ePact
Strengthening evaluation effectiveness and impact

Assessing Value for Money in DFID's Health Portfolio for Bihar, Madhya Pradesh and Odisha, India

Final Report

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e-Pact Consortium

Oxford Policy Management

itad

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The findings within this document, however, are entirely the responsibility of the team.

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Executive summary

Overview

DFID has made a substantial investment in health-sector development in India, and has dramatically increased its engagement with the state governments of Bihar, Madhya Pradesh (MP) and Odisha since 2005.[1,2] The key focus of the three state health sector programmes has been to improve access to essential health services (especially for maternal and child health), nutrition, and vector-borne disease control, with a focus on poor and excluded groups. For this purpose, increased support to state budgets through direct financial assistance (FA) is complemented with support in the form of technical assistance (TA). TA is focused on capacity building and system strengthening, in focal areas such as strengthening financial and human resources management, developing procurement systems, and improving quality of services.

This study is concerned with two main issues: firstly, a focus on assessing the value for money (VFM) of DFID's assistance in terms of the relevance, economy, efficiency, effectiveness, equity and sustainability (REEEES) of the DFID-supported programmes; and secondly, a broader, overarching issue relating to the mechanism by which FA and TA are expected to generate an impact and exploring the assumptions underpinning these theories of change.

This study is very relevant to the current aid and development agenda, both in the context of India and more generally. Firstly, while the UK government has been clear about its continued commitment to international aid, in a time of austerity, the value achieved with this increasingly high-profile spend comes under ever increasing scrutiny. Given the extent of DFID's investment, it is clearly important to understand the VFM of FA; however, understanding the value of TA is potentially even more important for DFID corporately. India will be graduating from financial grant aid in 2015,[3] and South Africa is also moving down this route, as China has done before it. There is substantive ongoing debate about aid to middle-income countries,[4] and as DFID starts to change the way it engages with countries as they move towards middle-income status and graduate from more traditional (and largely financial) aid, there is a clear need to understand more about the VFM of other forms of assistance. Given that all new programmes in India after 2015 will focus on sharing skills and expertise in priority areas, it is vital to understand 'what works' in the Indian context, in order to maximise the VFM of DFID's investment and build on lessons learned from earlier phases of DFID support in India.

Conceptual framework for assessing VFM

DFID has adopted a definition of VFM based on the '3Es': economy, efficiency and effectiveness. The **Independent Commission for Aid Impact** (**ICAI)** has introduced a fourth 'E' – equity – into the way VFM is considered.[5] This study has taken the 'four Es' as core to its approach; however, it has incorporated the additional dimensions of relevance and sustainability to ensure a comprehensive approach to the study – i.e. a 'REEEES' framework.

Preliminary analyses identified that a central principle of DFID's support in all three states is investment in selected strategic components of health-sector reform with financial and technical

[1] ICAI 2012. *Evaluation of DFID's support to health and education in India.* Report 11.
[2] Engagement in Bihar was started slightly later, commencing substantively after 2008.
[3] Following the Bilateral Aid Review in 2011, it was decided that DFID's existing financial commitments in India up to 2015 would be honoured. After this, however, all new assistance will be either TA or private-sector initiatives financed using returnable capital (DFID, 2011a; DFID, 2013b).
[4] BOND. 2013. Aid to middle-income countries – what should be done? (available from: http://www.bond.org.uk/data/files/publications/Middle_Income_Countries_-_final_report.pdf).
[5] ICAI. 2011. ICAI's approach to effectiveness and value for money.

resources devoted to a complementary mix of both 'upstream support' and 'downstream support.' Upstream support consists of interventions that were initiated and operationalised exclusively or mostly with DFID support and influence, and are targeted at the higher administrative levels – for example, strengthening/reforming institutional mechanisms. Downstream support consists of interventions that are provided at the frontline implementation level (i.e. the districts and below), and which are partially supported by DFID and complemented by other parallel initiatives, primarily to make service delivery more effective. Classifying the DFID-supported interventions into categories according to their primary function created units of analysis against which the REEEES framework could be applied in Bihar, MP and Odisha, and informed judgements of VFM against each dimension.

Methodology

The unique and complex nature of DFID's investment made it imperative to use multiple methods – quantitative and qualitative methods, and different streams of analysis – for the study. Data collection consisted of key informant interviews, case studies at district level, and secondary data collection and document review. Multiple components of analysis were then used to inform an assessment of the VFM of the state health programmes, and the contribution of DFID-supported interventions to improving VFM. This included a **contextual analysis** to 'set the scene' for the overall analysis, and identify drivers and barriers of VFM; a **benchmarking analysis** to generate comparators against which a judgment of VFM in the three states could be made; a **review of public expenditure** to analyse efficiency in public financing; and **cost-effectiveness analyses** at the macro (state) and micro (intervention) levels, to assess the extent to which DFID is supporting cost-effective interventions. The conclusions and recommendations of this study are also informed by two formative components of analysis, in the form of a **strategic assessment of TA** (examining models of TA of DFID and other development partners (DPs) to frame planning for future TA in India); and an **assessment of VFM reporting** in DFID project documents, examining the extent to which standard DFID reporting mechanisms, in the form of annual reviews, are set up to be able to monitor VFM.

Conclusions

The analysis generated a number of detailed findings both across the REEEES framework and with respect to the strategic assessment of TA and VFM reporting[6]. These findings were drawn together to develop 15 overarching conclusions as summarised below:

1. The TA and FA support to three states provided by DFID has been highly relevant to the needs and expectations of the state governments. The choice of interventions supported has been well aligned with government needs and strategy, and to some extent, with other DPs (according to the principles of aid effectiveness).

Overall, there is evidence of good alignment between DFID programmes and the strategy of the state governments, particularly in MP and Odisha where DFID has a history of engagement. DFID's support is generally perceived favourably compared to that of other DPs, primarily due to the lack of preconditions and associated flexibility. Across the intervention areas, DFID support appears to be addressing a number of critical needs of the government, in terms of reforms to procurement, strengthening management information systems (MIS), quality improvements, and addressing demand-side gaps through community mobilisation. The gradual progress towards integration and convergence of health, nutrition, water and sanitation within DFID's sphere of support is a highly relevant strategy that aligns with the global as well as the national approach

[6] Conclusions are presented as overarching conclusions with illustrative supporting findings. Further details of the evidence base are presented in the full report.

towards development. Support for institutional reforms is broadly aligned with the work of other DPs in the three states and there is evidence of inter-agency coordination. However, there is also persistent confusion about the overlap of roles and potentially a need for clarification.

2. The relevance of providing inter-linked FA and TA support is high, especially in the context of improving VFM; while FA fills in some critical infrastructural gaps in the system, TA creates an enabling environment to utilise funds more efficiently.

Across the three states, TA represents a *reported* high-value addition and there are examples of how technical support is being used to leverage greater value from initiatives being funded through FA – for example, in MP where FA has been allocated to support quality improvements in maternal and child health services, TA provides complementary support to the formation of quality assurance cells and accreditation procedures.

3. Financial support to implementation is likely to be substitutable in the longer term and therefore is arguably less relevant to the needs of state governments. However, DFID funds are valued for their flexibility and TA is reported to be a highly relevant strategy.

Considering the ongoing underspend in the states, and the increasing funding available through National Rural Health Mission, it is clear that FA is becoming less and less relevant to the needs of the states in which DFID is working; however, there is an ongoing appetite for TA and the flexibility of DFID support, in comparison to other DPs, is reported to be highly valued. An important element of reported value is the availability of discretionary funds which are linked to TA.

4. There is some limited evidence that the TA and FA support from DFID has helped leverage some important economy savings; however, as yet, there is little direct data on specific cost savings in terms of, for example, commodity price reductions being achieved directly as a result of these interventions. The greatest evidence of the contribution of DFID-supported interventions in terms of economy relates to the support for reforms in procurement and the establishment of procurement cells, but there is potential for further contributions in the longer term and a need for better measurement of changes.

The primary contribution of DFID interventions in terms of economy is the support for reforms in the processes and systems relating to procurement and the establishment of procurement cells in the three states. While there is little direct data on cost savings, the savings in terms of time are clear, and there has been increased transparency (for example, linked to tendering processes and the generation of reports on fund utilisation). Key downstream interventions that have been supported by DFID in all three states, such as community mobilisation support, have the potential to leverage significant economy savings. However, these are likely to be longer term and there is not yet strong evidence for their contribution.

5. Many of the interventions that have been supported through DFID FA and TA have either explicitly or implicitly been focused on improving overall efficiency of health systems in the three states. There is evidence that the support for strengthening/reforming institutional mechanisms has high potential to deliver efficiency gains; however, at this stage the evidence for actual efficiency gains from these upstream interventions is mixed. There is strong evidence that DFID support is contributing to significant efficiency gains through interventions that have resulted in increased utilisation of funds, more optimal use of infrastructure, and targeted allocation to high-burden or poor districts.

There is a clear focus on efficiency in the support to strengthening/reforming institutional mechanisms. This can be achieved through improvements to technical and/or allocative efficiency, but the gains are likely to be longer term. Efficiency gains are being achieved through increased fund utilisation, use of infrastructure and differential allocation to districts. The combination of these factors is promoting improved efficiency because the return on investment is likely to be better in

high-burden districts, and there are clear efficiency gains in the more optimal use of infrastructure; for example, through increasing utilisation. Allocative efficiency is being promoted through the downstream support mechanisms. Both FA and TA are closely aligned with the national programmes for health, nutrition and sanitation, which are characterised by evidence-based interventions, particularly in maternal and child health.

6. There is good evidence of consideration of equity in the design of the three state programmes and many of the downstream interventions show clear potential for improving equity.

It is clear that equity was a key consideration during the conception of the three state programmes, and an important element of DFID's approach was the targeting of high-priority districts. Many of the DFID-supported interventions, especially at the district and community levels, have the potential to contribute to improving equity outcomes. Community mobilisation interventions are particularly targeted at empowering women, and also targeted at children and other excluded groups, and evidence from similar interventions elsewhere suggests high potential for self-help groups to address demand-side barriers for disadvantaged women

7. While there is some consideration of equity issues in upstream support, there is scope for a more systematic focus on equity in support for evidence generation and translation into policy.

There is some evidence of considerations of equity at the policy level; for example, in support for generation of policies linked to women's empowerment and the strengthening of institutions with an equity mandate (such as the Women Development Corporation). However, there is less evidence to show that there has been a strategy to systematically generate policy-relevant evidence about the impact of interventions on the poorest and most vulnerable populations through TA.

8. It is clear that many of the interventions that have been supported by DFID have the *potential* to improve the effectiveness of the health system, but this has not yet been definitively realised. In terms of upstream support, improvements to efficiency may have a 'trickle-down' effect but this would be difficult to attribute. There is clearer potential for more directly attributable results to be generated from downstream support – improvements to quality of services and to demand and utilisation should lead to better health outcomes. DFID's investment in MP, Bihar and Odisha's health sectors is expected to bring a high return, and initial evidence suggests that they are potentially cost-effective programmes.

Progress against coverage and outcome indicators has been mixed, within and across the three states. There is potential for support to upstream interventions to improve health outcomes; however, this has not yet been demonstrated. There is a clearer link to the downstream support, where quality improvements and infrastructure can more reasonably be expected to result in better healthcare and thus improved outcomes. Evidence from community mobilisation interventions elsewhere suggests potential for contributions to improvements in health outcomes; however, the interventions are currently at too nascent a stage of implementation in the three states. The analysis suggests that, if logframe targets are achieved, then DFID's investment is likely to be cost effective based on international benchmarks for cost per disability-adjusted life year (DALY).

9. There is good evidence for the sustainability of the implementation of interventions funded with DFID's FA.

There is good evidence that interventions funded through DFID's FA will be taken over by the government; the government was given plenty of time to plan for the cessation of FA and the removal is more than counteracted by increased NRHM funding. In terms of implementation support, the government has already scaled up some of the DFID-supported initiatives; for

example, community mobilisation interventions have been extended within each of the three states.

10. Evidence for the sustainability of initiatives supported with DFID TA is mixed – while there is evidence of ownership and scale-up in some functions, in others implementation is at too early a stage to conclude that they are sustainable.

The government has taken ownership of the MIS strengthening, and further initiatives are planned. However, evidence for the sustainability of other functions of TA is more limited; for example, in terms of support to implementation where, in the case of quality improvement initiatives, there do not yet appear to be strategies in place to transfer ownership of the functions of TA. Implementation of a number of initiatives is at an early stage, and TA is required to sustain momentum and capitalise on the progress that has been made to date.

11. DFID's strategy of concurrent support to multiple departments, and the alignment of upstream support with a set of downstream interventions, has helped create an enabling environment for integration and innovation.

The concurrent support of DFID to the departments responsible for health, nutrition and WASH is targeted at overcoming the challenges linked to the operationalisation of an integrated strategy. This upstream support is combined with a 'bottom-up' approach of integrating services at community level and increasing demand for integrated services. The strategic focus on the integration of multiple sectors in delivering health related services has the potential to contribute substantively to VFM, and DFID's approach aims to create an enabling environment for this to evolve. Linking upstream and downstream support maximises the opportunities for TA to add value to interventions funded through FA and promotes innovation through a learning-by-doing approach.

12. There is substantial added value in the TA that DFID provides, but also clear opportunities for optimising the model to maximise the potential for significant and sustainable transformation.

DFID and its TA teams have an established presence and relationship with the governments and it has emerged as a leading player in the three states, especially in the context of addressing systemic and strategic issues, such as human resources, procurement and distribution of health commodities, and quality of care. The parallel and complementary technical support through a dedicated and expert team has helped the government agencies adopt a more professional and evidence-based approach, and there are clear examples of how DFID support has contributed to critical system reforms. The responsiveness of the TA teams to the needs of the government represents a good strategy for gaining buy-in and building rapport with the government; however, there is a risk that taking on routine or 'gap-filling' activities detracts from the support aimed at effecting sustainable transformation. There is a clear need to continue maintaining an appropriate balance between meeting the immediate needs of the government, and effecting longer-term change and capacity building.

13. DFID's model of TA (the use of multi-sectoral teams at the state and district levels) represents an efficient and effective approach, particularly in relation to health-system strengthening.

Most DPs that offer TA do so through the use of specialised agencies at the level of individual projects, which may, if successful, sometimes be scaled up by government, with the support of the DP. DFID has been offering broader support at the level of strengthening of systems in less traditional areas – such as financial management and developing information systems. The presence of a state-level TA team with expertise in multiple different areas is necessary for the provision of such support. However, there is scope for further convergence at the state level, including greater interaction between different sectors within the TA teams.

14. There are significant knowledge gaps that need to be addressed in order to maximise the impact of DFID's support and facilitate assessment of attribution.

This study found no evidence that a systematic and strategic analysis of how DFID-supported interventions can – and, more importantly, should – interface with each other has been done to date in any of the three states. This represents a missed opportunity in terms of analysing the opportunities to maximise VFM for DFID's, and the state governments' investments. A strategic analysis would allow attention to be focused, and avoid limited resources being stretched too thinly to be able to trace their impact. There is similarly a huge knowledge gap in tracking the utilisation of programme funds at the frontline, which presents a challenge for attribution.

