcomes. ▪ Choose methods for providing transparency and accountability, and to clearly communicate the equity motives of the programme.

Programme Stage	Activity	How to achieve equity
Programme delivery	▪ Collaboration with service provider in delivery of programme ▪ Annual reviews ▪ Internal and external monitoring and review ▪ Updated political economy and conflict analyses	▪ Ensure design of infrastructure that meets the needs of a significant proportion of poor users. ▪ Ensure design of infrastructure that meets the needs of marginalised or vulnerable users (for example, accessibility for disabled users, privacy and safety for women and girls). ▪ Ensure *services* delivered by the programme are also affordable and accessible. ▪ Consider construction methods (such as labour based) which provide employment for excluded groups, vulnerable households or for women. ▪ Consider support to enhance the accountability role of marginalised groups (on projects themselves, or through local government). ▪ Ensure procurement of local contractors to reflect equity values. ▪ Ensure equity outcomes are maintained in adaptive programming. ▪ Ensure the sustainability of equitable outcomes beyond the programme lifecycle and ideally for the lifecycle of the infrastructure. ▪ Undertake evaluation and lesson learning.

The remainder of this document describes in more detail each of these stages and the actions that should be taken to support equitable outcomes as part of good VFM. Each section includes prompting questions to assist programme designers / implementers. It is set out by programme stage as follows:

- **Chapter 2:** Equity and VFM in programme design
- **Chapter 3:** Equity and VFM during procurement / mobilisation
- **Chapter 4:** Equity and VFM during programme delivery (including in design of physical infrastructure and ensuring equity beyond the duration of the programme)

2. Equity and VFM in programme design

2.1. Introduction

This section discusses how to integrate equity through the strategic case and business case process, including setting equity objectives in logframe indicators. Readers will note the structural similarity to DFID's 2017 guidance note on equity.[5] This paper supports the earlier guidance with specific applications for FCAS programming. Readers may wish to refer to both guidance notes for a full picture integrating equity into VFM in programme design.

In DFID programming, 'programme design' is considered to be the project scoping and business case stages. This is the stage where the key aspects of a programme are conceived and it is important to establish equity as a contributor to VFM at this early stage. This should ensure that the trade-offs between the 4 E's in terms of costs and benefits of targeting different beneficiaries or including equity into design and operational costs are factored in.

2.2. Developing the Strategic Case

The first stage of programme design comes with producing a compelling strategic case. The strategic case is the first opportunity to outline the expected impacts and outcomes, and so it is the first the opportunity to introduce equity into the programme. The box below gives some questions to help drafting an equity-mainstreamed strategic case.

Questions to consider:

- How will the intervention contribute to poverty reduction?
- Who are the intended beneficiaries? What groups do they fall in, and what disaggregated impacts could we expect?
- How does the intervention overcome barriers to inclusion for a particular service?
- How does the intervention contribute to increasing gender equality and how does it meet the Public Sector Equality Duty?[6]
- Will people with disabilities will be included in, and benefit from, the programme?
- What are the costs of not addressing the needs of the poor and marginalised and/or excluded groups in the context of the intervention? (i.e. the relevant counterfactual)

Examples:

- How much extra cost would wheelchair adaptations add to a building project? How many people using wheelchairs would you reasonably expect to access the building? What extra value would these people bring to the outcome of the building investment?

[5] Downs, A & McGowan J, (2017) Equity in VFM, an Internal DFID Guidance Note.
[6] Further information at: https://www.equalityhumanrights.com/en/advice-and-guidance/public-sector-equality-duty

- Does conflict preclude the use of an infrastructure investment by certain groups? If so, what measures could you include to try to include more people in a post-conflict situation? How does this long-term equity factor into your VFM analysis?

In order to set out a clear Strategic Case and answer these questions as effectively as possible, programme designers should:

1. **Develop clearly defined spending objectives that include objectives in relation to marginalised and excluded groups.**

   Spending objectives set for an infrastructure intervention in FCAS should be clearly defined in terms of the desired economic development and stability outcomes, and how those will be achieved (for example by targeting specific groups of beneficiaries). Objectives should be SMART (specific, measurable, achievable, relevant, and time bound). Setting clear objectives helps to incorporate the needs of marginalised groups in line with programme aims and maximises the durability of equity considerations throughout the business case stage.

2. **Disaggregate data and information on populations in scope for the intervention as much as possible (i.e. data about possible target beneficiaries)**

   In order to support the rationale for intervention, analysis undertaken for the strategic case should identify the range of needs of different social groups within the populations at large, that are in scope as beneficiaries for the intervention. **At minimum, the target population should be broken down on the basis of sex, age, disability status and geography.**[7] Understanding aspects of equity requires information about cultural, socio-economic, political and conflict context to understand how different groups in society might be excluded from a certain intervention. The more granular the analysis, the better information available to determine the trade-off between the benefits and costs of targeting certain groups. In developing contexts, particularly FCAS, precise and reliable data can be difficult to obtain, so identify and document a balance between the costs of data collection and improved information. Disaggregation at this stage will guide data collection throughout the programme, so the additional burden this may impose should be considered and budgeted for.

3. **Seek beneficiary input early**

   If possible, consultation with potential beneficiaries of the intervention should be undertaken early during programme design, to enable the solution developed to better meet the needs of target beneficiaries and maximise equitable and good VFM outcomes. This is important particularly in the case of marginalised groups. As they can be hard to reach, they are often not well represented and their needs not understood. This can lead to unintended exclusion of these groups from the benefits of infrastructure investments, which can lead to poor VFM outcomes. For example, delivery of solar power to schools in a conflict environment may be intended to improve education outcomes; but if it is installed in areas where it is too dangerous for teachers and students to attend school, the investment is unlikely to provide good VFM.

[7] These four categories were selected as part of DFID's recently published Data Disaggregation Action Plan to support getting the required data and to ensure that high quality disaggregated data is available to inform policy and programme decisions. Source: Bradford Smith, K and O'Broin-Molloy, F (2017). Data Disaggregation Action Plan. DFID.