15. There are clear opportunities for DFID and state governments to strengthen their monitoring and reporting on VFM.

DFID's reporting on economy indicators is reasonably strong (in comparison to other VFM indicators); however, there are opportunities for improving the utility of the indicators to DFID and its partners. These generally relate to consistency in reporting over time, in order to demonstrate trends in improving economy, and the strengthening of the indicators through monetising cost savings or benchmarking. Current monitoring and reporting systems do not allow for systematic assessment of performance in relation to efficiency – for example, the indicators being reported by DFID in its annual reviews do not collect data on the efficiency savings and most information provided is framed through qualitative descriptions. There are good examples of cost-effectiveness indicators, which should be reported on consistently over time and across the three states, to facilitate comparisons of trends in VFM.

Recommendations

The report has identified a number of recommendations to structure the future development of DFID's support for health programmes in India. They have been structured around four areas:

A. The current programmes;
B. The next phase of DFID support;
C. Improving the measurement of the VFM of TA; and
D. Longer-term sustainability.

All recommendations are designed to be actionable and the key responsibilities for each recommendation are *underlined.*

A. Recommendations for the current programmes

Recommendation 1: Within the existing programmes, *DFID TA* should be targeted to increase the momentum within three critical areas, to ensure transformational and sustainable change: a) human resource-related issues; b) monitoring performance of innovations in health, nutrition and WASH; and c) demand-side interventions.

- **Human resource-related issues**: TA initiatives have focused on streamlining the human resources (HR) information system and supporting the government's initiative to frame appropriate HR policies and norms. There is an urgent need to push the reform further and ensure effective implementation of some important, but sensitive, HR policies (for example, rationalisation of workforce allocation). *State TA teams* should steer further consultation with the departments on this unfinished but achievable agenda.
- **Monitoring performance of innovations in health, nutrition and WASH:** monitoring and evaluation (M&E) indicators for process and results of innovative interventions need to be developed by *state TA teams*. For example, the quality improvement initiative at hospitals,

community-based WASH interventions, and innovative nutrition interventions need to be assessed with an increased focus on equity, based on a well-defined set of M&E indicators.

- **Demand-side interventions:** community mobilisation initiatives (especially those based on a participatory learning approach) are at crucial stage in the scale-up process. Emphasis needs to be on ensuring the sustainability of these developments and *state TA teams* should push harder to institutionalise and fully integrate them into national programmes.

B. Recommendations for the next phase of DFID support

Recommendation 2: *DFID India* should continue to work together with *state governments* and other stakeholders to identify where ongoing TA should be provided to departments with responsibility for health, nutrition, and WASH. The next phase of TA should be based on reassessment of key blockages to progress, and a systematic and evidence-based analysis of potential TA responses, and learning from the previous phase of support.

- *DFID India*, in close consultation with the *state governments* and other key stakeholders, including *TA providers,* should assess the TA needs in each state, with a focus on identifying critical blockages and the appropriate TA response.
- The critical blockages to delivery of integrated programming across the sectors should be systematically assessed and the TA requirements to mitigate these barriers should be defined.
- Prioritisation of strategies for TA should be informed by the implementation of a systematic and transparent assessment framework that is based on clear, simple and mutually agreed VFM criteria and has a strong focus on supporting long-term, and sustainable, transformation across the three sectors.

Recommendation 3: TA should balance flexibility and responsiveness to meet the state governments' short-term priorities with provision of long-term strategic and 'transformative' support.

- Effective TA requires a balance between the need to be responsive and meet the government's immediate priorities, and a desire to ensure sustainable transformation. Being reactive and flexible has been one of DFID's key strengths, and maintaining this is fundamental to ensuring continuing successful collaboration with the government; however, this should not be a barrier to long-term capacity building.
- There should be a transparent process of consultation between *state governments, DFID*, and the *TA providers* to gain consensus on, and clearly articulate, the functions of the TA teams. This agreed mandate should allow space to be flexible to the immediate needs of the government, while ensuring the long-term focus is on sustainable transformation. The consultation process should also identify the appropriate structure to operationalise this balance; for example, flexibility may be created by a small discretionary pool in the grant, while the major share is allocated to long-term transformative TA that focuses on capacity building and systems strengthening.

Recommendation 4: *DFID India* should continue to support capacity building of state governments using a multi-speciality TA team structure.

- Provision of DFID TA to strengthen systems across sectors – as opposed to individual sector-specific projects – is an important contribution that the current multi-speciality TA teams have provided. This cross-sector support should be maintained and indeed deepened for the next round of TA provision.
- This will require *TA providers* to implement recruitment strategies that ensure the hiring of appropriate technical specialists with a robust understanding of inter-linkages between these

sectors across systems. It is important that the organisational structure of TA providers maximises opportunities for integration and, for example, does not create sector-specialist silos.

Recommendation 5: *DFID India* should continue to advocate for state governments to increase their roles in donor coordination. *State governments* should take a leading role in initiating and managing DP co-ordination according to their own needs.

- DFID is one of a number of DPs providing TA in the three states. Given some of the concerns raised about co-ordination between donors and the fact that there are both strengths and weaknesses implicit in different models of TA, there is an opportunity for mutual learning and a more harmonised approach to TA during the next phase of assistance.
- DFID's co-ordination efforts are greatly appreciated (e.g. in the context of RMNCHA+), but future co-ordination initiatives will work best when initiated and organised by *governments*.
- *DFID India* should leverage its strong position as a convener and co-ordinator among DPs to consolidate the extensive body of knowledge and practical experience possessed by the TA teams currently working in the three states and to facilitate a collective learning exercise.
- *DFID India* should advocate to *state governments* and support them to adopt a leadership and co-ordination role in initiating and managing DP assistance according to their own needs. This could include specific initiatives, such as providing support to the government to set up a result-oriented and specific TOR-based donors' co-ordination platform.

Recommendation 6: *DFID India* should articulate an explicit strategy for supporting state governments and research partners in the generation, and translation into policy and practice, of evidence relating to how programming can improve equity.

- The TA provision for evidence generation has high potential to leverage better equity-focused programming; however, to date this potential has not been sufficiently realised. *DFID India* should work with *state governments* and *research partners* to identify a clear research agenda to better understand what works and what does not in relation to equity-focused programming
- This support for evidence generation should incorporate an explicit emphasis on using evidence to inform ongoing policy making and programming.

Recommendation 7: *DFID India* and *state governments* should agree a revised incentive structure for ensuring mutual accountably around the delivery of TA.

- Provision of TA without FA will require *DFID India* to develop a revised incentive structure *in consultation with the government* to achieve set milestones. Continuing DFID's TA support, in the absence of FA, will require DFID to work together with state/national governments to design health systems strengthening programmes that clearly respond to their needs and TA requirements. Currently, the release of tranches of FA according to achievement of milestones provides a key incentive for the government to work jointly with the TA support teams (TASTs) towards targets. Without FA, such an incentive structure will no longer exist, but given the governments' expressed need for DFID's TA, it should prove possible to collaboratively develop a mutually agreeable accountability and incentive framework.
- *DFID India* should undertake a broad global review of provision of TA to governments, with a view to understanding the incentive structure that will obtain maximum co-operation from the governments in the absence of FA. The focus could be restricted to systems-strengthening technical support.

C. Recommendations to improve measurement of the VFM of TA

Recommendation 8: *DFID India* should focus its attention on a consolidated set of indicators of VFM in the state health systems. *TA providers* should work closely with *state governments* on ensuring that data is collected and used to improve the economy and efficiency of use of public funds.

- *DFID India's* reporting on VFM should be strengthened through refinement of its indicators, and consolidation around a limited basket of markers of VFM that are systematically monitored over time and across states.
- VFM indicators could be used to help inform risk analysis around TA provision.
- *TA providers* should use these indicators as a basis for advocating with state governments around the systematic collection of data on health-system performance on VFM, and the translation of this evidence into policy changes.

Recommendation 9: In developing its TA strategy, *DFID* (in conjunction with *state governments* and *TA providers)* should devote resources to developing a clear and simple 'VFM framework' for jointly planning monitoring and assessing TA provision in the future.

- Building on the extensive work that has been done on measuring TA provision globally and the more recent work that has been done with respect to the VFM agenda, *DFID India* should devote resources to the development of a clear and simple TA VFM assessment framework.
- This framework should cover the REEEES components, but should be more explicitly focused on generating data that will help decision makers at all stages of the TA cycle (planning, implementation and review) to have an overview of performance across these VFM elements so that strategic choices can be made. Practically, this means that the framework needs to be simple, transparent and adaptable.
- This framework needs to be explicit about the need to generate evidence of both the 'external' VFM of TA provision (i.e. where possible, the impact of TA on contributing to state objectives relating to health outcomes), as well as 'internal' VFM of the TA provision (i.e. the extent to which TA provision itself is meeting VFM criteria) and to use this evidence to inform ongoing decision making.

A VFM Framework for Technical Assistance

As an output of this study we have developed a 'skeleton' assessment framework which can be further refined to allow DFID to undertake a systematic VFM analysis of TA in the future. Its primary objective is to provide a simple management and decision making tool for DFID India and its partners as it moves forward in to a phase of TA only provision. This assessment framework builds on the REEEES VFM framework deployed in this review but is designed to provide a simple and user friendly **VFM assessment tool,** to allow for focused and strategic analysis of TA provision in the states. The framework is designed in order that it can be adapted as a planning, monitoring or review tool. The framework proposes a five step assessment process and is presented in Annex K of this report.

Recommendation 10: *DFID India* and *DFID Headquarters* should be realistic and pragmatic about the extent to which 'external' attribution of their TA in India can be achieved.

- Evaluating TA for purposes of attributing impact is difficult, and even more so in the case of broader systems-strengthening support, which has multiplier effects. This fact is well recognised by other DPs operating in India, the majority of which do not attempt to measure the extent to which 'their' TA has an impact on key development outcomes. Rather than focusing on quantifying and attributing the impact of its TA, DFID should work on refining qualitative methods (for example, the use of a detailed theory of change) of exploring the broader impact of its TA on both development outcomes and intermediate outcomes (such as strengthened systems).

- A key strength of DFID has been its ability to be flexible and responsive, and there is a danger of losing this if a focus on results means that aid effectiveness principles are disregarded as the TA provision becomes fixated on achieving milestones and organisational incentives are created to reach (DFID-mandated) targets.

D. Recommendations on longer-term sustainability

Recommendation 11: *DFID India* should ensure that consultation with the government around priority areas for the next phase of TA explicitly considers longer-term capacity building, ownership and exit strategies.

- DFID's leadership in the procurement of TA and responsiveness to state government requests for substitutional tasks has been necessary, given current government capacity and administrative structures in the three states. Building the governments' own capacity to lead on the delivery of these functions will need to be a high priority as part of the longer-term exit strategy and also maximising ownership.
- *DFID India* should work with *state governments* and other *DPs* to develop a joint policy paper on the long-term expectations from the TA provided by DPs, working towards an eventual exit.

Recommendation 12: *TA providers* should support capacity building and organisational development of State Health Resource Centres, with a view to transferring responsibility for TA provision to the centres in the longer term.

- The possibility of increasing the state governments' capacity to procure their own TA in the long term (when DFID's TA will be phased out) is not just about providing organisational support. It is about institutional change; for example changes in pay structures, and government procurement and hiring procedures.
- TAST support should be provided to develop the nascent resource centres, which could then continue providing TA to the government in a sustainable manner when DFID TA is phased out.

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Abbreviations

AP	Andhra Pradesh
(A)PHC	(Additional) Primary Health Centres
ABM	Atal Bal Mission
AHS	Annual Health Survey
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
A(PIP)	Annual Project Implementation Plan
AWC	Anganwadi Centres
AWW	Anganwadi Workers
BEmONC	Basic Emergency Obstetric and Newborn Care
BMGF	Bill & Melinda Gates Foundation
BMSICL	Bihar Medical Services and Infrastructure Corporation Ltd
BRGF	Backward Regions' Grant Fund
BRGF	Backward Regions' Grant Fund
BTAST	Bihar Technical Assistance Support Team
C&AG	Comptroller and Auditor-General
CAGR	Compound Annual Growth Rate
CCM	Concurrent Monitoring
CCT	Conditional Cash Transfer
CDMO	Chief District Medical Officer
CEA	Cost Effectiveness Analysis
CEmONC	Comprehensive Emergency Obstetric and Newborn Care
CHC	Community Health Centre
CHCMI	Community Health Care Management Initiative
CLTS	Community-Led Total Sanitation
CMAM	Community-based Management of Acute Malnutrition
CMN	Communicable, Maternal and Nutritional
CMP	Common Minimum Programme
DALY	Disability-adjusted Life Year
DFID	Department for International Development
DH	District Hospital
DHFW	Department of Health & Family Welfare
DLHS	District Level Household Survey
DP	Development partner
DRD	Department for Rural Development
DSW	Department of Social Welfare
DWCD	Department of Women and Child Development
FA	Financial Assistance
FFHI	Family Friendly Hospital Initiative
FGD	Focus Group Discussion

G(S)DP	Gross (State) Domestic Product
GMP	Good Manufacturing Practice
GoB	Government of Bihar
GoI	Government of India
GoMP	Government of Madhya Pradesh
GoO	Government of Odisha
HB	High Burden
HDI	Human Development Index
HPD	High-priority Districts
HR	Human Resources
HR(M)IS	Human Resources Management Information System
HSS	Health Sector Strategy
ICAI	Independent Commission for Aid Impact
ICDS	Integrated Child Development Scheme
IIHMR	Indian Institute of Health Management Research
IMCI	Integrated Management of Childhood Illness
IMR	Infant Mortality Rate
IPMS	Integrated Management of Childhood Illness
KII	Key Informant Interview
LLIN	Long-lasting Insecticide Treated Net
LMIC	Low and Middle Income Country
LSAS	Lifesaving Anaesthesia Skills
MCH	Maternal and Child Health
MDG	Millennium Development Goal
MI	Micronutrient Initiative
MIS	Management Information System
MMR	Maternal Mortality Rate
MoU	Memorandum of Understanding
MP	Madhya Pradesh
MPHSRP	Madhya Pradesh Health Sector Reform Programme
MPRLP	Madhya Pradesh Rural Livelihoods Programme
MPUIIP	Madhya Pradesh Urban Infrastructure Improvement Project
MPUSP	Madhya Pradesh Urban Services for the Poor
MTEF	Medium term expenditure framework
NAO	National Audit Office
NBA	Nirmal Bharat Abhiyan
NDCP	National Disease Control Programme
NFHS	National Family Health Survey
NHSRC	National Health System Resource Centre
NIN	National Institute of Nutrition
NIPI	Norway-India Partnership Initiative
NMR	Neonatal Mortality Rate
NOP	Nutrition Operational Plan

NPSGY	Nayi Pidhi Swasthya Guarantee Yojana
NRC	Nutritional Rehabilitation Centre
NRHM	National Rural Health Mission
NSDP	Net State Domestic Product
ODF	Open Defecation Free
OEMAS	Odisha Emergency Medical Ambulance Service
OHSNP	Odisha Health Sector and Nutrition Plan
OPD	Outpatient Department
OPM	Oxford Policy Management
OPR	Output to Purpose Report
PEA	Political Economy Analysis
PFM	Public Finance Management
PHC	Primary Health Centres
PHED	Public Health Engineering Department
PIP	Project/Programme Implementation Plan
PLA	Participatory Learning Approach
PPR	Preliminary Project Report
PRBS	Poverty Reduction Budget Support
PSU	Programme Support Unit
QA	Quality Assurance
QAC	Quality Assurance Committee
QI	Quality Improvement
QPR	Quarterly Progress Report
REEEES	Relevance, Economy, Efficiency, Effectiveness, Equity and Sustainability
RCH	Reproductive and Child Health
RCT	Randomised Control Trial
RHCTM	Reproductive Health Costing Tools Model
RMNCH+A	Reproductive, Maternal, Newborn and Child Health (+ Adolescents)
RSU	Reform Support Unit
RUTF	Ready-to-use Therapeutic Food
SC	Scheduled Caste
SDH	Sub-divisional hospital
SDMIS	State Drug Management Information System
SHG	Self-help Group
SIAF	State Illness Assistance Fund
SNCU	Sick Neonatal Care Unit
SPMG	Strengthening Performance Management in Government
ST	Scheduled Tribe
SWASTH	Sector Wide Approach to Strengthening Health
TA	Technical Assistance
TAST	Technical Assistance Support Team
TC	Technical Cooperation
TNMSC	Tamil Nadu Medical Services Corporation

ToC	Theory of Change
ToR	Terms of Reference
UNFPA	United Nations Population Fund
UP	Uttar Pradesh
UPHSSP	Uttar Pradesh Health Systems Strengthening Project
UT	Union Territory
VFM	Value for Money
VHND	Village Health and Nutrition Day
VHSC	Village Health and Sanitation Committee
WASH	Water, Sanitation and Hygiene
WDC	Women Development Corporation
WHO	World Health Organisation
YLD	Years Lost due to Disability
YLL	Years of Life Lost

1 Introduction

1.1 Overview

DFID in the Indian context

The states of Bihar, Odisha and Madhya Pradesh are among the poorest in India. Data from the three states on indicators such as infant mortality and maternal mortality do not compare favourably to other neighbouring states, and there is inequality in outcomes for different subgroups.[7] The states are off-track on Millennium Development Goals (MDGs) 1, 4 and 5 (under-nutrition, maternal and child mortality).

DFID has dramatically increased its engagement with the state governments of Bihar, Odisha and Madhya Pradesh since 2005.[8][9] The key focus of the three state health sector programmes is to improve access to essential health services (especially for maternal and child health), nutrition, and vector-borne disease control, with a focus on poor and excluded groups. For this purpose, increased support to state budgets through direct financial assistance (FA) is complemented with support in the form of technical assistance (TA). TA is focused on capacity building and system strengthening, in focal areas such as strengthening financial and human resources management, developing procurement systems and improving quality of services. Table 1 illustrates the DFID funds being distributed to the health programmes in the three states, and the overall stated purpose of each DFID project as articulated in the most recent logframe versions made available to the team.

Table 1: DFID funding to the health projects in Bihar, Madhya Pradesh and Odisha

State	DFID's funding	Overall goal and purpose[10]
Bihar	£145 million	Impact: '*To improve the nutrition and health status of people in Bihar, particularly the poorest and excluded.'* Outcome: '*Increased use of quality, essential nutrition, health and water and sanitation services, especially by poorest people and excluded groups.'*
Madhya Pradesh	£120 million	Impact: *'The people in Madhya Pradesh have improved health and nutrition status.'* Outcome: *'Increased use of quality health, nutrition and sanitation services by the poor.'*
Odisha	£100 million	Impact: *'The people in Odisha have improved health and nutrition status.'* Outcome: *'Increased use of quality health, nutrition and sanitation services by the poor.'*

Rationale for the study

There are a number of different reasons why this study is highly relevant in the current context of aid, both to India and more generally.

Firstly, while the current UK coalition government has been clear about its continued commitment to international aid, in a time of austerity the value achieved with this increasingly high-profile spend comes under ever more scrutiny, not least from the UK press. The need to achieve value for money (VFM) from the aid budget has been strongly emphasised by the

[7] Sourced from Family Welfare Statistics in India in 2011 (https://nrhm-mis.nic.in/UI/FamilyWelfare2011/03%20Section-A/03%20Section%20-%20A.pdf)
[8] ICAI 2012. *Evaluation of DFID's support to health and education in India.* Report 11.
[9] Engagement in Bihar was started slightly later, commencing substantively after 2008.
[10] Logframes for Bihar (September 2014), Madhya Pradesh (November 2013) and Odisha (September 2014)

Secretary of State Justine Greening, and indeed both the National Audit Office and the Public Accounts Committee (PAC) have commended DFID on taking 'a big step towards improving the VFM it gets from these funds.'[11] This is particularly difficult in budget support programmes (such as DFID's health sector support in India) where state governments are in charge of delivery.

Understanding the VFM of sector budget support is important for DFID because, while FA is arguably an efficient mechanism for DFID internally, it represents a very large investment with a number of associated delivery risks. However, understanding the value of TA is potentially even more important for DFID corporately. India will be graduating from financial grant aid in 2015[12]; South Africa is also moving down this route, as China has done before it. There is substantive ongoing debate about aid to middle-income countries,[13] and as DFID starts to change the way it engages with countries as they move towards middle-income status and graduate from more traditional (and largely financial) aid, there is a clear need to understand more about the VFM of other forms of assistance.

Although an evaluation by the Independent Commission for Aid Impact (ICAI) was 'convinced that the UK's particular contribution to Indian development is primarily knowledge and skills, not finance,'[14] the evidence for this conclusion needs to be more strongly validated, which this assignment has aimed to do. Given that all new programmes in India will focus on sharing skills and expertise in priority areas, it is vital that there is an understanding of what works in the Indian context, in order to maximise the VFM of DFID's investment and build on lessons learned from earlier phases of DFID support in India.

1.2 Objective and scope of the study

The objective of this study was to assess the overall impact and VFM of DFID's health sector programmes in three states in India. The Terms of Reference (ToR) of this study (see Annex A) detailed three sets of more specific objectives:

Objective one:
- Identify and assess the key outcome, economy and efficiency drivers at the sectoral level.
- Undertake internal/international benchmarking on unit costs and comparators of sectoral investments.
- Provide relevant sectoral evidence on what works to achieve results at good value for money.

Objective two:
- Assess and update health sector portfolio performance against the sectoral/unit cost benchmarks/economic appraisal assumptions.
- Produce a set of recommendations for a way forward, including guidance on methodology and benchmarks for evaluating VFM annually.

Objective three:
- Evaluate the incremental impact (including in terms of lives saved – disaggregated data by scheduled caste (SC)/scheduled tribe (ST) population, gender and wealth quintiles) of the health sector budget support in three states. This should clearly state the impact of TA over and above the impact of FA in these programmes, setting out clear method of attribution.

[11] In relation to multilateral spend: NAO (2012). Department for International Development – The multilateral aid review. Report by the Comptroller and Auditor General; HC 594 London: The Stationery Office.
[12] Following the Bilateral Aid Review in 2011, it was decided that DFID's existing financial commitments in India up to 2015 would be honoured. After this, however, all new assistance will be either TA or private sector initiatives financed using returnable capital (DFID, 2011a; DFID, 2013b).
[13] BOND. 2013. Aid to middle-income countries – what should be done? (available from: http://www.bond.org.uk/data/files/publications/Middle_Income_Countries_-_final_report.pdf)
[14] ICAI 2012. *Evaluation of DFID's support to health and education in India*. Report 11.

The ToR also detailed a number of specific questions, which informed the development of the conceptual framework detailed in Chapter 2 and the evaluation framework and questions developed during the inception phase (seen Annex C). However, although this study was originally framed as an evaluation, it became clear at an early stage that DFID support to the three state programmes, as a unit of analysis, was not evaluable – the significant data limitations identified meant that summative evaluation was largely not possible, and the available resources for the assignment meant that substantive primary data collection was not feasible. The result was that attribution, for example, was not possible, meaning that some of the key objectives in the original ToR could not be fully met.

Accordingly, there was a shift in emphasis, agreed in conjunction with DFID India, from *VFM evaluation* to a *systematic appraisal* of what has worked, and what has not, in terms of DFID's TA and FA interventions through a VFM lens; and a *formative assessment* of how best to measure VFM – with clear focus on TA – in the future. Given its timing (leading up to 2015 when DFID's development assistance to India will become solely TA), this study has presented a clear opportunity to learn lessons about what has and has not worked in terms of the previous phases of DFID support and highlighted a need to understand best-practice in terms of models of TA and their measurement. Given the number of development partners engaging in TA, in India and elsewhere, it is anticipated that the findings of this study will be of interest both within, and outside of, DFID.

1.3 Structure of the report

DFID commissioned the e-Pact consortium to conduct this study, which has been led by Itad, in conjunction with Oxford Policy Management (OPM) and the Indian Institute of Health Management Research (IIHMR) (full details of the team structure can be found in Annex B).

This report represents the synthesis of a number of different streams of analysis and associated reports, including individual reports for the three states, a set of case studies, and a strategic assessment of TA. The main body of the report is structured as follows:

Chapter 2: Conceptual framework
Chapter 3: Overview of state contexts and DFID's programmes
Chapter 4: Methodology
Chapter 5: Analysis against the REEEES framework
Chapter 6: Strategic assessment of DFID's TA
Chapter 7: Assessment of DFID's monitoring of VFM
Chapter 8: Conclusions and recommendations

A number of additional materials and analyses are attached as annexes to this report, in a separate document:

Annex A: Terms of reference
Annex B: Structure of the team
Annex C: Evaluation framework
Annex D: Interview guides
Annex E: Interviewee list
Annex F: Case study findings
Annex G: Supplementary data
Annex H: Cost-effectiveness analyses
Annex I: Strategic assessment of DFID's TA
Annex J: VFM diagnostic analysis

Annex K: An emergent framework for assessing the value for money of technical assistance

2 Conceptual framework

2.1 Introduction

This study is concerned with two issues: a) a focus on assessing the VFM of DFID's assistance in terms of assessing the relevance, economy, efficiency, effectiveness, equity and sustainability (REEEES) of the DFID-supported programmes; and b) a broader overarching issue relating to the manner in which FA and TA are expected to generate an impact and the assumptions underpinning these theories of change.

The conceptual framework presented in this chapter was designed with these two lenses in mind. Building on concepts of, and frameworks for assessing, VFM adopted by DFID, DAC[15], ICAI[16] and others, the team firstly conceptualised a framework for assessing VFM in DFID-supported programmes, using the 'four Es'[17] of economy, efficiency and effectiveness and equity as a starting point. In order to develop this into a comprehensive framework for analysing DFID's portfolio in the three states, the team explored the different types of interventions being supported, in order to generate units of analysis upon which to apply the VFM framework. Details are presented in sections 2.2 and 2.3 below.

2.2 The REEEES framework for assessing VFM

VFM assessment has, for many years, been a key part of the work of the National Audit Office (NAO) in assessing whether government Departments and agencies are spending public funds well. The NAO defines VFM as the '*optimum combination of whole-life cost and quality (or fitness for purpose) to meet the user's requirement.*'[18] VFM, is therefore something other than lowest-cost provision it relates to whole of project life, and, it must meet the outcome expectations of the organisation that is expending the resources.

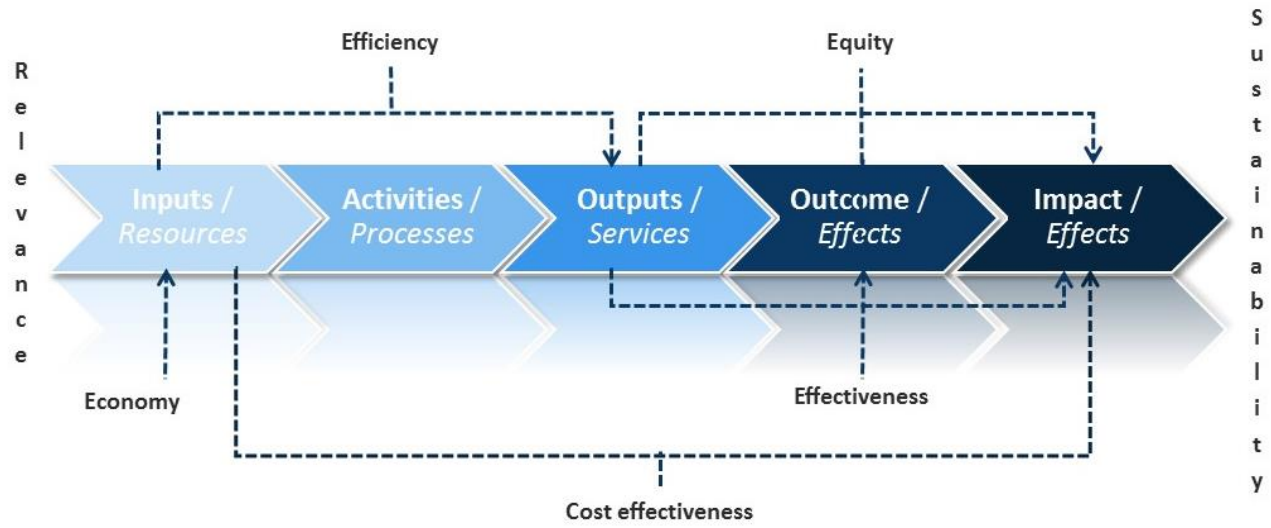
DFID, like most other development agencies that are concerned with VFM including AusAID, OECD DAC, BOND, and ICAI has adopted a definition of VFM based on the '3Es': economy, efficiency and effectiveness. The DAC defines VFM as *'a term or a concept, which is about getting the best balance between three things: economy, efficiency and effectiveness'*[19]. ICAI has introduced a fourth E, equity, into the way VFM is considered.[20] This study has taken the 'four Es' as core to its approach; however, it has incorporated the additional dimensions of relevance and sustainability to ensure a comprehensive approach to the assessment, in line with DFID policy.[21]

Firstly, there is a clear link to allocative efficiency i.e. *is money being spent on the right things?* Secondly, given that the mode of support is a combination of TA and FA, and the agenda for post-2015, it is significant to assess the extent to which the two modes, separately and in combination, were relevant to the needs of the government and the population. Similarly, given the focus of TA on capacity building within government and the planned cessation of FA post-2015, evidence of sustainability of the DFID-supported interventions is a key consideration. The

[15] Penny Jackson, 2012, *Value for Money and International Development: Deconstructing some myths to promote more constructive discussion*, Development Co-operation Directorate, OECD, Paris.
[16] ICAI. 2011. ICAI's approach to effectiveness and value for money.
[17] *Ibid*
[18] UK National Audit Office, 2001, *Getting value for money from procurement: How auditors can help,* National Audit Office & Office of Government Commerce, London.
[19] Penny Jackson, 2012, *Value for Money and International Development: Deconstructing some myths to promote more constructive discussion*, Development Co-operation Directorate, OECD, Paris.
[20] ICAI, 2011, ICAI's approach to effectiveness and value for money.
[21] Building the evidence to reduce poverty: The UK's policy on evaluation for international development. DFID, June 2009. Note that the present evaluation slightly deviates from the original framework: the framework contains another parameter – coverage – which is not addressed separately in the present evaluation, since it is a cross-cutting issue in the present context.

assessments of relevance and sustainability have implications for VFM in both the short and the long term and therefore this study is structured around the assessment of all six criteria to capture VFM across the entire results chain i.e. a REEEES framework.