It is important to consider how best to engage with the various special interests within a beneficiary population. Useful actions include:

- Undertake a proportionate political economy analysis (PEA) to understand key stakeholders and power dynamics, helping to identify those whose voice may be difficult to hear and how to approach them.
- Conduct interviews or focus group discussions. In some FCAS contexts this may include the need for sensitive techniques to enable the participation of women and the expression of views and opinions that may normally be suppressed.
- Undertake or draw on existing conflict analysis to understand how the population in your target area will understand equity. Ensure that conflicting groups with which it is possible to engage are included in early discussions.[8]

Box 1: PEA, conflict analysis, conflict sensitivity and equity

There is substantial guidance for practitioners on various forms of context analysis.[9] This document refers to Political Economy Analysis (PEA), but this term can be widely interpreted and the type of analysis will typically be decided by donor and implementer teams on the ground. Conflict analysis is typically conducted in FCAS and can complement or even replace PEA, depending on the approach used.[10] The name and specific approach matters less than its utility in understanding social, political and conflict dynamics that will have an impact on programming. *Conflict sensitivity* makes use of understanding gained from conflict analysis (or PEA) to modify the programming approach in FCAS contexts.

Although usually understood as the inclusion of previously marginalised groups in development benefits, **Equity has another dimension in conflict contexts**. In these contexts, targeting marginalised groups can exacerbate conflict or introduce new drivers of conflict that previously did not exist. Programme designers and implementers should form an understanding of **how equity is understood by the local population** (this may differ significantly from a foreign interpretation) and explicitly seek views from groups that are in conflict with each other. While there is still a need to seek the inclusion of marginalised groups to demonstrate the equity of programming, programmes will also need to consider the need to demonstrate **impartiality**, which can be a directly contradictory motivation.

Examples of conflicting equity and impartiality motives quoted in previous DFID guides include infrastructure programming that benefits ‘returning combatants’, which can be perceived as unfair by local populations (“Why should the people who were fighting benefit?”) and post-conflict reconstruction perceived to benefit particular ethnic groups known to live predominantly in the target area.

[8] For example, in some rural economies settled populations can come into seasonal conflict with nomadic groups. Conducting focus group discussions at the wrong time of year or failing to identify drivers of conflict can lead to infrastructure which favours one faction and increases conflict.
[9] A useful summary of different kinds of context analysis and their uses was produced in 2016 by IIED, funded by DFID: https://www.rescue.org/sites/default/files/document/1215/10797iied.pdf
[10] See the DFID-supported How To Guide on conflict sensitivity (2012), produced by the Conflict Sensitivity Consortium, for a practical discussion. In particular see page 44: ‘Good enough approach to conflict analysis’. http://local.conflictsensitivity.org/wp-content/uploads/2015/04/6602_HowToGuide_CSF_WEB_3.pdf

In each case, **the solution has been closer engagement with affected communities and a compromise that enables programming which still addresses equity issues**.

2.3. *Undertaking options appraisal*

Assessing VFM in FCAS is complex and will always require an element of judgement beyond formulaic calculations. However, it is important to be able to compare options for intervention against each other during programme design on a VFM basis. Traditional methods of options appraisal, including cost benefit analysis (CBA) and cost effectiveness analysis (CEA), do not always explicitly take equity considerations into account. The UK Treasury's Green Book provides guidance on cost-benefit and distributional analytical methods and should be consulted when undertaking options appraisal of any proposal.[11] Specifically, equity should be incorporated into options appraisal by doing the following:

1. **Consider how the 'counterfactual' varies by beneficiary type**

   The value that is added to a person's life from the assistance they receive from a DFID programme depends on the *counterfactual*, i.e. what would happen if they didn't benefit from a DFID programme. The first step of options appraisal is to define this counterfactual case. The impacts (costs and benefits) of the options for intervention are then evaluated incrementally against the counterfactual.

   To incorporate equity into the analysis, the counterfactual should be defined for each of the different population groups in scope for the intervention (see information on disaggregating data in Section 2.2 above). The counterfactual should look at what the likely trajectories for these different population groups are if no DFID intervention occurs. Based on the available evidence, what is the opportunity cost of reaching a person with constraints X or Y or characteristic Z; versus a person without those constraints or with different characteristics?[12]

   For example, a DFID programme may seek to build schools that include facilities for disabled pupils. The counterfactual would be the situation in which pupils have poor or inadequate facilities and the disabled pupils likely have no educational opportunity. The costs and benefits for each scenario should then be quantified and weighed up, using the techniques described below.

   When calculating benefits relative to the counterfactual, the likelihood of 'displacement' should be considered: in the absence of DFID funding, is it likely that other sources would provide the same benefits? If an option being appraised is targeting beneficiaries whom other donors and governments do not reach, then the risk of displacement is low, as other donors are unlikely to step in. This increases DFID's potential impact.

   There will likely always be challenges around collecting data and evidence to support definition of a robust counterfactual. This is often more pronounced in FCAS, and for

[11] The Green Book applies primarily to projects in the UK but describes rigorous project appraisal and evaluation methodologies that can be applied directly to international development programming. Section 5 (HMT 2018:34) briefly covers equity issues, describing the need to estimate distributional effects in project appraisal. Annex 3 (HMT 2018:77) sets out how to do a distributional analysis.
[12] ibid

marginalised and excluded groups. Quantitative analysis should be undertaken to the extent that it is possible. Where it is not, qualitative evidence should be used to support the counterfactuals of marginalised groups. Where a shortage of evidence is identified in programme design, specific data collection needs should be flagged and incorporated into the programme's monitoring and evaluation framework. This helps to improve the evidence base for future programming, and supports better VFM in the longer term.[13]

Questions to consider:

- Can you assess the relative needs and thus relative returns of investing funds in a more marginalised/hard-to-reach person versus an easier to reach person?
- Can you quantify the added value of an intervention which reaches those furthest behind versus the easier to reach population?
- What opportunity costs may be incurred by targeting one group over another?
- What costs are likely to be incurred if certain beneficiaries are not reached and supported or if social exclusion from infrastructure is maintained? (Now, and over the life of the infrastructure investment.)
- Is DFID's impact increased by reaching those who other donors or government programmes will not reach?

Examples:

- For a water programme in a fragile state, is this investment reaching areas that other programmes or government support has not been able to? While this likely will incur a higher cost, what lessons have you learned from previous attempts to suggest that this will be a more valuable long-term prospect?
- Conflict makes counterfactual situations difficult to predict - how could different political outcomes affect the assumed counterfactual? How would this affect the additional equity value of your options?

2. Assess how costs and benefits vary depending on who is reached.

It is important to understand the trade-offs between different outcomes in terms of the costs and benefits. It may cost more to reach marginalised groups, but the higher costs may be worth it to achieve a particular economic development or stability objective. VFM assessment should aim to find the best balance for a programme in equity and other VFM factors. The right balance will be specific to each programme and its spending objectives. To effectively incorporate equity factors into the analysis, options appraisal should include the following steps:

[13] Downs, A & McGowan J, (2017) Equity in VFM, an Internal DFID Guidance Note.

COSTS

For infrastructure delivery in particular, it is important to undertake whole-of-life costing, including all costs to DFID and all costs to others incurred as the result of the intervention, over its useful life. For example, if a building is expected to provide benefits over a 10 year period; the costs of construction, operation, and maintenance of that building over a 10 year period should be included in the analysis – whether these costs are borne by DFID, beneficiaries, or others.

It may be useful to gather the data and evidence to understand the costs of targeting different groups. "Do not assume that harder to reach beneficiaries will be prohibitively more expensive or that the cost of inclusion will be prohibitively high."[14] For example, disability inclusion in infrastructure programming is frequently a particularly low-cost benefit when building new infrastructure assets.[15]

In VFM analysis, cost analysis can be useful to compare costs per input, output and outcome, and to look at how these vary depending on who is reached, where and, in particular, how the context matters. Although costs will be higher to target harder to reach groups, it is important to understand why this is and by how much, so that evidenced based decisions can be made on which groups to target.

Consider whether costs of inclusive outcomes are justified. Do they support the programme's theory of change and spending objectives? For example, when constructing water supplies for rural communities, there can be diminishing returns in reaching progressively more isolated households in a target area. It may be better VFM to reduce target coverage in order to increase reach in other areas or allow for better quality WASH infrastructure and other interventions in the areas that are covered.

Questions to consider:

- How does the cost of delivering outputs vary, depending on who is reached? (This may include variation in the activities, materials, or time required for successful implementation).
- Are the costs of inclusive outcomes justified when considered against programme spending objectives? Against DFID's principles for estimating where to spend to maximise impact?

Example:

- In DFID's rural water programming in Sudan (*Rural Water for Sudan*), a catchment-wide approach to resource management and water access and infrastructure planning is used. Community representatives from a wide area are brought together to discuss the common resource. This differs from – and is more expensive than – consultation with single settlements, which is the more typical approach. The process has in several cases led to community-supported decisions *not* to provide

[14] Downs, A & McGowan J, (2017) Equity in VFM, an Internal DFID Guidance Note.

[15] Estimates obviously vary by sector and asset, but additional costs for disabilities access are commonly as low as 1%. There is a particularly compelling case for early inclusion of disabled access in infrastructure designs, as retro-fitting access features is substantially more expensive. See references in Agarwal and Steele (2016) Disability Consideration for Infrastructure Programmes, section 5, page 19, as well as the rest of the report for a detailed practical analysis of disabilities inclusion in infrastructure programming. https://assets.publishing.service.gov.uk/media/57a08954ed915d3cfd0001c4/EoD_HDYr3_21_40_March_2016_Disability_Infrastructure.pdf

direct improved water access to a particular settlement, as resources are better employed building a larger or multi-purpose access point that is more distant in order to serve a larger area and more user groups more efficiently. Although the consultation approach is more involved, water infrastructure is more efficient and sustainable and a suitable balance can be struck between cost and equity.

BENEFITS

It is important to assess the relative needs and thus relative returns of investing funds in a more marginalised/hard-to-reach person versus as an easier to reach person. Downs and McGowan write, "In general, the most marginalised, excluded or the poorest stand to gain the most from an intervention, since they would have less ability to meet the need via other means."[16] See Box 2 from the same paper, below.

Proposals should identify the different groups that an intervention could reach. For each group, they should discuss the different benefits that could accrue for each group. Proposals should try to quantify the effects, if possible, but qualitative findings should always underpin the analysis. Proposals could define groups according to age, gender, ethnic group, health, skill, or location. These effects should be explicitly stated and quantified wherever feasible.

In infrastructure, for example, access to markets through a newly constructed access road in a rural location will have a significantly higher impact on a poor individual than if the road was constructed in a more connected, urbanised area, where access to markets and services is already reasonably feasible.

Box 2: Diminishing marginal utility of additional consumption[17]

The impact of a policy, programme or project on an individual's well-being will vary according to his or her income; the rationale being that an extra pound will give more benefit to a person who is deprived than to someone who is well off. In economics, this concept is known as the 'diminishing marginal utility of additional consumption' (ibid).

Broadly, the empirical evidence suggests that as income is doubled, the marginal value of consumption to individuals is halved: the utility of a marginal pound is inversely proportional to the income of the recipient. In other words, an extra £1 of consumption received by someone earning £10,000 a year will be worth twice as much as when it is paid to a person earning £20,000 per annum (ibid). Thus it is important, when carrying out an options appraisal, to consider how the different values that a person gains from an intervention are being captured in the appraisal.

It can be difficult to quantify the benefits of inclusive aspects of a programme, or the social costs of not including vulnerable groups. There is also a challenge of addressing subjectivity in deciding what is valuable in terms of inclusion.

Proposals can use distributional weights to account for equity in a CBA. The calculation should weight benefits to more marginalised groups higher than benefits to less marginalised groups. Programme designers should use distributional weighting

[16] Downs, A & McGowan J, (2017) Equity in VFM, an Internal DFID Guidance Note.
[17] Ibid.

only where appropriate, and choices on weighting should be proportionate to the expected effects. The Green Book contains more guidance on these issues.

Questions to consider:

- How does reaching a certain group add value, compared with alternative potentially less costly approaches?

Examples:

- What are the benefits of allowing a certain rural population greater access to markets or education and health care facilities?
- Does supporting women and girls to enjoy safer and more reliable mobility lead to increased economic benefit than otherwise – if so can this be quantified?
- How does removing the barrier of social exclusion to access WASH infrastructure of marginalised disabled users create value in a community?