Figure 1: VFM across the results chain



Following the conceptualisation of the REEEES framework, the team unpacked the key issues under each dimension of VFM, and used them to inform the development of a set of evaluation questions (these are listed in the framework in Annex C). The evaluation questions were formulated to generate an understanding of a) *'what'* has happened in relation to the specific VFM component (for example, what is the evidence of improved efficiency); b) *'how'* have events happened in relation to the specific VFM component (for example, how has DFID's support helped to improve efficiency); and c) *'why'* have these things happened (for example what are the key drivers that have determined the level of efficiency). The REEEES framework, and associated evaluation questions provided the frame for the design of the study, informing the choice of data collection and analysis methods.

The primary focus of this study has been on VFM performance *'externally'* – i.e. the impact of DFID assistance on addressing blockages in state delivery systems and ultimately on development outcomes. However, in some specific cases this study touches upon VFM from an *'internal'* perspective – specifically linked to the performance of the model of TA delivery.[22] The key issues that have been explored for each of the REEEES dimensions are detailed below:

Relevance

The *relevance* of a development intervention is defined by the European Commission as 'the extent to which the objectives of the intervention are consistent with beneficiaries' requirements, country's (state's) needs, global or national priorities, and partners' and donors' policies.'[23] The principle issue for this criterion is **whether DFID did the right things** (i.e. how relevant were the interventions to actual needs of the system).In other words, the hypothesis to be tested here is that the DFID programmes are aligned to the states' health sector strategies and the priority needs in the respective sectors.[24] Given that the DFID state programmes are

[22] The nascent framework for assessing VFM (detailed in chapter 8 and annex K) builds on the thinking around these two lens and articulates a methodology for the systematic assessment of both.
[23] ec.europa.eu/europeaid/evaluation/methodology/methods/mth_ccr_en.htm
[24] This is closely linked to the concept of allocative efficiency (see below). However, for the purposes of this study, relevance has been primarily assessed according to the stated definition, focusing on whether DFID's support was targeted according to the needs of the states' governments and aligned with the work of other DPs. Questions of allocative efficiency have focused more substantively on the extent to which DFID support has improved allocative efficiency *within the system.*

just one among the crucial change agents in the states' health sectors, this study also considered the extent to which DFID's work is aligned with that of other actors.

Economy

The principal guiding issue for assessing *economy* is **whether the inputs/resources are purchased at the right price, in the right amount, and in the right quality, especially in the context of DFID-supported programmes**. A corollary to this issue is whether and in what way the DFID support influenced the overall service delivery systems to adopt the universally accepted economic standard in purchasing inputs. The definition of 'right price' in this case will be determined primarily on economic grounds (i.e. the price that minimises costs subject to the given constraints). The 'right amount' corresponds to the optimum amount (at minimum prices), which leads to cost minimisation. The 'right quality' refers to the process of procurement, distribution, and deployment of the inputs, which should follow a universally accepted standard or benchmark. As mentioned, the question is applicable to both FA and TA components of the DFID-supported programme, and is framed around finding benchmarks for several key indicators, then focusing on comparisons between the estimated or observed values/status and the benchmarks, and establishing the extent to which DFID support has contributed to improving economy in the state programmes.

Efficiency

The key questions being addressed are: 1) are DFID-supported interventions being delivered efficiently i.e. are things being done in the 'right' way?; and, 2) how and to what extent has DFID support contributed to the efficiency in the system? The principal issue in this context is: **whether inputs are allocated according to some economic norms or empirical evidence and whether they are transformed into maximum possible outputs**. This relates to both *allocative efficiency* for example, exploring whether there is evidence of an adequate focus on the areas of greatest need[25]; and *technical efficiency*, which links costs to outputs, for example, exploring whether it is possible to increase the number of institutional birth deliveries by using the same amount of resources. Similar to economy, the corollary is the extent to which DFID support contributed to improvements in efficiency of the entire system.

Effectiveness

The key issues being considered in terms of effectiveness are whether and to what extent the key interventions and partnerships supported by DFID have been, or have the potential to be, successful in bringing the desired changes in the health outcomes. The fundamental questions are: 1) **what are the incremental gains in the key health outcomes during the DFID support period**; and 2) **to what extent can these be attributed to the DFID-supported programmes?** In terms of VFM, this study also considers whether the interventions have been cost effective, linking the cost, in terms of DFID's investment, to the value, in terms of changes in outcome indicators and benchmarking the results against international standards for cost effectiveness.

Equity

The key consideration is **to what extent were the incremental benefits in the DFID-supported programmes equitably distributed?** Related issues consider the extent to which DFID's support adequately attempted to address, and indeed succeeded in addressing, the needs of different sections of the society, such as women, the poor, religious minorities, tribal communities, who usually face disproportionately tougher barriers to access basic health, nutrition and sanitation services; and to what extent DFID support could contribute to weakening these barriers and consequently reducing inequities in health outcomes.

Sustainability

[25] This is also linked to considerations of equity, which in this case are linked to the targeting of specific geographical areas and populations according to metrics of disadvantage.

The key question related to sustainability is **how much progress has been made towards sustainability in terms of ownership of reforms, capacity development and resilience to risks, as well as whether there is evidence of fiscal sustainability**? This primarily considers the ownership of DFID-supported initiatives by the state governments. Considering that DFID's FA comes to the state as long-term budgetary support, which provides time for the state governments to prepare for financial sustainability of the DFID-supported programmes, the issue is whether there is evidence of state ownership of reforms, technical supports, and financial commitments.

2.3 A framework for analysing DFID's portfolio of support

2.3.1 Classification of DFID support

Preliminary analyses identified that a central principle of DFID's support in all three states is investment in selected strategic components of health sector reform with financial and technical resources. There are numerous different types of interventions supported under each programme and it was not considered feasible (given the scope and resources available for the study) to analyse them individually. Instead a number of categories have been defined, that represent the range of interventions across the three states.

Classification of the different intervention categories initially followed a bottom-up approach, based on preliminary analysis of documents and meetings with stakeholders. They were first split into interventions that provide support at the 'upstream' level and are targeted at strengthening governance and management (generally at state level) and those that are focused on 'downstream' support at more decentralised levels. Interventions were then classified according to their purpose. This was done with a health systems lens[26] but was very much grounded in the reality of DFID support in the three states. Initial categorisations were shared with DFID and the TA agencies, and refined in light of feedback. The five resulting categories, which comprise a useful unit of analysis by which to analyse the three state programmes, are presented here:

1.) <u>Upstream support</u> consists of interventions that were initiated and operationalised exclusively or mostly with DFID support and influence, and are targeted at the higher administrative levels. The intervention categories are:

- **Strengthening/reforming institutional mechanisms**: The purpose of this intervention is to improve leadership and governance of the government agencies (i.e. the departments) to make the health system more efficient and effective. This includes supporting reforms in the area of human resource management, procurement of health and nutrition commodities, planning process, oversight mechanism and policy development.
- **Evidence generation**: The primary purpose of this support is to provide decision makers with new and useful evidence that is usually not generated within the system. This includes baseline and concurrent data on progress of programme outputs, independent assessment of programmes, scientific research to evaluate programme effectiveness, and documentation of implementation process. The purpose of this initiative is to help sector leaders take informed decisions or plan policy.
- **Better management of information systems**: The purpose is to effectively link upstream governance with downstream implementation through an efficient internal

[26] Thinking was framed by the WHO building blocks for health system strengthening (http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf)

information system. This includes reforms in collection, transmission, and use of information at all levels of the system.[27]

2.) <u>Downstream support</u>, consists of interventions that were provided at the frontline implementation level (i.e. the districts and below), and which were partially supported by DFID and complemented by some other parallel initiatives, such as the centrally-sponsored National Rural Health Mission (NRHM) and Integrated Child Development Scheme (ICDS) or projects funded by other development partners, primarily to make the service delivery more effective. The intervention categories are:

- **Implementation support**: the purpose is to make the government's service delivery system more effective at the ground level by improving infrastructure, quality of services, planning process and access.
- **Community mobilisation**: the purpose is to address the demand-side barriers through mobilising the community and generating more demand for quality health, nutrition, and water sanitation and hygiene (WASH) services and behaviour change at individual and household levels. Since the initiatives (supported with both FA and TA) are implemented at the community level, these are grouped under downstream support.

The interventions are grouped according to their primary objectives and are not mutually exclusive. It is also important to note that the areas of support – upstream and downstream – are complementary to each other. However, each group reflects a particular cornerstone of the overall strategy to improve the performance of the health system. For example, 'strengthening/reforming institutional mechanisms' is perceived as a strategic step to address the deficits in governance and improve the performance of service delivery in the long term. Similarly, 'better management of information systems' is expected to improve efficiency in monitoring progress and complement the process of improving governance. The interventions are strategic because they are intended to bring in structural transformation in the delivery system, not to do more of the same routine tasks.

2.3.2 An emergent Theory of Change

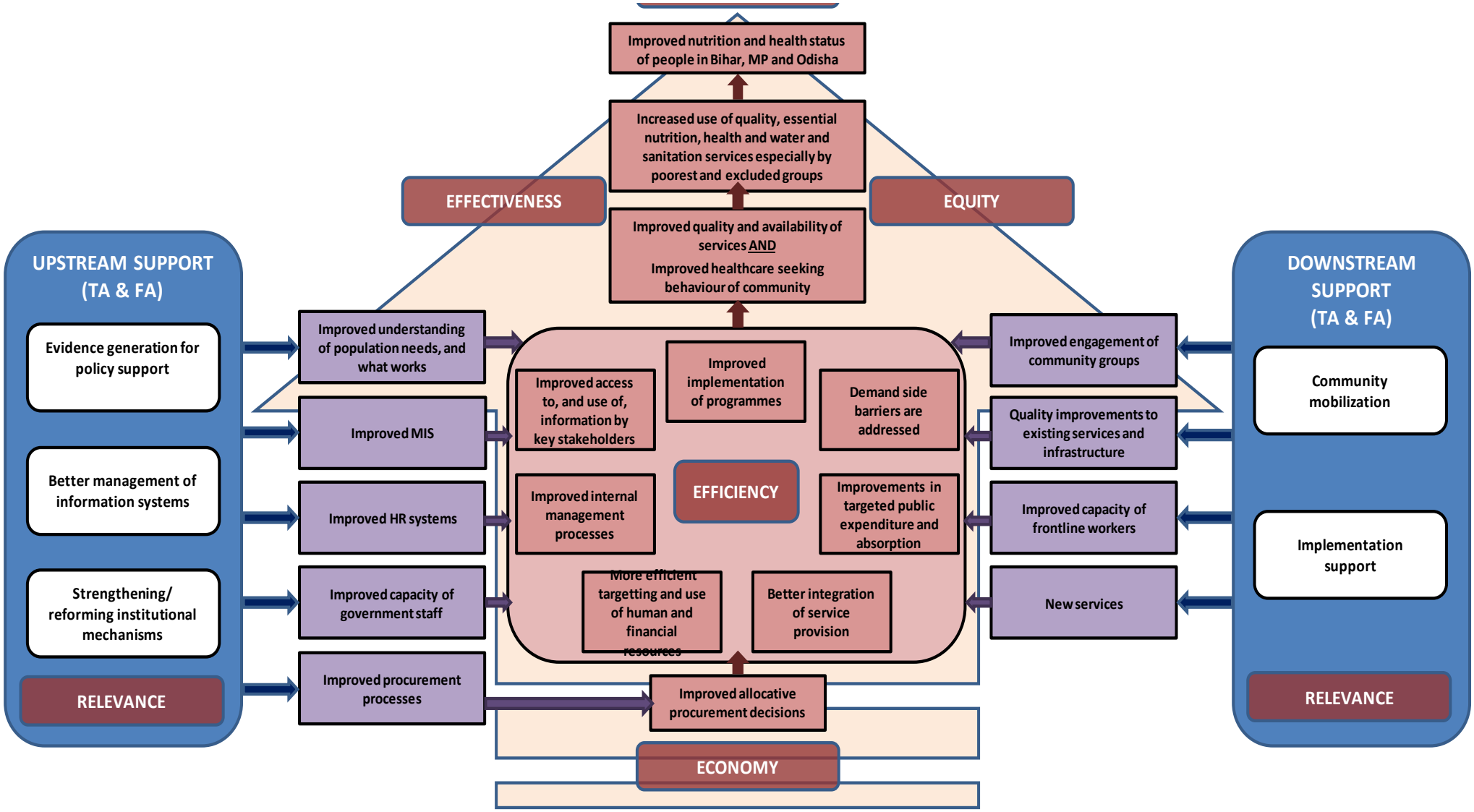
Figure 2 below articulates an emergent generic Theory of Change (ToC) for the DFID-supported interventions in the three states. This ToC builds on the original ToC that was developed (and presented in the inception report) but was expanded throughout the course of the study, and is presented here as an illustration of the rationale behind the overall conceptual framework – namely, the interface between the intervention categories articulated above and the REEEES framework. The approach taken in this study has been to generate a better understanding of how DFID has performed on the VFM dimensions within the REEEES framework by assessing the evidence base, from the intervention perspective, of what has happened to date in each of the three states.

The core (trunk) of the ToC is made up of the four 'Es' of economy, efficiency, effectiveness and equity. The sequential nature of these Es (bottom to top) follows the 'traditional' understanding of how the VFM 'Es' map over the value chain of inputs to impact. This sequence in the ToC illustrates the logic of how 'value' is increased through the interventions supported by DFID TA and FA and identifies how the five intervention categories could contribute to improving VFM. The ToC model also illustrates how questions of relevance and sustainability are 'framing concepts' around the core four 'Es'. In terms of relevance, the key issues relate to how the specific interventions supported by DFID fit with the overall programmes at state level, and specifically how they contribute (in theory and in practice) to

[27] It should be noted that 3), i.e. better management of the information system is treated as a separate set, and not as a sub-set of 1) or 2). This is because the information system involves both upstream and downstream, while the other two are primarily targeted at upstream level. Also, 'evidence' is generated by external agencies, while 'information system' is internal to the system.

improving the VFM of these programmes. In terms of sustainability, the key questions relate to how the set of interventions supported can contribute to longer-term and sustainable health system developments that contribute to ongoing improvements in health outcomes.