3. Consider possible negative impacts of each option on the most marginalised.

All possible negative impacts of an investment should be included in the options appraisal. For infrastructure investments, this could include for example, negative environmental effects, costs of increased road congestion, costs of reduced road safety. The poorest and most marginalised members of society tend to suffer the most from these types of impacts as they tend to have fewer choices available to them to avoid them. For example, environmental degradation disproportionately affects the rural poor because they have the least resources to protect themselves, and are more directly dependant on the natural environment for their livelihoods.

DFID's Smart Rules state that DFID should *'avoid doing harm by ensuring that our interventions do not sustain unequal power relations or reinforce social exclusion'*.[18] This is especially important in relation to both infrastructure investments and working in FCAS. Because infrastructure is costly, it is designed to last a number of years. If delivery of infrastructure causes or reinforces social exclusion or unequal power relations, the negative effects can last a long time.

Questions to consider

- What is the risk that delivery of infrastructure increase inequalities in any way? If so, how are the associated negative benefits and the harm associated with this captured?
- Could an infrastructure investment lead to further marginalisation of groups and thus increased social or economic inequalities?
- Are there any expected environmental impacts of the programme that could have a negative effect on marginalised groups?

Example:

[18] Craig, R. (2017) DFID's Approach to Value for Money. DFID Smart Guide

- Is an energy infrastructure investment robust to being ‘captured’ by higher power groups in a region recovering from conflict? In Somalia, where DFID is involved in building infrastructure in the energy sector, the private sector has stepped in to provide public services in the protracted absence of functioning government. Businesses that benefit greatly from lack of regulation exert powerful influence over politics. This has resulted in some parts of the country in cartels that keep energy prices high to the particular detriment of the poorest citizens. DFID Somalia has needed to carefully articulate the value – on balance – of working with the system that exists with the aim of reducing energy tariffs, even at the expense of reinforcing the influence of existing powerbrokers. This is a pragmatic solution in the short term while the longer term plan remains to build the influence and capabilities of government for regulatory enforcement.

4. Use an equity lens in sensitivity and risk analysis.

Sensitivity and risk analysis is particularly important for proposing interventions in FCAS, where the intervention environment is more changeable. For equity, Downs and McGowan point out that it is also important to consider:

- Drivers of inequalities
- How these may change over the lifecycle of the programme
- How they may affect the costs and benefits of each option and the associated risks.[19]

In FCAS, sensitivity analysis must consider how conflict and fragility could change outcomes for different groups. This may be particularly relevant for inter-group relations, where infrastructure investments could potentially influence power relations. Proposals should evaluate, for example, the likelihood of infrastructure capture by particular groups.

[19] Downs, A & McGowan J, (2017) Equity in VFM, an Internal DFID Guidance Note.

Box 3: Alternative frameworks for incorporating equity into options appraisal

There are a number of alternative / complementary methods to CBA that can be used to appraise international development interventions. These can be useful tools for incorporating equity considerations in options appraisal:

i. **Social return on investment (SROI):** This is a variant of social cost-benefit analysis. Its main differences with social CBA are (1) the systematic inclusion of social and environmental outcomes within a cost-benefit framework and (2) factoring in of all potential stakeholders within the equation. It is a stakeholder-driven exercise which takes into account all forms of value accruing to different stakeholders impacted by a project. It is especially useful when data does not exist to support cost/benefit valuation; and there is a manageable number of stakeholders involved, who can be easily reached.[20]

ii. **Multi-criteria analysis (MCA):** This is a method for analysing options against identified criteria, relating to a programme's or organisation's spending objectives. Each criterion is assigned a weighting based on its perceived importance, and each option is scored (based upon a defined or relative measure) against each criterion. MCA offers a number of ways of aggregating the data on individual criteria to provide indicators of the overall performance of options. MCA is more subjective than CBA, in that it requires judgement of the decision making team (in establishing objectives, criteria, and weights; and judging option performance). It is a useful tool for considering qualitative impacts, which is not possible within a CBA. Where quantitative data is available, it should not be used as a replacement for CBA. It is used most effectively in combination with CBA results, to assess options against a number of quantitative and qualitative criteria. Detailed guidance for using MCA is provided in the Green Book.

iii. **Adapted Cost-Benefit Analysis:** This involves assigning a value to all benefits, including non-monetary ones; and finding a scale to compare them on. That either means giving a monetary value to non-monetary gains, or (if that is not possible or meaningful) then instead converting monetary gains to a standard non-monetary scale. Ideally, assessing the benefits should include capturing all of the outcomes of inclusive programming, including the benefits of not discriminating / increasing equality; although this can be challenging. If the main benefits of a programme can't be quantified, then strong qualitative evidence should be provided instead. Even if the main benefits of a programme can be usefully quantified, they should be triangulated this with any qualitative evidence available.[21]

2.4. Selecting appropriate equity metrics to measure and monitor VFM

To help in Options Appraisal and to monitor equity VFM throughout the programme, smart metrics should be used to capture information on the 4 Es. When selecting metrics it is important to question the value they capture and any implicit value assumptions.

This is also an opportunity to include equity related outputs and outcomes into logframe indicators. The choice of equity related output and outcome indicators should flow naturally from a Theory of Change with linkages between inputs, outputs, outcomes and impact.

[20] NEF Consulting (2013) Note on Economics in policy-making: Social CBA and SROI.
[21] Downs, A & McGowan J, (2017) Equity in VFM, an Internal DFID Guidance Note.

Barr and Christie's paper on Better Value for Money[22] proposes three types of VFM indicator:

- **Monetary indicators** – which report the monetary value of a point on a programme's results chain (eg. an output or an outcome) – in relation to the associated cost;
- **Quantitative indicators** – which report how much (in numbers) a programme has achieved in relation to the associated cost;
- **Qualitative indicators** – which report the kind of change a programme has achieved (in descriptive terms – eg. an improvement in quality), in relation to the associated cost.

It is important to note that although a monetary indicator may be easier to interpret than a quantitative or qualitative one, it doesn't follow that it is always better at presenting the VFM of a development intervention. For example, it might be better to measure the value of an economic development programme in terms of number of new jobs created, rather than the amount of money the business start-ups make.