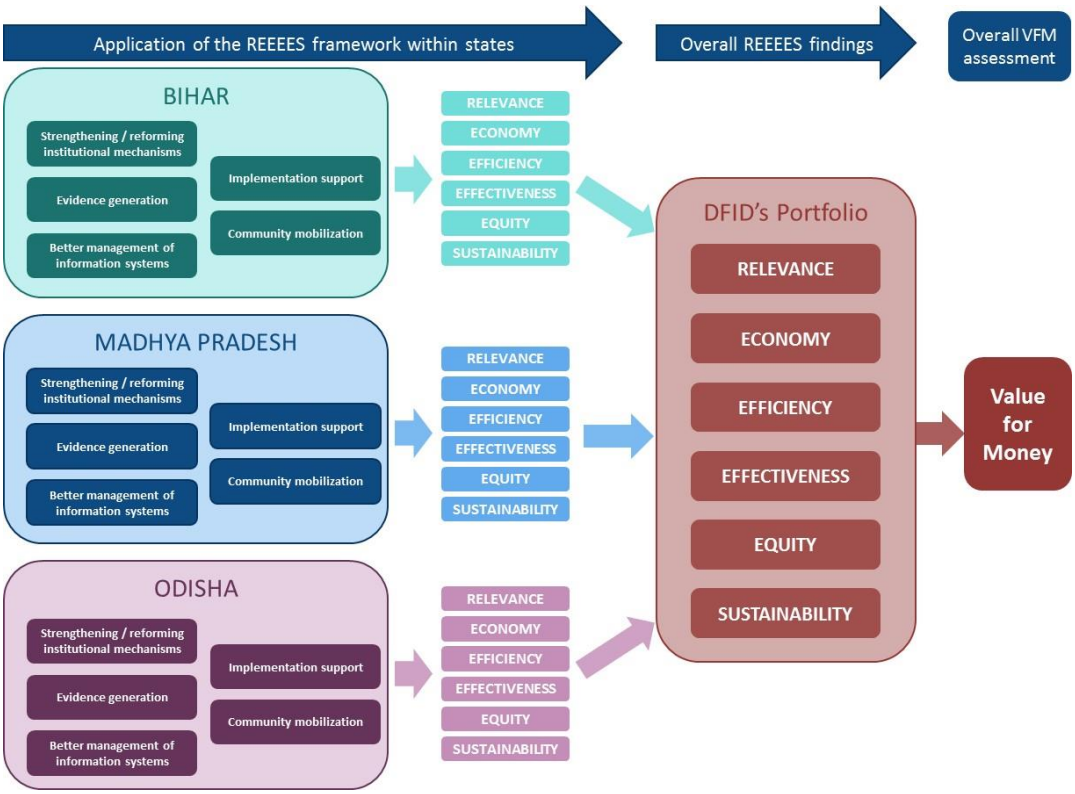
Figure 2: An emergent Theory of Change for DFID support in the three states



2.3.3 Applying the framework in the three states

As articulated above, the five interventions formed the basis of the analysis in each of the three states. The REEEES framework (with associated evaluation questions) was applied to each of the five intervention areas in Bihar, Madhya Pradesh and Odisha, based on the specific DFID-supported interventions. This informed a judgement of VFM against each dimension within the three states (presented in the individual state reports submitted to DFID during the analysis phase), which were then synthesised, and the key findings for each dimension drawn out into this report. This framework for analysis is presented in Figure 3 below.

Figure 3: Application of the REEEES framework



2.4 Formative analyses

In addition to the main conceptual framework that informed the design and methodology of the primary VFM assessment, the team were also cognizant of the formative aspects of the study. This centred on two key areas of work:

1.) **Strategic analysis of TA**: The ToR for this study (see Annex A) and discussions with DFID during the inception phase illustrated that TA, and its role in India after 2015, were a key issue for DFID. Therefore, a supplementary component of analysis was done with a specific focus on examining models of TA, of DFID and others, to frame analysis and recommendations for TA moving forward. Given the role of TA, and ongoing dialogue on aid effectiveness

Box 1: Paris Declaration Principles

1. Ownership: Developing countries set their own strategies for poverty reduction, improve their institutions and tackle corruption.

2. Alignment: Donor countries align behind these objectives and use local systems.

3. Harmonisation: Donor countries coordinate, simplify procedures and share information to avoid duplication.

4. Results: Developing countries and donors shift focus to development results and results get measured.

5. Mutual accountability: Donors and partners are accountable for development results.

and aid to middle-income countries (see Chapter 1) this analysis was framed by consideration of the Paris Declaration Principles (see Box 1).[28]

2.) **Monitoring VFM**: This assessment of VFM (and some of the challenges and limitation linked to data availability, detailed in section 3.4 below) informed ongoing analytical thinking about how VFM could be monitored and assessed in future. This is detailed in Chapter 7 and Annexes J and K, but represents a key area that could be developed over the course of future work.

[28] The Paris Declaration on Aid Effectiveness, 2005

3 Overview of state contexts and DFID's programmes

This chapter presents a brief overview of the DFID support in each of the three states, and some details on the context in which the programmes are operating.

3.1 Madhya Pradesh

3.1.1 Context

Despite increased allocations to the social sector, Madhya Pradesh (MP) is struggling to meet most Millennium Development Goal (MDG) targets relating to hunger, maternal and child mortality, nutrition, water and sanitation and environmental sustainability (see Table 2). About one-third of its population live below the national poverty line, compared to a national average of 22%[29], and the state ranks 20th out of 23 Indian states on the Human Development Index (HDI) scale. The state ranks first in the country in infant mortality rate (IMR), second highest in crude death rate and fifth highest in maternal mortality rate (MMR) (230/100,000 live births)[30,31]. The northern region has a high proportion of scheduled castes (SCs) among its population, while the south-eastern and western regions have a high proportion of scheduled tribes (STs). These two groups together account for one-third of the total population and roughly two-thirds of the poor.

Table 2: Current status of selected health MDGs in MP

Relevant MDG indicators	MDG targets for MP 2015[32]	Current status of MP[33]
% children underweight	22	50
IMR	37	54
U-5 MR	49	73
MMR	151	230

While the economy of MP was considered to be one of the least productive in all of India until 2003, it has registered a consistent growth rate since 2005 (10.2% in 2012-13, compared to the national average of 4.96%), becoming the Indian state with the highest GDP growth. However, the annual per capita net state domestic product (NSDP) in real terms still falls far short of the national average (Rs.26514 or £300 compared to Rs.39143 or £430)[34]. The political environment is stable: a single political party, elected for three terms, is committed both to the social sectors and to poverty reduction. The chief minister has projected himself as a pro-development champion and made welfare schemes the vanguard of his campaign.

3.1.2 DFID's programme

DFID began working in the health sector in MP in 2004, through a District Health Management and Sector Reform Programme. This was followed by two phases of the **MP Health Sector Reform Programme (MPHSRP**), which began in 2007. In both phases, DFID provided TA and FA. In the second phase (2012-15), the TA teams have scaled up and intensified their engagement with government departments, as well as increasing their role in implementation,

[29] GOI. *Report of the Expert Group to review the Methodology for Estimation of Poverty* Government of India Planning Commission. November, 2009.
[30] SRS Bulletin, September 2013.
[31] *Special Bulletin, on Maternal Mortality in India 2010-12*, SRS (December, 2013).
[32] Source: Millennium Development Goals: India Country Report 2011. CSO, Ministry of Statistics and Programme Implementation, GoI (http://mospi.nic.in/mospi_new/upload/mdg_2011_24apr12.pdf).
[33] Source: SRS Bulletin (2013) for IMR, Annual Health Survey (2011-12), NIN survey (2011).
[34] *Brief for Annual Plan 2013-14, Madhya Pradesh*. FR Division, Planning Commission, Government of India.

particularly community-based approaches and district-level engagement. FA was also restructured to include a separate budget line for DFID financial aid plan from 2012 onwards[35].

The central principle of MPHSRP involved backing reforms of the government of MP (GoMP) with resources, thus incentivising the process of addressing some of the more difficult health challenges. The programme memorandum focused on six key reform elements:

- Improving equitable access to quality public health care services;
- Accountability of staff;
- Organisational development and human resource management;
- Adequacy of financial allocation;
- Effectiveness of expenditure, participation and regulation of the private sector; and
- Integrated service delivery to reduce malnutrition.

The programme was initially designed for five years (2007-12) with a proposed support of £60 million provided to GoMP as sector poverty reduction budget support (PRBS), including £56 million in FA through budgetary support and £4 million as technical cooperation (TC) funds, starting from 2007-08. However, a set of midway corrections changed the resource commitment:

- FA support was extended to the Department of Women and Child Development (DWCD) from 2010 to help address the nutrition challenges.
- The budget for TA was raised from £4 million to £17 million to improve nutrition TA, community mobilisation and district implementation support.

Table 3: DFID's outlay for financial and technical support to MP (2007-15)

Year	FA (£ million)		TA (£ million)	Total (£ million)
	DHFW (Health)	DWCD (Nutrition)		
2007-09	31	0	2.0	33.0
2010-11	18	16	4.4	38.4
2012-15	19	19	10.6	48.6
Total	68	35	17	120
% of FA	66%	34%	N/A	
FA-TA%	86%		14%	100%
Source: DFID Programme Documents				

TA to DWCD, the Department of Health & Family Welfare (DHFW), and the Public Health Engineering Department (PHED) is provided primarily by a support team (TAST), contracted by DFID, to strengthen implementation, capacity building, and service quality at district and sub-district levels. For the first phase, DFID contracted a consortium of TA partners led by Options (UK) and IPE (India), identified as MP Technical Assistance Support Team (MPTAST). The focus of MPTAST was to develop a strong ground for initiating reforms around the health sector in the state.

In the second phase, the consortium was replaced by a new one led by FHI 360[36]; and the engagement with government departments was scaled up and intensified. The TA plan included health, nutrition and WASH, implying that the TAST team now has to interface with at least four departments: Health and Family Welfare, Women and Child Development, Rural Development and Panchayati Raj and Public Health Engineering. The second-phase MPTAST

[35] During 2007-12, there was no separate budget line for DFID funds. From April 2012 onwards both departments of Health and DWCD have clearly earmarked DFID funds within the departmental financial action plans.
[36] The other TA partners are WaterAid and BBC Media – they are separately contracted by DFID.

has branched out to the district level to help implement integrated approaches to health, nutrition and water and sanitation outcomes.

Examples of DFID-supported interventions in MP, under the intervention categories presented in Chapter 2, are presented in Table 4.[37]

Table 4: DFID-supported interventions in MP (2006-15)

Intervention areas	Major interventions	FA/TA
Strengthening/reforming institutional mechanisms	Development of Human Resources (HR) policy and strategy	TA
	Establishment of procurement corporation	TA
	Strengthening financial management	TA
Evidence generation for policy support	Analysis of public expenditure and projections (e.g. PER, MTEF for DWCD)	TA
	Evaluation of hot cooked meals	
	Assessment of the Emergency Response Services Evaluation of community mobilisation pilot	
Strengthening information systems	HRMIS: Software-based HR information system	TA
	Drug MIS	TA
	ICDS MIS	TA
Implementation support	Contribution in developing the PIP in 16 MPTAST districts	TA
	Training of frontline workers in health and nutrition	TA + FA
	Mobility support	FA
	Construction of Anganwadi centres (AWCs), sub-centres and Nursing Skill Labs	FA + TA
	QA interventions in hospitals	FA + TA
Community mobilisation	Support to capacity building of village health and sanitation committee (VHSC) members	TA + FA

There are several parallel DFID streams of support in MP, which could affect the effectiveness of the health sector programme. For example, the Strengthening Performance Management in Government (SPMG) programme, running into its second phase (2007-15), is aimed at strengthening the management of public expenditure in the state as part of the larger programme to strengthen performance management. Through the Rural Livelihood programme, DFID has enabled the village communities in nine tribal districts to provide the poorest with a mix of grants/loans and to help them access government schemes. DFID investment in these parallel non-health programmes during 2006-15 totals £153.4 million (excluding £120 million support to the health sector).

[37] This table presents illustrative interventions and is not intended to be a comprehensive mapping of DFID support in the state

3.2 Bihar

3.2.1 Context

Bihar is the poorest of the major Indian states, although some indicators have improved in recent years: the state's IMR was reduced from 62 in 2001 to 43 in 2012 (almost equivalent to the 2012 national average of 42). The crude death rate is at 6.6 and the MMR (219 per 100,000 live births) is the lowest among the BIMARU (Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh) states, although it still falls far short of the national average (178).[38][39] A recent nutritional survey in Bihar found that 35% of children were underweight and 27% chronically malnourished[40], as compared to the 50% and 34%, respectively, found in the 2005-06 NFHS-3.

Table 5. Current status of selected health MDGs in Bihar

Relevant MDG indicators	MDG targets for Bihar 2015[41]	Current status of Bihar[42]
% children underweight	25	52
IMR	25	43
U-5 MR	46	70
MMR	184	219

After a period of weak governance, a high degree of corruption, and sharp caste divisions between 1990 and 2005, the coalition government that came into power in 2005 achieved turnarounds in law and order, administrative reforms, economic growth and rural development. The political landscape is now characterised by a reasonable degree of stability and good governance. The coalition government won a second term in 2010.[43] From 2006 to 2010, the average rate of growth in real per capita GDP averaged more than 10% as compared to only 4% between 1999 and 2006.[44] However, the annual per capita NSDP in real terms still falls far short of the national average (Rs.14268 or £150 compared to Rs.39143 or £400).[45] Revenue receipts have increased three-fold in the 6 years prior to 2013-14 but the fiscal deficit has increased from 1.5% of Gross State Domestic Product (GSDP) in 2007-08 to 2.6% in 2012-13.[46]

3.2.2 DFID's programme

DFID started working in the health sector in Bihar in 2010 through supporting the design and implementation of the Sector Wide Approach to Strengthening Health (SWASTH), a programme to improve people's health and nutritional status, with a focus on the poorest and excluded, and a view to accelerating progress towards the MDGs[47]. The Indian government approved the preliminary project report (PPR) proposal for DFID support in November 2008 and requested that the state prepare a detailed design of the programme. In early 2009, DFID appointed a Bihar Technical Assistance Support Team (BTAST) a consortium of three agencies but it was not until February 2010 that the SWASTH programme project memorandum was signed by the government of Bihar, the Indian government and DFID. The programme was envisaged as an instrument to enable the government of Bihar to take a holistic view of the

[38] SRS Bulletin, September 2013.
[39] *Special Bulletin, on Maternal Mortality in India 2010-12*, SRS (December, 2013).
[40] *Baseline findings from the Ananya evaluation*, Final report, MPR and PHFI, 2013.
[41] Source: Millennium Development Goals: India Country Report 2011. CSO, Ministry of Statistics and Programme Implementation, Government of India (http://mospi.nic.in/mospi_new/upload/mdg_2011_24apr12.pdf).
[42] Source: SRS Bulletin (2013) for IMR, Annual Health Survey (2011-12), Ananya baseline survey (2012).
[43] After the Lok Sabha elections, however, while the same coalition government continues the chief minister resigned and has been replaced.
[44] Economic Survey 2013-14, Department of Finance, Government of Bihar.
[45] *Brief for Annual Plan 2013-14, Bihar*. FR Division, Planning Commission, Government of India.
[46] *Ibid.*
[47] Project Memorandum.

resources available to tackle health, nutrition, water and sanitation problems and identify expenditure and reform priorities. It was decided that DFID would provide FA and TA to four government departments/agencies to implement the programme:

- Department of Health & Family Welfare (DHFW) for health;
- Department of Social Welfare (DSW) for nutrition;
- Public Health Engineering Department (PHED) for water and sanitation (WATSAN); and
- Women Development Corporation (WDC)[48] for community mobilisation.

The programme was initially designed for five years (2010/11-2015/16) with a proposed support of £145 million of which £120 million was allocated to FA and £25 million to TA. This allocation has now been revised, to a split of £100 million and £45 million, respectively.

Table 6: DFID's outlay for financial and technical support to Bihar (2008-18)

YEAR	FA (£ million)				TA (£ million)	Total (£ million)
	DHFW (Health)	DSW (Nutrition)	WDC (Women)	PHED (WATSAN)		
2008-09/2009-10	Not applicable (N/A)				0.95	0.95
2010-11	5	0	0	0	2.7	7.7
2011-12	7	10.6	2	5.4	3.5	28.5
2012-13	8	8	4	4	4.3	28.3
2013-14	9.2	9.2	3	4.6	6.1	32.1
2014-15	7	7	2.5	3.5	10.7	30.7
2015-18	Data not available				16.9	16.9
TOTAL	36.2	34.8	11.5	17.5	45.1	145
% OF FA	36%	35%	12%	18%	N/A	
FA-TA%	69%				31%	100%

Source: DFID Programme Documents

TA is provided primarily by the BTAST, contracted by DFID and led by CARE and IPE Global, whose mandate is to assist the departments in strengthening implementation, capacity building, and service quality in the areas of supervision, demand generation and monitoring at district and sub-district levels. The TA plan covered health, nutrition and WASH, extending to the district level. Officially, there are 9+2 DFID focus districts, but the BTAST support is being provided to all 38 districts.

The health programme in Bihar was launched without a history of deep and productive partnerships between DFID and the state government. However, this provided an opportunity to apply lessons learned from other states and to maintain a stable focus from the outset. The primary purpose of the DFID-supported programme in Bihar was to initiate long-neglected reforms in the health sector and to address the expressed need for critical inputs into the reform process. The upstream support, primarily through TA, was most crucial because of the state having been an 'aid orphan' until the middle of the past decade, largely due to the very poor quality of governance.

Some indicative examples of DFID-supported interventions in Bihar, under the intervention categories presented in Chapter 2, are presented in Table 7 below:

[48] Women Development Corporation (WDC), Bihar is a registered organisation under Societies Registration Act 1860. It is working in close conjunction with DSW and is the nodal agency for implementing women's development programmes in the state.

Table 7: DFID-supported interventions in Bihar (2010-16)

Intervention areas	Major interventions	FA/TA
Strengthening/reforming institutional mechanisms	Development of HR policy and strategy	TA
	Support to establish Bihar Medical Services and Infrastructure Corporation Ltd (BMSICL)	TA + FA
	Reviving Reform Support Unit (RSU) cell in PHED	TA
	Nutrition Monitoring Unit within DSW	TA
Evidence generation for policy support	Analysis of public expenditure and projections (e.g. PER, MTEF)	TA
	Gap analysis for upgrading of 36 District Hospitals and APHCs	
	Assessment of the Emergency Response Services	
Strengthening information systems	HRIS: Software-based HR information system	TA
	Smart Water System: ICT-based framework for monitoring drinking water infrastructure	TA
	Mobile Tracking: for ICDS functionaries	TA + FA
	Integrated Performance Management System	TA
Implementation support	The Nayi Pidhi Swasthya Guarantee Yojana (NPSGY)	FA
	Training of frontline workers in health and nutrition	TA + FA
	Nursing skill lab	FA + TA
	Construction of nodal AWCs	FA
	Family Friendly Hospital Initiative in health facilities	FA + TA
	WATSAN innovations	FA + TA
Community mobilisation	Gram Varta Community Level dialogue on issues related to malnutrition, health, water, sanitation and hygiene practices through the self-help groups (SHGs)	TA + FA

Aside from SWASTH, there is another parallel stream of support to catalyse the private sector to scale up quality-assured, accessible and affordable family planning and reproductive health services for poor women in Bihar (Project *Ujjwal).*[49] DFID also funds a Support Programme for Urban Reforms in Bihar, which aims to 'to build the ability of Bihar's Urban Development Department and Urban Local Bodies to provide urban services and attract private investment' and support for governance reform, with a focus on accountability to the poor.[50]

3.3 Odisha

3.3.1 Context

Odisha ranks 22nd out of 23 Indian states on the HDI scale,[51] struggling to meet most MDG targets relating to hunger, maternal and child mortality, nutrition, water and sanitation, and environmental sustainability. It ranks highest in crude death rate (8.5) and fourth highest in

[49] This DFID-supported project (2012-15) is being implemented by Futures Group in Bihar and Odisha in collaboration with the respective state governments. Unlike SWASTH, the support (£18 million) is provided to the private providers.
[50] DFID project documents (http://devtracker.dfid.gov.uk/).
[51] India: Human Development Report 2011. Oxford University Press, New Delhi, 2011.

MMR (235/100,000 live births).[52] This is despite the fact that maternal and child health indicators have been steadily improving over the past decade (maternal deaths reduced from 358/100,000 in 2001-03 to 235/100.000 in 2010-12 and the IMR dropped from 90/1,000 to the current 53/1,000).

Table 8: Current status of selected health and nutrition MDGs in Odisha

Relevant MDG indicators	MDG targets for Odisha 2015[53]	Current status of Odisha[54]
% children underweight	27	39
IMR	40	53
U-5 MR	**45**	68
MMR	120	235

Despite a healthy growth rate, the annual per capita NSDP in real terms still falls far short of the national average (Rs.25584 or £260 compared to Rs.39143 or £400).[55] The growth rate during the past decade has been much lower than the national average. The state has a high population of STs, mostly concentrated in the north-western and south-western districts, and a significant number of SCs, which together account for 40% of the total population and roughly two-thirds of the poor. The political environment in Odisha is very stable: a single political party has been in place since 2000 and in May 2014 was re-elected for a fourth term. There is a strong political will towards industrialisation with a balancing attention to improvement in the social sector.

3.3.2 DFID's programme

DFID's engagement in Odisha dates back to the late 1980s, with support and contributions to the cost of infrastructure, equipment, supplies and training. Its support became more prominent from 2000 onwards, when DFID-supported the government of Odisha in drafting the Odisha Health Sector Plan (OHSP)[56] 2005-10 to achieve improved health outcomes for its people, particularly the poorest, by 2010. Full implementation of the OHSNP did not commence until 2007, after the government received FA and TA from DFID for an initial period of five years. The programme was later extended to 2015, with the second phase aimed at a more comprehensive approach to integrating health, nutrition, water and sanitation services.

It was decided that DFID would provide support to implement the programme (FA and/or TA) to three government departments:

- Department of Health & Family Welfare (DHFW) for health (FA and TA);
- Department of Women and Child Development (DWCD) for nutrition (FA and TA); and
- Department of Rural Development (DRD) for water and sanitation (only TA).

The support in the first phase, according to the project memorandum, included a package of £50 million (£47.5 million FA and £2.5 million TA) and an additional £50 million was allocated later, making the total investment equal to approximately £100 million. It is worth noting that starting initially with DHFW, the FA was later shared with DWCD (for nutrition) in increasing proportions, with a funding increase from Rs.2,700 million in 2008-09 to Rs.6,600 million in 2013-14. No FA was allocated for water and sanitation.

[52] SRS 2012.
[53] Source: Millennium Development Goals: India Country Report 2011. CSO, Ministry of Statistics and Programme Implementation, Govt of India (http://mospi.nic.in/mospi_new/upload/mdg_2011_24apr12.pdf).
[54] Source: SRS Bulletin (2013) for IMR, Annual Health Survey (2011-12), CCM (2011).
[55] *Brief for Annual Plan 2013-14, Odisha*. FR Division, Planning Commission, Government of India.
[56] Nutrition was added in 2012, and the programme is now known as Odisha Health Sector and Nutrition Plan (OHSNP). The programme will be referred to as such throughout the rest of the report.

Table 9: DFID's outlay for financial and technical support to Odisha (2007-15)

YEAR	FA (£ million)			TA (£ million)	Total (£ million)
	DHFW (Health)	DWCD (Nutrition)	DRD (Watsan)		
2007-08	5	0	0	0	5
2008-09	7.5	0	0	0.7	8.2
2009-10	10	4	0	0.7	14.7
2010-11	10	6	0	1.7	17.7
2011-12	7.5	7.5	0	2.3	17.3
2012-13	5	7	0	2.1	14.1
2013-14	8	5	0	1.7	14.7
2014-15*	3	2.5	0	2.3	7.8
TOTAL	56	32	0	11.5	99.5
% OF FA	63%	37%	0	N/A	
FA-TA%	88%			12%	

* **Projected**
Source: DFID Programme Documents

TA is provided primarily by the Technical and Management Support Team (TMST), contracted by DFID, to help the three government departments in strengthening implementation, capacity building, and service quality in the areas of supervision, demand generation and monitoring at district and sub-district levels. The TA plan covered health, nutrition and WASH, demonstrating that the TMST team was to interface with all three departments. The TA support extends to the district level. There are 15 DFID focus districts.

The OHSNP Project was the result of a strategic review of the Odisha health sector conducted by DFID in the late 1990s that produced a policy document 'Health Vision 2010', developed with DFID support by DHFW in 2003[57]. The vision was to improve people's health status with their participation, and to make health care equitable, accessible and affordable through partnerships between the public, voluntary and private actors. OHSNP was to translate the vision into a plan of action and to support its implementation. In 2010, a similar initiative was undertaken by DWCD for the nutrition sector, resulting in the Nutrition Operational Plan (NOP).[58] DFID's portfolio, therefore, expanded to include nutrition in order to support the preparation of the plan and its implementation in 15 underserved districts.

Examples of DFID-supported interventions in Odisha under the intervention categories presented in Chapter 2, are presented in Table 10 below:

Table 10: DFID-supported interventions in Odisha (2007-15)

Intervention areas	Major interventions	FA/TA
Strengthening/reforming institutional mechanisms	Reforming Human Resource Management	TA + FA
	Reforming procurement of drugs and equipment	TA + FA
Evidence generation	Concurrent Monitoring of Health, Nutrition, and WASH.	TA
	Outcome budget, PETS and PER studies	

[57] *Orissa Vision 2010: A Health Strategy*, DHFW, GoO, Feb. 2003. (http://203.193.146.66/hfw/PDF/vision2010.pdf).
[58] http://wcdodisha.gov.in/node/42

	Assessment of the Emergency Response Services	
	Evaluation of Mamata cash transfer	
Strengthening information systems	HRIS: Software-based HR information system	TA
	e-Swasthya	TA
Implementation support	Anti-malaria interventions (long-lasting insecticide treated nets [LLINs])	FA + TA
	Odisha Emergency Medical Care and Transport Services (OEMAS)	TA + FA
	Quality improvement for maternity care in health facilities	FA + TA
	Mamata cash transfer	FA + TA
Community mobilisation	Shakti Varta – Community Level dialogue on issues related to malnutrition, health, water, sanitation and hygiene practices through the SHGs	TA + FA
	Community-led total sanitation (CLTS)	TA + FA

Aside from OHSNP, there is another parallel stream of DFID support that attempts to catalyse the private sector to scale up quality-assured, accessible and affordable family planning and reproductive health services for poor women (Project *Ujjwal)*[59], as well other projects that specifically have a focus on disadvantaged groups such as a WASH project focused on underserved areas[60] and an incentives programme for disadvantaged girls.[61]

3.4 Overview and implications for the study

Overall, there are many similarities between the DFID projects in the three states, although each has particular distinguishing features and emphases. One of the key differences between Bihar and the other two states is that DFID engaged later (from 2010 onwards) in Bihar, whereas in MP and Odisha, there were earlier elements of support; for example, to the drafting of the Odisha Health Sector Plan and the MP Medium Term Health Sector Strategy. However, despite this, all three programme memoranda list between four and six key reform outputs that are foci and there are some common themes across the states for example, linked to system strengthening, improving access, or increasing scale or quality of services.

DFID's FA and/or TA is provided to various government departments. In both Odisha and MP, FA is provided to only two departments (DHFW, DWCD), whereas in Bihar, financial support is provided to four departments (DHFW, DSW, WDC and PHED). In the case of the Odisha and MP, the Department of Rural Development (Odisha) and the PHED (MP) are only provided with TA. Bihar is similarly different to the other two states in the proportion of funding allocated to TA and FA in Bihar, 69% of overall assistance is in the form of FA and 31% in the form of TA, whereas in Odisha and MP the proportion of FA is 88% and 86% respectively.

In each state, TA is provided by a consortium of partners, based in the states' capitals, but with a district presence that is focused on designated priority districts. Across the states, there are a number of common areas of support for TA namely human resource reform, assessments of

[59] This DFID-supported project (2012-15) is being implemented by Futures Group in Bihar and Odisha in collaboration with the respective state governments. Unlike OHSP, the support (£18 million) is provided to the private providers.

[60] DFID support to Water, Sanitation and Hygiene Programme for Madhya Pradesh & Odisha (http://devtracker.dfid.gov.uk/projects/GB-1-202871/).

[61] Disadvantaged Girls Incentive Programme for Secondary Education in Odisha (http://devtracker.dfid.gov.uk/projects/GB-1-203217/documents/).

emergency response services, quality improvement or assurance interventions, and community mobilisation interventions.

The characteristics of the DFID programmes in the three states suggested the following implications for the study:

- The fact that the modalities of support vary between departments and interventions presents opportunities for comparing the effectiveness of different models; for example, provision of TA with and without FA. The team was therefore careful to ensure that key informants from different departments within the states were interviewed. However, the scope for comparison was also limited by the heterogeneity between the units of analysis (i.e. capacity differences between departments, or differences in mode of TA support).
- The organisation of TA (i.e. at both state level and district level) made it imperative to conduct data collection in both the state capitals and in districts, to ensure that the findings were representative of the range of types of TA support and that views could be compared and triangulated.
- Similarities between the areas of support across the three states provided opportunities to generate stronger supporting evidence for findings and lessons learned.
- For interventions supported by both FA and TA, there was an identified need to try and disaggregate the added value of each. Quantifying this was judged unfeasible given the data available, which functioned to inform the development of evaluation questions and interview guides to explore the added value of each qualitatively.
- The relatively more recent engagement of DFID in Bihar had implications for some of the components of analysis for example, the difficulties in demonstrating a clear improvement/trend in outcome indicators over a short time span.
- The timescale of DFID support, combined with the presence of other donor partners in each state, also made it difficult to assign attribution to DFID-supported interventions in those instances where significant outcomes could be demonstrated.

4 Methodology

4.1 Overview of approach

The unique and complex nature of DFID's investment made it imperative to use multiple methods – quantitative and qualitative methods, and different streams of analysis – for the study. The design of the assessment was very much informed by the overarching REEEES framework, and need to explore each dimension at various levels. However, as detailed in Chapter 2, the team was also very cognizant of the formative aspects of the study. The full assessment framework, which links the dimensions to evaluation questions and analysis, is presented in Annex C.

As discussed in Chapter 2, DFID is supporting a vast number of different interventions in the three states. Therefore, it was necessary to define units of analysis (in the form of the intervention categories presented in Chapter 2), which could be used to analyse each state portfolio according to the REEEES framework. The state-wise findings (detailed in the state reports submitted to DFID) were then synthesised to draw out overall findings.

The analysis according to the REEEES framework was informed by a number of different streams of analysis, which were synthesised by the team leader and members of the core team to generate an analysis of VFM across the results chain. Further details are presented in section 4.3 below, but in summary the methods were:

- **Contextual analysis**: primarily used to provide a context for the overall analysis, and identify drivers and barriers of VFM.
- **Benchmarking**: used to generate comparators, against which a judgement of VFM in the three states could be made.
- **Review of public expenditure**: primarily used to analyse efficiency in public financing, informing the efficiency and cost-effectiveness analyses.
- **Cost-effectiveness analysis**: conducted at the macro (state) and micro (intervention) levels, to make an assessment of the extent to which DFID is supporting cost-effective interventions.

The conclusions and recommendations of this study were also informed by two supplementary components of analysis, which had a more formative emphasis:

- **A strategic assessment of TA**: primarily functioned to synthesise data on DFID's approach to TA in the three programmes, comparing it to the approaches of other development partners in order to make formative recommendations about the future of TA in India.
- **An assessment of VFM reporting in DFID project documents**: functioned to make an assessment of the extent to which standard DFID reporting mechanisms, in the form of annual reviews, are set up to be able to monitor VFM.