In this case, although poorer members of the community may make less money, the 'value' of providing a job (however small the income) for someone hitherto excluded from this opportunity may be greater in development terms than creating high profitability businesses or providing a job for a richer member of the community.[23]

Comparisons of indicators are most likely to be meaningful within a given programme over time, but can also be used to benchmark between similar programmes. However, DFID[24] found that great care should be taken in attempting to benchmark VFM across different VAWG interventions and contexts due to the likely differences in the context and value given to each quantitative and qualitative indicator and this principle applies to equity in infrastructure programming.

Rather than being absolute, metrics are most useful as a trigger for VFM discussions and assessment and as Barr and Christie conclude, fundamentally, VFM still requires judgement – but strong VFM indicators make forming a judgement easier.

Some **examples of indicators** for monitoring equity related to infrastructure in FCAS include:

- Proportion of workforce employed on a labour base construction initiative, who are women / below a certain income level.
- Additional number of women and girls who use a specific infrastructure service / mode of public transport following DFID support.
- Proportion of disabled users in a community or wider beneficiary group able to access ICT services.
- Proportion of households in a district with access to clean water supply.

[22] Barr and Christie (2014) Better Value for Money. ITAD Guidance Note.
[23] ibid
[24] DFID (2016) Guidance Note on Shifting Social Norms to tackle Violence Against Women and Girls (VAWG)

3. Equity and VFM in procurement / programme mobilisation

Once the business case process is concluded and the programme approved by DFID for procurement, the next stage is programme mobilisation. During this stage, service providers are engaged and monitoring systems are set up. This chapter provides practical advice on considering equity at this stage of the programme lifecycle, to support good VFM outcomes.

3.1. Equity and VFM during programme mobilisation

The programme mobilisation stage is important for embedding equity considerations from programme design into programme delivery. The following actions should be undertaken to incorporate equity-related aspects during this stage, to support good VFM outcomes in programme delivery:

- **Seek (additional) beneficiary feedback early** and as needed. Beneficiary feedback should be sought throughout design and implementation as required. Understanding the needs and issues of target populations including those most in need, is essential for shaping equitable and effective approaches to programme implementation.
- **Undertake continued PEA.** PEA should be undertaken during design and frequently during delivery, to keep track of developments which could impact on equity factors. These include high level political and elite group decision-making, and resource capture and control; and power and conflict dynamics at the community polity level. For example, high political instability in which governments change frequently, and patronage-based politics, pose high risks to the successful implementation of infrastructure projects. PEA can help mitigate risks in several ways such as working through semi-autonomous bodies such as Investment Boards which are less susceptible to political instability; being 'politically smart' through employing local staff who can identify political windows for action; and being highly adaptive in order to adjust to changes in the local context and learning-by-doing. PEA is an essential tool for planning, risk management and impact assessment of infrastructure programmes.[25] During programme mobilisation, it is useful to develop a plan for undertaking PEA for the programme lifecycle.

  PEA is particularly important in FCAS at the community level to understand community and tribal or clan dynamics where relevant. National and formal governance structures in FCAS are usually weak, so the community level is often the practical entry point for development programmes. There is evidence that community involvement strengthens stabilisation outcomes in FCAS. Local infrastructure implemented through local community structures has, in general, a good record for contributing to economic development, stabilisation, and peace-building, though in some circumstances it can undermine broader state-building efforts.[26] Community-level engagement presents its

[25] See ICED Guidance Note on Political Economy Analysis, particularly Section 2.
[26] Stephen Jones and Simon Howarth (2012) Supporting Infrastructure Development in Fragile and Conflict-Affected States: Learning from Experience. Study carried out by the ENGAGE consortium, led by Oxford Policy Management, for DFID.

own challenges for equity, as discussed in Box 6 (page 27) and elsewhere in this guide.

In a highly fragile context, there remains a real risk that infrastructure assets and/or related revenue streams are captured by militant groups. Regularly updated conflict analysis and flexible programming can mitigate some of this risk, but infrastructure is usually immobile and some risk must be tolerated in order to reach groups that are most in need. Capture by militant groups will usually damage or reverse equity outcomes from infrastructure and revenue potential from infrastructure can provide resources that perpetuate armed conflict (e.g. roads providing export infrastructure for illegally exploited mineral and hydrocarbon resources).

- **Make clear to the programme team how equity is being incorporated into the programme, and the related targets/objectives at the input, output and outcome levels.** The value of the equity aspects in an infrastructure programme should be clear to all team members.
- **Determine what data needs to be collected during programme implementation to support measuring impact.** Data availability and quality on equity aspects of the programme should be considered during mobilisation, to determine the baseline available, and to build data collection into the project plan. In FCAS it is wise to think about evidence and data in very practical terms, including what support may be available from other DFID or partner programmes.
- **Ensure a degree of budget flexibility to support equity related aspects in a rapidly changing political environment.** If delivering infrastructure in a very challenging location, there may be unforeseen costs. While some risks can be priced in, others may require budget reallocation or extensions to safeguard VFM. For example, in order to improve education outcomes for girls in a fragile environment DFID may build education centres with agreement from the government to supply electricity and schoolbooks for 5 years. A new government – or non-government actor taking charge in a conflict – may have different feelings on supporting girls' education. A mitigation plan might involve subsidising operational costs of schools that have already been completed and halting planned construction of new ones. DFID would require flexibility to divert some capital funding to provide for operating costs, enabling the existing schools to stay open. This kind of flexibility requires forward planning for procurement and contracting arrangements (e.g. in this case: can DFID put the construction contracts on hold?) – as well as phased implementation plans – that can handle major changes.

3.2. Incentivising service providers to deliver on equity objectives

In selecting service providers to deliver infrastructure programming in FCAS, it is important to consider their capabilities in understanding and delivering components of the programme that enable inclusive growth, social inclusion, and opportunities for marginalised groups. Service providers should be incentivised to deliver the desired equitable outcomes set out in the business case.

When procuring a service provider, the following actions should be taken:

- Specify the equity objectives and requirements of the programme clearly and transparently in the Terms of Reference.
- Use proposal evaluation criteria to ask for demonstration of experience in delivering similar equity related aspects in FCAS.
- Ask suppliers to propose actions for incorporating equity during programme delivery, including particularly in the design of infrastructure.
- Design supplier results targets and performance indicators to support equitable programming objectives. It is important to ensure KPIs and measurement of results do not incentivise suppliers to choose easy (low cost, low value) delivery options, over more difficult (higher value but more costly) options. For example, if suppliers are measured only on their costs per programme beneficiary reached, they are likely to target the easiest to reach beneficiaries in all cases. This will not result in benefits for the most poor and marginalised groups.
- Share with suppliers all political economy analysis undertaken, including evidence of relative costs and benefits of providing infrastructure to marginalised groups. Where there are gaps in evidence, discuss and agree with suppliers how they will go about collecting evidence and data during programme implementation, that can be used to support good VFM decisions in the future.