4.2 Data collection methods

Data collection for this study consisted of three main streams of work.

4.2.1 Key informant interviews

Members of the core team visited Bihar, MP, Odisha and Delhi during January-March 2014 to meet with key stakeholders.[62] The preliminary list of informants to be interviewed were selected based on consultations with DFID and members of the TA teams in each state, ensuring that there was representation from the various stakeholder groups:

1.) Key government officials at the state level for each department receiving DFID support (namely, DHFW, DWCD/DSW, and PHED/DRD);

2.) District-level counterparts of the same departments (for example, Chief District Medical Officer);

3.) Development partners;

4.) DFID representatives at state level and in Delhi; and

5.) TA-implementing organisations.

Interviews were conducted with stakeholders in the state capitals (Patna, Bhopal and Bhubaneswar) and in selected districts (Jehanabad, Sehore and Angul), and were supplemented with additional meetings and interviews, with DFID and other development partners, in Delhi. The list of informants was revised according to availability and the identification of new informants during field visits, and the need to ensure coverage across departments and levels of centralisation (district, state, national). A comprehensive list of stakeholders interviewed as part of this study is incorporated as Annex E; however, an overview is given in Table 11 below:

Table 11: Overview of key informant interviews conducted

Location	Number of key informant interviews
Bihar	27
Madhya Pradesh	34
Odisha	26
Delhi	20[63]

Key informant interviews (KIIs) conducted as part of this study followed one of several semi-structured interview guides (attached as Annex D), tailored for state-level government, district-level government, development partners, TA teams, and DFID staff. The tools were framed according to the evaluation questions; and specific priority issues were highlighted for each stakeholder group, given the anticipated constraints in terms of time available for interviews (particularly for state level government officials).

Interviews at the state level were all conducted by the team leader and members of the core team, who were supported by research assistants for writing up the interviews.[64] In order to ensure consistency in interviewing and recording, the team leader and two research assistants attended all three state visits.

The interviews were analysed according to the principles of framework analysis, which is a qualitative method appropriate to research with 'specific questions, a limited time frame, a pre-designed sample (e.g. professional participants) and a priori issues (e.g. organisational and

[62] Visits to the states were approximately five days' duration; interviews in Delhi were conducted in an ongoing way given the presence of members of the core evaluation team in Delhi.
[63] This consisted of 13 interviews as part of the strategic assessment of TA, plus additional meetings conducted with DFID, ICAI and IPE Global that also informed the framing of the overall analysis.
[64] All interviews were written up by the two research assistants, incorporating notes from the other team members present.

integration issues) that need to be dealt with'.[65] The interviews were coded thematically against the REEEES dimensions and other relevant issues.[66] Coding of the interviews in this way allowed collation of qualitative evidence against the relevant evaluation questions. Themes could then be drawn out to generate a robust synthesis of views.

4.2.2 Case studies

Teams from IIHMR conducted data collection at the district level to inform case studies of DFID-supported interventions in the three states. The purpose of the case studies was to collect field-level data on whether, and to what extent, the interventions had been successfully aligned to DFID's sectoral policy goals; and to generate supplementary data on the VFM of DFID's investment; as well as assessing the potential for scaling up and sustaining the interventions without active DFID support in future. The use of case studies was considered important in this assessment, in order to:

- Allow collection of data to demonstrate how and to what extent government policies are translated on the ground.
- Help to develop and refine the theory of change of DFID-supported interventions through real life examples in the context of a complex adaptive system.
- Collect primary data, especially from the beneficiaries and frontline workers – this is important because the interventions are the only visible and tangible demonstrations where DFID's investment can be directly traced forward to the end users (i.e. the beneficiaries).

The case studies were not selected to present best practice, but were intended to be representative of the range of DFID impact. The interventions were selected, in conjunction with DFID India, based on the following criteria:

- Alignment with one or more key focal areas (or milestones) of DFID's policy of sectoral support.
- Coverage of all sectors supported by DFID (e.g. health, nutrition, WASH)..
- DFID's visible presence in terms of TA or FA.

Given these criteria, and following consultation with DFID, the following interventions were selected:

[65] Srivastava, A. & Thomson, S. B. 2009. Framework Analysis: A Qualitative Methodology for Applied Policy Research. Research Note JOAAG, Vol. 4. No. 2.

[66] For example, organisation of TAST; strengths and weaknesses of DFID's and partners' models of assistance; convergence; harmonisation between donors; future technical assistance needs.

Table 12: Topics for case studies

Topics for case studies	Interventions	States	Sample size
Community mobilisations to increase demand for health, nutrition, sanitation and hygiene	*Gram Varta*, Bihar *Shakti Varta,* Odisha *Sanjhi Sehat*, MP	Bihar, Odisha, MP	57 interviews 3 FGDs
	Community-based management of severe acute malnutrition (CMAM), using locally available ready-to-use food	MP, Odisha	
Improving quality of services	Quality assurance (QA) initiatives in public hospitals through change in infrastructure or establishing QA mechanism (e.g. Family-friendly Hospital Initiative (FFHI) in Bihar and QA initiatives in MP and Odisha)	Bihar, MP, Odisha	130 interviews[67]
Improving access to priority health services in underserved areas	Distribution of LLINs for malaria control, especially for pregnant women and under-5s	Odisha	27 interviews 7 FGDs
Strengthening demand for and supply of WASH	TA support to WASH projects (e.g. community-led total sanitation [CLTS] initiatives)	Bihar, MP, Odisha	18 interviews 4 FGDs

The case studies consisted of document review and a short field visit to collect both qualitative and quantitative data, with an emphasis on the former (through interviews and focus group discussions (FGDs)) to understand the perspectives of the community and providers at district level. Further details of the data collection methodology are located in Annexes D and E (interview guides and list of stakeholders interviewed); however, an overview is given in Table 12 above.

The case study report is attached as Annex F, and details findings for each case study, which have been drawn upon in the drafting of this report. Findings for each of the interventions are presented according to the REEEES framework, with additional consideration of potential for scale-up, challenges and lessons learned.

4.2.3 Secondary data collection and document review

A process of document review and data collation commenced in the inception phase of this study and continued into the implementation and synthesis phases. The study drew upon the available secondary data on different aspects directly or indirectly related to DFID's programmes and a literature review of TA models of different development partners.[68] Documents were collected from DFID, from the TA teams, from government officials and from open sources such as the internet. Four main sets of documents were reviewed:

1. DFID project and programme documents (namely annual reviews, project memoranda, logframes).
2. Reports generated by Technical Assistance teams (for example, studies and knowledge products).
3. Government documents (for example, budgets, operational plans, project implementation plans (PIPs)).

[67] This includes both in-depth interviews and exit interviews linked to quality of services, hence the relatively larger sample compared to the other case studies.

[68] A literature review was initially conducted during the inception phase, and developed during the implementation phase. This was based on identification of different models of TA and relevant development partners during data collection, and an internet search for relevant evaluations (of TA, and of health projects in India), as well as snowballing.

4. Evaluations and reports on TA models of DFID and other development partners.

The documents were reviewed and evidence on the REEEES dimensions was extracted. Where possible, evidence was triangulated. For quantitative analyses, data from independent and/or commonly used sources (for example, annual health surveys (AHS), District Level Household Survey (DLHS), and the NRHM Management Information System (MIS)) were used wherever feasible. However, in some cases, analyses were constrained by the availability of secondary data. These limitations are discussed in Section 4.4 below.

4.3 Analysis methods

4.3.1 VFM analysis using the REEEES framework

The VFM analysis under the REEEES framework formed the substantive basis for the findings of this study. As introduced in Chapter 2, the findings were drawn from analysis at various different levels, from the intervention, to the type/category of intervention, to the cross-state analysis. These findings were informed by different streams of analysis that are detailed below.[69]

Contextual analysis

The analysis functioned to generate an understanding of the context in which the DFID programmes are being implemented, in order to ensure that the study's findings and recommendations were grounded in the reality of the three states. The analysis was based on the principles of political economy analysis (PEA). Although not a PEA in the purest sense,[70,71] the analysis used a review of documentation around the political and economic situation in the three states to provide an assessment of the context, as well as mapping the stakeholders in the health sector and other sectors that are of importance in considerations of convergence. In-depth interviews conducted as part of the data collection phase were used to refine understanding of the issues raised in the document review and understand the implications for DFID programmes of the broader political, economic, and social context within which the programmes are operating.

	Relevance	Economy	Efficiency	Effectiveness	Equity	Sustainability	Formative
Contextual analysis	✓✓	✓	✓	✓	✓	✓	✓✓
✓✓ significant input into findings; ✓ some input into findings							

Benchmarking

An assessment of the VFM of a programme requires a comparison of several critical programme indicators with a set of benchmarks. The focus of the analysis was on unit costs, either of inputs or of outputs. Data were collated and then these costs were compared to relevant benchmarks (wherever possible, costing guidelines prepared by the national programmes, such as National Rural Health Mission (NRHM), were used). An assessment of drivers (enabling factors), constraints and bottlenecks was made to explain any differences and these were used to explain, wherever possible, why the costs were above or below the benchmark.

	Relevance	Economy	Efficiency	Effectiveness	Equity	Sustainability	Formative

[69] The tables at the end of each analysis section present an overview of how each analysis method fed into the findings against the REEEES framework and/or formative analyses.
[70] http://www.gsdrc.org/docs/open/PO58.pdf
[71] This was judged to be impractical in the resource and time window of this evaluation, and not necessary given the other streams of analysis that were being conducted.

Bench-marking		✓✓	✓✓				
✓✓ significant input into findings; ✓ some input into findings							

Review of public expenditure

A review of public expenditure was done in order to analyse the efficiency in public financing and inform the cost effectiveness analysis. The analysis of budget allocation to the different departments was fundamental to this.

The analysis of public expenditure in the health sector for the three states is primarily based on secondary data on expenditure levels and composition. This includes funding through the state government and through central government under programmes such as the National Health Mission. For all states, the analysis was done separately for outlays through the state budgets ('on-budget' transactions) and those through funds received from central government (off-budget' transactions.

The proportion of expenditure on health (and family welfare) as a proportion of total budgetary expenditure and as a proportion of expenditure on entire social sector (including education, social welfare, rural development, etc.) and development expenditure was calculated. For continuity, a common data source was used throughout (i.e. the annual publication of the Reserve Bank of India, A Study of State Budgets).

To estimate the efficiency of public expenditure in the respective states, a measure of budget absorptive capacity was calculated by considering the difference between the budget estimate of a fiscal year and the revised estimate of the following year. For NRHM/NHM outlays, a similar estimate is derived by observing the proportion of unspent (unutilised) and uncommitted balance from the approved outlay of a year, expressed as a proportion of the total NRHM/NHM outlay.

	Relevance	Economy	Efficiency	Effectiveness	Equity	Sustainability	Formative
Review of public expenditure			✓✓	✓✓		✓	
✓✓ significant input into findings; ✓ some input into findings							

Cost-effectiveness analysis

The full cost-effectiveness analysis (CEA) methodology is presented in Annex H; however, the following steps were undertaken:

1. Estimating deaths/cases from three health outcomes (U-5 mortality, maternal mortality, and underweight morbidity), considering both the modelled scenario (with DFID support) and the counterfactual (without DFID support).
2. Estimating lives saved/cases averted in the three health, through the difference between the modelled and counterfactual scenarios.
3. Calculating net disability-adjusted life year (DALY) gains, based on assumptions around life expectancy and DALY loss.
4. Calculating DFID's attribution rate according to its share of its investment in total additional programme investments in the state.
5. Calculating cost per DALY gained, and comparing to international standards for cost effectiveness.
6. Undertaking sensitivity analyses, in order to make an assessment of the robustness of the findings.

	Relevance	Economy	Efficiency	Effectiveness	Equity	Sustainability	Formative
CEA				✓✓			
✓✓ significant input into findings; ✓ some input into findings							

4.3.2 Strategic assessment of DFID TA

This analysis functioned to synthesise evidence on DFID's approach to TA in the three programmes, using the approaches of other development partners as a basis for comparison. Data sources included a desk review of DFID's support to the health sector in the three states of Bihar, MP and Odisha, as well as in the South Asian region. In addition, qualitative evidence was obtained during field visits and KIIs with government officials, DFID staff, the TASTs in the states and other development partners (DPs) providing TA in the three states of study.

Interviews focused on their approach to TA, perceptions about DFID TA and mechanisms of attribution. The analysis (see Chapter 6) examined the different models of TA and considered how DFID's approach might be modified to maximise results in the current context and post-2015 when FA is removed.

Following a review of the literature around TA, the following characteristics were drawn out as specific features of different models, which formed the basis of an assessment of DFID's TA, using other development partners' models as a basis for comparison:

- The purpose of the TA;
- Whether it is 'demand' or 'supply' led;
- The relationship with FA; and
- How it is procured, managed, and monitored.

Analysis was done with the above characteristics in mind, and was also framed by consideration of the Paris Declaration principles (as per Chapter 6).

	Relevance	Economy	Efficiency	Effectiveness	Equity	Sustainability	Formative
Assessment of TA	✓					✓	✓✓
✓✓ significant input into findings; ✓ some input into findings							

4.3.3 An assessment of VFM reporting in DFID project documents

This component of analysis assessed the extent to which standard DFID reporting mechanisms, in the form of annual reviews, are set up to be able to monitor VFM. This was done through an assessment of the VFM indicators reported in DFID annual reviews, either for the programme (as per the 'Performance on VFM measures' sections) or for 'internal' VFM (as per the 'Commercial improvement and Value for Money' sections).

Having extracted the list of indicators, they were classified (see Annex J) according to whether the indicator was a strong VFM indicator or not. Importantly, to be classed as a VFM indicator, it must consider *both* 'cost' and 'value'. Reporting on VFM must link costs with the monitoring and evaluation (M&E) reporting; it should not just be a repetition of reporting on outputs, outcomes, etc. Therefore, **economy indicators** should measure the costs of inputs, **efficiency indicators** should measure the relationship between inputs and outputs by cost, and **effectiveness indicators** should link outcomes with costs.

Having identified the VFM indicators from the project documents, the team then applied the 'VFM diagnostic' in order to make an assessment of the strength of the indicators. The diagnostic consists of a 3 x 4 matrix with two sets of axes, classifying the indicator according to the type of indicator (monetary, quantitative, qualitative, process) and the type of measurement (benchmarked, trend, stand-alone). Full details of the methodology are presented in Annex J.

This diagnostic formed the basis for recommendations about how the VFM indicators could be improved. Not all indicators need to, or can, be monetised and benchmarked, but a preponderance of stand-alone indicators or process and qualitative metrics would suggest a programme is unbalanced in the way it approaches VFM. In Annex K, the team present a skeleton framework which can be further refined to allow DFID to undertake a systematic VFM analysis of TA in the future.

	Relevance	Economy	Efficiency	Effectiveness	Equity	Sustainability	Formative
Assessment of VFM reporting							✓✓
✓✓ significant input into findings; ✓ some input into findings							

4.4 Limitations

There are various limitations to this study, which can broadly be divided into limitations linked to scope; a lack of good quality data; and issues of attributing impact to DFID in a complex context with multiple other actors:

4.4.1 Issues of scope

This assignment required analysis to be undertaken on three large and complex programmes, in three very different states, over varying timeframes and delivered through diverse modalities. The interventions that have been supported constitute a wide range of different types (with hundreds of different initiatives).