Questions to consider:

- Does the partner have a gender or inclusion strategy/action plan and what is their record on delivering on these issues?
- Does the partner have a strong strategy and track record of community engagement?
- Does the partner have a strong track record in delivering projects that follow international or donor specific inclusive design and safeguarding standards?
- Are partner organisations good employers that consider and promote inclusion and equity in the workplace through their HR policies?
- Do partners have policies and processes in place to ensure that the way they do recruitment, selection, promotion and management is consistent with DFID core values of diversity and inclusion?
- Do partners have a broad supply base which represents a diverse range of businesses, do they treat their partners fairly and do they capitalise on opportunities to ensure their partners share our core values of diversity and inclusion? How do they measure, monitor and report this?

Using payment mechanisms to incentivise desired equity outcomes

Payment mechanisms can be used to incentivise suppliers to reach the most marginalised groups when delivering infrastructure. Two possible options are:

1. **Payment by results (PbR).** The 'results' indicator could be designed to include infrastructure delivery to certain marginalised groups. Payment could be withheld unless those furthest behind are reached. There is, however, a risk that poorly designed PbR frameworks could encourage suppliers to target the easiest to reach

rather than those most in need. This reduces both equity and programme effectiveness and is not likely to provide a good VFM outcome.

For example, rewarding achievement of ‘open defecation free communities’ might result in suppliers focusing on the richest, least disadvantaged communities. But rewarding ‘open defecation free districts’ means that the supplier has to make sure that everyone, and every community, in a particular district is defecating in a toilet etc. Thus ensuring that DFID support leaves no one behind.[27]

2. **Price-per-outcome models.** This approach involves an ‘accelerator model’, where suppliers are able to attain a higher price-per-outcome if they accomplish higher performance.[28] For example, if providing internet access to communities in a poor rural district, the supplier may be paid an agreed flat rate for 80% of households which are in easier to reach locations, but they will be paid a higher rate for the final 20% of households who are in more challenging, isolated locations, to reflect the higher cost and to incentivise the connectivity of more isolated households.

[27] This example is taken from Downs, A & McGowan J, (2017) Equity in VFM, an Internal DFID Guidance Note.
[28] Downs, A & McGowan J, (2017) Equity in VFM, an Internal DFID Guidance Note.

4.Equity and VFM in programme delivery

The programme delivery stage usually includes detailed design and construction of physical infrastructure, and design of policies and funding around operations and use. Technical assistance including government/community capacity building, support for strengthening regulations, training in operations and maintenance, and a range of other complementary programme activities may also be included.

This chapter provides practical advice on considering equity during programme delivery, to support good VFM outcomes. It focuses on equity in design of physical infrastructure, ensuring accessibility and affordability for marginalised groups and equity in employment as part of infrastructure construction programmes. This section also addresses increasing equity in the use of infrastructure through training and behaviour change, how to protect equity objectives during flexible adaptive programming and how to ensure equity objectives in infrastructure projects are sustainable, well beyond the project duration.

4.1. Participation and equity in infrastructure design

Section 1.2 introduced some tangible concepts of how equity can support good VFM in infrastructure programmes. One of the most important aspects to consider in infrastructure programming, is how to make sure the design of the physical infrastructure itself meets the needs of marginalised groups, and helps to overcome barriers to social inclusion.

Accessibility of infrastructure to the disabled, women and girls, and the poorest in a society should be incorporated into the design brief of infrastructure constructed under any DFID programme. While specific details will be bespoke to each programme, some examples of key considerations are:

- Access to buildings and between floors for the elderly and for disabled users, including those of limited mobility, in wheel chairs, the blind and the deaf.[29]
- Where men and women are more culturally segregated, design of spaces that encourage women and girls to access facilities (particularly those for healthcare and education).
- Safe pedestrian pavements along roads and bridges to enable the majority of users who do not have access to motorised transport to travel safely.

To properly understand the design needs, stakeholder engagement and community participation is very important. In many cases, marginalised end users are not well enough represented to make their voice heard and remain hard to reach, so it is important to design consultation which understands marginalised groups and actively seeks their inputs.

If the needs of certain groups of marginalised individuals are not taken into account, the value of infrastructure investment may be severely reduced. For example, if toilets at schools are not designed to include privacy for girls, they are less likely to go to school.

[29] Useful guidance available: Agarwal, A. & Steele, A (2016) Disability Considerations for Infrastructure Programmes. Topic Guide produced for DFID under the Evidence on Demand Helpdesk. Available at: www.evidenceondemand.info

Therefore the equity programming objectives are not achieved and investment in building toilets and/or the school is not effective and represents poor VFM.

Cost implications for infrastructure that is more equitable need not be significant. In order to make buildings more accessible for those with disabilities, or more encouraging for women and girls to use, much can be achieved with a more intelligent design, rather than a higher cost of construction.[30]

4.2. *Equity and employment in infrastructure construction*

VFM of an infrastructure programme in equity terms can also be increased by creating jobs for those that are disadvantaged along construction, operations and maintenance supply chains in all infrastructure sectors. Labour-based construction of infrastructure is an example of this. These types of initiatives can enable very poor households to clear debts, generate some capital and potentially invest in other activities that generate economic output in the longer term, once the programme has finished. The equitable allocation of project-related jobs to the most vulnerable does not happen naturally and there is an important role for DFID and development partners to play in maximising such opportunities for the disadvantaged. Beyond the project itself, infrastructure is a catalyst for economic development and employment growth. An integrated programming strategy employing non-infrastructure support can pursue equitable employment growth beyond the infrastructure workforce.[31]

As described in Section 2.3, additional consumption (enabled by the additional employment income) is worth more to the poorest in society. Creating jobs for poor and marginalised groups can increase a programme's impact, and improve VFM. This should be weighed up against any additional costs incurred to target marginalised groups (e.g. additional training needed).

The DFID Rural Access Programme in Nepal is a good example of a successful infrastructure programme in a fragile state achieving both its overall road development and connectivity objectives, and providing jobs for marginalised communities.

Box 4: Case Study – Rural Access Programme, Nepal

Nepal is the 16th poorest country in the world and one of the most unequal. DFID is providing direct support to the Government of Nepal, developing government and private sector capacity, and stimulating economic growth in the poorest area of Nepal. For the RAP 3 phase, this includes construction of over 1,000km of new roads and over 17 million person-days of construction employment for poor people, 40% of which have been allocated to poor women. The programme also includes government capacity building and private sector development initiatives. For RAP 3, some valuable equity related lessons were learned from RAP 2:

[30] Loryman, H & Meeks, P (2016). Leaving no one Behind: The VfM of disability-inclusive development, Bond online.
[31] See academic and practitioner discourse on Area Based Development programming.

- Labour-based works programmes for road construction are effective in reaching the poorest. Wages lifted 12,000 people directly out of poverty, enabling them to invest in longer term, alternative livelihoods.
- Simple targeting is effective at reaching the poorest: to be eligible for work, RAP workers were living below the poverty line before they started work on RAP.
- Direct targeting of women is necessary to ensure they benefit more than would naturally occur on construction projects, particularly as in this context they are often more responsible with income. RAP had to enforce quotas to ensure women did not lose out to men in terms of employment.

Source: ITAD (2016) DFID Nepal Rural Access Programme 3 (RAP 3) Monitoring, Evaluation and Learning Component: A Value for Money (VFM) Analysis for RAP 3

Procurement of local contractors (and materials)

Where construction of infrastructure is to be managed and delivered by local contractors rather than through community engagement and direct employment, programme implementers should follow the guidance in Section 3.2 on incentivising service providers to deliver on equity objectives. Rules and standards may need to be adapted for local SMEs based in specific FCAS.

Locally sourced materials should also be used where possible (where quality is adequate), to maximise the linkages and benefits to local value chains. This increases the number of people in the region in which the programme is operating who benefit. Ideally, the service provider can agree to a supply chain policy that promotes good VFM in terms of equity as well as the other 3Es, partly through prioritising certain types of business, such as women owned businesses, if such ventures exist in that context.

4.3. Equity in operation: affordability and maintenance of services

Affordability can be a significant barrier to equity in programme delivery. Even if water or power infrastructure has been provided to a community, there are likely to be poor households or excluded individuals who are unable to afford the transformative benefits it can bring. Infrastructure programmes should incorporate mechanisms to understand affordability and cost barriers to certain beneficiary or income level groups. Programme managers should seek understanding of how much beneficiaries are willing or able to pay for services, ideally based on data disaggregated between gender, age, income etc.

Based on the parameters identified, practical solutions should be developed to allow the poorest or most marginalised to have access. This may include subsidisation of costs for the most vulnerable, identified by means testing, or it could be a flat fare on bus transport, such that poorer residents likely to be travelling greater distances from suburbs into city centres do not pay significantly more that more wealthy city centre inhabitants.

Accountability is another equity related aspect that infrastructure programmes must aim to enforce. Accountability of local government or community organisations to their citizens to provide services and maintain them is vital for sustainable and equitable access to water, sanitation, power, good roads and so on. Strong accountability will lead to the needs of more marginalised voices being heard and addressed, resulting in resulting policies or aspects of infrastructure delivery. This is demonstrated in the approach of the DRC WASH Programme in the Case Study below.

Good VFM, requires programmes to ensure accountability applies to all aspects of society, including marginalised ethnic minorities or clans, women and girls and the disabled. There are some good examples of DFID programmes, such as ***Making all Voices Count***,[32] that have aimed to improve infrastructure and service delivery through enhancing good governance and accountability, both in FCAS and more stable but low-income countries.

Citizens have increasing access to IT- or media-based tools that enable them to monitor government performance and express their views on performance in real time. The *Making All Voices Count* programme is about seizing this moment to promote transparency, fight corruption, empower citizens, and harness the power of new technologies to make government more effective and accountable.

Questions to consider

- How will the infrastructure programme support provision of services that are affordable to marginalised groups and the very poorest?
- Is there a risk that the government or community will not be accountable for long term operation and maintenance of the infrastructure delivered? If so, are efforts being considered under this programme or others, to increase accountability of government or community groups to their citizens; in terms of planning, delivering and maintaining infrastructure?

Box 5: Case Study – Increasing access to water, sanitation and hygiene in the east of the Democratic Republic of Congo (DRC), DFID, 2013 – 2020

DFID is supporting Mercy Corps in a £164 million intervention to increase sustainable and equitable access to water, sanitation and hygiene services in three towns in the conflicted affected Eastern DRC, including Goma. This involves working with the state owned water supply agency to rehabilitate the system infrastructure and improve the system's governance with a specific focus on increasing capacity of the water supply agency, local ownership, transparency and accountability to users.

The service provider is working through communities (men, women, girls and boys as well as existing, and new, community structures), using targeted participative approaches to stimulate the mobilisation of those communities and ownership of the fundamental principles behind sustaining WASH services.

In inaccessible rural areas, the approach is towards the construction of appropriate and cost effective infrastructure that can be more easily maintained by communities.

Equity is integrated into the logframe through the following indicator: 'The percentage of water committee members who are women.' This should show a progressive increase through the programme, which represents increased ability to meet the WASH needs of women and girls.

[32] Website: http://www.makingallvoicescount.org/

4.4. *Equity and VFM in use: training and awareness initiatives*

Social exclusion can still occur even if infrastructure is in place, for example through lack of knowledge in how to access ICT services or on electricity supply costs and packages available. Training and awareness can help disadvantaged groups make the best use of infrastructure services and should always be considered alongside delivery of physical infrastructure.

Infrastructure programmes should also consider increasing their VFM in equity by helping to change behaviours or practices that are damaging to equitable community development or access to services. There is also an opportunity to further engage with marginalised groups and to raise their awareness of the benefits brought by infrastructure investments.

Examples of such initiatives include:

- Hygiene training for poor, elderly or disabled users as part of a water and sanitation infrastructure.
- Entrepreneurship or personal financial management training for those employed on labour based programmes to construct infrastructure.
- Road safety training for pedestrians and disabled users in support of hard infrastructure with accessible pedestrian facilities.
- IT training for users who are not familiar with using a computer or the internet, in support of an ICT initiative.

Such initiatives are generally cost-effective and the value they can add in terms of the benefits of enabling economic and social participation through mobility or employment can be very significant.

4.5. *Adaptive programming and equity*

The fast changing political and security context in FCAS environments means that opportunities must often be grasped and delivered as soon as possible if they are to contribute efficiently and effectively to the overall outcomes of the programme. This requires infrastructure programmes in FCAS to have a degree of built-in flexibility; and this has an impact on how equity and VFM can be maintained as things change.

One approach to facilitate flexibility in programming is through adaptive programming, which means that activities and outputs will change over the life of the programme as approaches are tested and refined. There is no point sticking fast to indicators that are no longer relevant measures of what the programme is doing. These should be adapted as the programme evolves and this means logframes will go through many versions.[33]

However, equity considerations are often sidelined as context changes and other VFM dimensions are prioritised – for example, it may now seem more practical to focus on

[33] Barr (2016) Blog on Monitoring and Evaluating Flexible and Adaptive Programming, available at http://www.itad.com/monitoring-and-evaluating-flexible-and-adaptive-programming/

easier to reach communities, given the increasing cost and risks of going further out. Programmes face a challenge of how to maintain their commitment to equity objectives that have been assessed and decided upon during the programme design stage. One approach is identifying a small number of 'bedrock indicators', particularly at the Intermediate Output/Outcome level. These are chosen carefully so they will not need to change over the adaptive life of the programme – in particular, they need to be intrinsically unaffected by changes in context.

Adaptive programming relies to a great extent on assessment of the effectiveness of programme activities and outcomes. Capturing and using beneficiary feedback in order to improve equitable outcomes in infrastructure programmes is very useful in this regard. For example, when delivering WASH infrastructure, it would be useful to capture feedback from users upon the completion of early phases, with lessons learned contributing to improvements in later phases. This can include aspects such as how accessible or affordable infrastructure is to certain groups including women and girls, disabled users or ethnic groups.

This is challenging on a number of levels, not least because of the relatively short timeframes of infrastructure programmes compared to their potential impacts and benefits. Justifying the cost of an extensive feedback mechanism is also a challenge. However, efforts should be made where appropriate to incorporate this into infrastructure programmes.

4.6. Equity and VFM beyond the programme lifecycle

Infrastructure is expensive to build, so if an infrastructure investment is to provide good VFM, the economic benefits it enables must be sustainable over the longer term. This will usually go beyond the lifespan of the programme set up to deliver the infrastructure assets. Sustainability of equitable outcomes is part of this consideration.

To maximise equitable outcomes beyond the programme lifecycle in support of good VFM, programme designers and managers should consider the following:

What are the likely effects on equity / risks to equity after programme closure?

- Are the barriers to inclusion being permanently removed by the programme or will they return?
- Will the infrastructure be maintained such that it continues to provide a service to beneficiaries, including marginalised users?

Can measures be put in place during the programme to safeguard equity in the long-term?

- Can individuals who have earned income through programme works, be trained in further construction techniques or trained in entrepreneurship etc.?
- Will local governance structures continue to reflect DFID's policy on equitable procurement of contractors? How could they be incentivised to do so?

5. Practical challenges to equity in VFM analysis

This paper describes best practice, but practitioners face frequent challenges in pursuing equity in programming which are not always resolvable by closely conforming to the letter of best practice. Common challenges include:

Box 6: Practical challenges to equity

Challenge	Strategy
Having to compromise on equity to be allowed to conduct programming at all. All development programming – and infrastructure in particular – is vulnerable to political capture. It is impossible to avoid some association with dominant political and social groups which allow donors to operate in their area of influence. These groups are frequently unsympathetic to efforts to include marginalised populations.	A nuanced understanding of social and political dynamics is essential to resolve these issues. Development programming – especially infrastructure – should have sufficient financial resource and leverage to reach an appropriate compromise between the needs of marginalised populations and better represented ones. It is also sometimes possible to blend donor funding and locally available funds, allowing DFID to preferentially fund equitable modifications to existing infrastructure plans while also encouraging local ownership.
Limited financial resources and low expected equity returns. Programming that targets marginalised populations can be below the threshold of useful development impact, but the same financial inputs could support useful programming in less marginalised areas. For example, electrification of richer areas is arguably more effective because electricity is more affordable for customers and more people can benefit per donor pound invested. By contrast, poorer areas may require a substantial period of subsidy to stimulate income growth to a level where tariffs can be increased to market levels.[34]	Programming should be possible with the understanding that there will be poor value for money on the equity dimension (and higher VFM on the other Es), but equity should still be explicitly addressed in programme design, delivery and monitoring and the principle of Do No Harm followed. Long term strategy should address equity and be working towards this goal.
Some equity outcomes require long periods of social change to achieve. Programmes that last only a few years risk	Design programmes that can work within the existing system and *at least do no harm.* Align with local organisations with a longer term equity mandate. Pursuing

[34] Affordability is also discussed in section 4.3 on page 24.

wasting resources on targeting strategies that have little or no impact.	equity goals within programming – even with limited scope – *can* create a more fertile environment for change in the longer term. Targeting marginalised populations should always be done only with a clear understanding of the cost and barriers to achieving impact, and should not turn into an excuse for failure to achieve development results.
A need to work with existing social structures rather than undermining them. A common tension in development is how to interact with strong existing social and political structures that entrench social inequality – whether to work with them and accept some compromises or undermine them and set up competing governance systems with more equitable aims.	Findings from previous experience are varied and context dependent, so a careful reading of development experiences from other programmes should inform decisions. Sometimes in an FCAS context, programming has stabilisation goals which explicitly involve undermining powerful groups which are perpetuating conflict. However, the typical experience with setting up parallel donor supported bodies to inform and authorise aid projects has been negative. Donor systems tend to last only as long as funding, or are subject to political capture of another sort (such as enabling a centralising agenda and undermining local authority) and the damage to social structures they cause can be long-lasting. Generally the best approach is to incorporate existing social authorities into project decision-making but use leverage to enable work on equity goals. Simply achieving results can erode social barriers to more equitable development.

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