Although the in-depth state-level studies submitted to DFID looked at a great number of interventions though the VFM lens, the scope of the exercise necessarily (and purposely) did not aim to generate definitive statements for each intervention. It follows that our approach has generated findings on a *selection* of interventions that were placed into an analytical VFM framework. This analysis was undertaken with the view to providing a directional rather than definitive conclusion regarding VFM, based on the patterns observed within the data.

The framing of the analysis around the REEEES criteria allowed analysis to be undertaken across the results framework; however, the team recognise that there are other characteristics of DFID's approach that could have been considered – for example, a more explicit consideration of risk.

4.4.2 Issues of data availability and quality

While the team was provided with (and sourced) a large volume of background and project material, some data were not available either because they were not currently being collected/collated or because they could not be accessed due to confidentiality issues:

- In MP and Odisha, the expenditure of FA was not tracked as rigorously during the first phase of the programmes as it was in the second phase, making it difficult to trace the input costs; the available documents (e.g. PIPs at state and the district level) on programme budgeting are based on traditional line-item costing (e.g. manpower, travel, infrastructure, administration, etc.), while estimations of unit costs of services require activity-based costing.

- In Odisha, the expenditure of a large part of FA started flowing to the nutrition sector only recently, making it difficult to trace the input costs.
- In all three states the disaggregated cost data on the TA inputs in both the phases are largely unavailable because of vendor's right to protect confidentiality. This limited the ability of the study to assess certain elements of *internal* VFM significantly.
- In terms of benchmarking, the diversity in contextual settings, input market structures, and quality of inputs often makes it untenable and even undesirable to come up with a benchmark cost for inputs (this is discussed in further detail in Chapter 5); and the benchmark cost should ideally be based on standard costing, but the database on such an exercise is often either outdated or unavailable. However, the benchmarking for a few crucial indicators of output and outcome are included in Chapter 5.

The main implications of the availability and quality of data were for the costing and cost-effectiveness analyses. In the case of the former, the implication was that the findings of the benchmarking analysis had to be interpreted in the light of contextual considerations (such as the appropriateness of different technologies). In the case of the latter, several assumptions had to be made (see Chapter 5) and the findings must be interpreted with these in mind, although a basic sensitivity analysis was undertaken in order to test the robustness of the findings.

4.4.3 Issues of attribution

There are also fundamental challenges in assessing and attributing DFID's impact, which were manifest in this study:

- DFID supports a large and heterogeneous portfolio of interventions.
- The programmes were just one of the few crucial change agents, overlapped and linked with other interventions and programmes, all of which shared an objective to deliver similar results. Given this, it is extremely difficult to attribute a part of the gain to a particular programme.
- There was an absence of data to estimate the levels of the key outputs and outcomes both before and after the start of the programme.
- In terms of significant trends in health outcomes, these have been mapped in Section 5.5; however, in the case of Bihar, where the programme started much later than in MP and Odisha, it may be too early to see effects on health outcomes.

Given these challenges, attribution was approached with two lenses; firstly, a quantitative estimate of attribution based on trends in outcomes and the proportion of funding provided by DFID; and secondly, exploring attribution qualitatively during interviews conducted as part of this study. Views from different stakeholders (for example, DFID, TAST, and other stakeholders) were triangulated to ensure that the findings were representative as far as possible.

4.5 Phases of the study

This study has been conducted in three phases:

1. Inception phase (August 2013-January 2014): examining documents, developing a preliminary ToC, and conducting initial scoping meetings with DFID and other stakeholders (including a visit to Odisha); this phase concluded with the preparation of an inception report.

2. Data collection phase (January-February 2014): interviews with stakeholders at state level and in Delhi, case studies at district level and secondary data collection and document review.

3. Analysis and synthesis phase (February-July 2014): state-wise analysis and drafting of three individual state reports, as well as a separate case study report and strategic analysis of

DFID's TA; overall synthesis into a draft full report which has been revised following feedback from DFID.

This version of the report is the **FINAL VERSION.**

5 Analysis against the REEEES framework

5.1 Overview

Sections 5.2 to 5.7 present the findings of analysis against the six REEEES framework criteria presented in Chapter 2. Reference will also be made to link the REEEES findings with the project's success in covering the five broad intervention areas[72] under which the programme was implemented (see Tables 4, 7 and 10 in Chapter 3 for a list of the activities broken down by intervention areas for each state). As discussed in Chapter 4 (Methodology), the findings draw primarily on the in-depth analysis performed during drafting of the three state reports, and the individual state reports submitted to DFID contain more details about some of the activities summarised in the following sections.

This section presents the findings by each of the REEEES dimensions. Headline findings are presented as bold (and numbered) statements and the supporting findings are presented as italicised sub-statements, with additional paragraphed text. Evidence sources are highlighted (mainly through footnotes), but more detailed information is also contained in annexes.

5.2 Relevance

The principal issue in assessing relevance is whether DFID's programmes are both aligned to the heath sector strategies of the three states, and also correspond to the needs of the target population. In order to understand the context in which DFID support is acting and the dynamics of the different players within the states, it is also important to consider the alignment between DFID and its development partners.

5.2.1 Findings

5.2.1.1 There is strong evidence[73] of alignment between DFID programmes and the strategy of the state governments.

A review of documents and KIIs found that in all three states, the interventions in the area of institutional reform are aligned with major national and state programmes and the National Health Policy. The national programmes (NRHM, Integrated Child Development Scheme [ICDS], Nirmal Bharat Abhiyan [NBA] and the State Water and Sanitation Mission, and most recently the national programmes related to WASH) have an urgent agenda to change the pace and scale of operations to meet the MDG goals and they have started demanding reform initiatives and more rigorous technical responses from the state departments.

Since no comprehensive and flexible support for reforms in this area was available from the existing development partners, DFID's system support formula was widely reported by stakeholders to be both appropriate and timely. The strategy to focus on communicable, maternal and newborn (CMN) diseases is consistent with National Health Policy, five-year plan goals and health MDGs. In both MP and Bihar, progress towards the health, nutrition and WASH MDGs has been critically slow in all key indicators, implying an urgent need for prioritising greater investments in primary health.[74] DFID's support to implementation is mainly

[72] Strengthening/reforming institutional mechanisms; Evidence generation for policy support; Strengthening information systems; Implementation support; Community mobilisation.

[73] Evidence sources include: KIIs, plus: Bihar: Programme Memorandum, SWASTH (2010); Odisha: Orissa Vision 2010: A Health Strategy, DHFW, GoO, Feb. 2003 (http://203.193.146.66/hfw/PDF/vision2010.pdf; Odisha Health Sector Plan April, 2008-March, 2012: Policy and Activity Briefs 2008-12. TMST; Programme Memorandum, OHSP (2007); Madhya Pradesh: Programme Memorandum, MPSHRP (2007); Medium Term Health Sector Strategy (HSS), MP http://www.health.mp.gov.in/archives/mths.pdf

[74] Social Statistics Division, Ministry of Statistics and Programme Implementation, Government of India. 2014. Millennium Development Goals India Country Report 2014 (http://www.indiaenvironmentportal.org.in/files/file/mdg_2014%20India%20country%20report.pdf).

targeted at the primary health sector, which incorporates programmes with the objective of reducing the burden of major CMN diseases.

The alignment between the DFID programme in Odisha and MP and the strategy of the state governments is partly the product of DFID's history of engagement in the two states. The OHSNP was the result of a strategic review of the sector (conducted by DFID) in the late 1990s that led to the production by DHFW in 2003 of a policy document, 'Health Vision 2010' (developed with DFID support).[75] In Madhya Pradesh, the Medium Term Health Sector Strategy (HSS), announced in 2006-07, was designed to meet the essential needs and plot the future direction of the state's health sector in the context of a set of growing and complex challenges. Since both conceptualisation and implementation of these two strategies were supported by DFID, there was (not unexpectedly) a close alignment between 'what the government wants to do' and 'what DFID wants to do'. In Bihar, the health programme was launched by DFID without a history of partnerships with the state government; however, this late entry provided DFID with an opportunity to apply lessons learned from other states and to maintain a stable focus from the outset.

5.2.1.2 Across the intervention areas, the evidence[76] indicates that DFID support appears to be addressing a number of critical needs of the government.

There is strong evidence that the technical support focused on reforming institutional mechanisms has been perceived as valuable, in terms of both filling gaps in technical capacity and providing a fresh perspective. The critical needs at the upstream organisational level include strengthening and often revamping key elements, such as procurement of health commodities, management of information systems, and a restructured human resource system. These needs were highlighted in the KIIs with government officials and other development partners during the team's state visits, which also confirmed the relevance of the TA support model.[77]

In terms of strengthening or reforming institutional mechanisms, one of the most successful initiatives in all three states has been the support provided to strengthen procurement processes. For example, the government of Bihar previously used a decentralised procurement system that was dominated by irregularities – drugs were procured at the district level through multiple channels, with a substantial number being procured without reference to rate contracts, and a top-down approach to supplying health facilities[78] resulted in frequent stock-outs of essential drugs. The mean availability of a 'basket of drugs' for Bihar was about 43% in contrast to 88% in Tamil Nadu; the health facilities registered an average of about 41% stock-outs of drugs with a mean duration of 97 days, compared to around 17% for about 50 days in Tamil Nadu. In 2010, the Bihar Medical Services and Infrastructure Corporation Ltd (BMSICL) was incorporated into the DHFW.[79] DFID's TA support helped DHFW prepare a wide range of

[75] *Orissa Vision 2010: A Health Strategy*, DHFW, GoO, Feb. 2003.(http://203.193.146.66/hfw/PDF/vision2010.pdf).
[76] Evidence sources include: Bihar: OPR (2010-13); FA plan of DHFW and DSW (2013-15); List of studies commissioned by BTAST; Odisha: OPR (2010-13); Odisha Health Sector Plan April, 2008-March, 2012: Policy and Activity Briefs 2008-12. TMST; List of studies commissioned by TMST; Madhya Pradesh: OPR (2009-13) and QPRs (2013); FA plan of DHFW and DWCD (2013-15); Process documentation of innovations-ABM; List of studies commissioned by TAST; Nutrition India Situation Report (2014), DFID.
[77] Bihar: Key informant interview (Departments and BTAST); Demand for grants (budget documents) of the departments; Case study on WATSAN and Gram varta; OPRs; Odisha: Key informant interview (Departments and TMST); Demand for grants (budget documents) of the departments; Case study on WASH and Shakti Varta; OPRs; Madhya Pradesh: Key informant interview (Departments and TAST); Demand for grants (budget documents) of the departments; Case study on WASH; OPRs.
[78] Selvaraj S et al (2010). "Improving governance and accountability in India's medicine supply system". Report published by PHFI (http://tap.resultsfordevelopment.org/sites/tap.resultsfordevelopment.org/files/resources/PHFI_DelC-Final.pdf).
[79] This followed the model of the Tamil Nadu Medical Services Corporation (TNMSC), a company set up by the Tamil Nadu State Government in the 1990s to manage the whole procurement and distribution system for public health facilities.

manuals and operational guidelines, plan for human resources, and build the capacity of professionals in logistics management – all essential prerequisites for a scientific management of procurement and distribution.

Technical support to the strengthening of the management information systems is highly relevant and is broadly aligned to the needs of the states. The systems that were in place before technical support was provided were generally marked by a large volume of superfluous information with no standardised mechanisms to check quality or use the information to improve performance. The transition to more modern and transparent information systems required significant amounts of technical inputs, especially in difficult areas such as human resource management, where regular updating and analysis of system-generated data is important. All three TA teams have rightly invested a substantial level of effort in strengthening and streamlining the management information systems (MIS) in the departments they work with.

The TA interventions covered a wide range of resource management issues and were often aligned with the recent drives towards e-governance; for example, as a part of this initiative, DHFW in Odisha has developed an IT roadmap and initiated around 20 IT and e-governance innovations to strengthen monitoring and evaluation, improve decision making, and make the health system more accountable and client-oriented. Areas covered included programme management, construction monitoring, finance, procurement, human resource management, telemedicine, blood bank monitoring, and hospital information management.[80]

Strengthening information systems for human resources is a focused subset of wider processes. For example, in each of the three states, TA support has been provided for the implementation of an MIS package for human resources (HRIS) aligned with the states' HR policies. In Bihar and Odisha, a comprehensive database of all doctors working in government health facilities has been prepared, and data uploaded onto a dedicated portal under the State Health Society[81] in Bihar and the state's NRHM wing[82] in Odisha.

Knowledge products generated with TAST support are proving to be relevant for informing government, management and other administrative decisions; however, implementation research remains an area that is generally under-addressed. Knowledge products include process documentation,[83] evaluations/assessments, monitoring reports, and surveys. One of the most prominent among these are the reports on concurrent monitoring (CCM) of health, nutrition, and WASH services (Round 1) conducted in Odisha in 2010, which helped not only to set the baseline for OHSNP's second phase, but also helped the administration take informed decision on management issues.

In Odisha, implementation research is a key focus of TA support and several studies have been initiated.[84] However, in MP and Bihar, implementation research remains under-addressed, despite its obvious relevance for monitoring, evaluation and programme planning.[85,86] There is

[80] OHSNP Policy and Activity Briefs: 2008-11. TMST, (p.25)
[81] www.statehealthsocietybihar.org/hris.html
[82] http://odishanutrition.dashboardmonitoring.com
[83] For example, documentation of innovations in nutrition in MP.
84 For example, the Lot Quality Assurance Sampling (LQAS) methodology has been extensively used to measure anti-malarial interventions in selected districts and case control studies on community-based management of acute malnutrition (CMAM) have been initiated to evaluate different approaches.
[85] In Bihar, the annual reports submitted by BTAST to DFID highlight hardly any initiatives in this area (the exceptions include a pilot study to investigate the impact of conditional cash transfer (CCT) on nutrition impacts in Gaya district, and a pilot of special training of ASHA workers on Kala Azar). The TAST in MP has yet to set up a mechanism to concurrently monitor the progress in key health and nutrition outcomes, at least in the high-priority districts.
[86] The intent of implementation research is to understand what, why, and how interventions work in 'real world' settings and to test approaches to improve them (Peters *et al.* (2013. 'Implementation research: what it is and how to do it'. BMJ 2013; 347: 16753). The word 'research' is important here (i.e. the process of evidence generation is guided by standard research protocols).

clear potential for the TA teams to contribute to the systematic promotion and use of evaluation and implementation research on a wider scale.

Community mobilisation initiatives are filling in some of the important gaps in the demand-side barriers of the health system, which traditionally remained unaddressed in the government's supply-driven approach. Experiments to mobilise the community with the goal of increasing demand for better health, nutrition and WASH care and adding value through addressing households' health-seeking behaviour are key interventions in all three states. For example, participatory learning approaches (PLAs) are being implemented using existing self-help groups such as Shakti Varta in Odisha (see Box 2).

Box 2: Shakti Varta at Tikabali block, Kandhamal District, Odisha

Shakti Varta, the PLA-based intervention in the Tikabali block of Kandhamal district is at an early stage of development. The district programme officer and the SHG coordinator of TMST have received three days of intensive training on the PLA approach, and are then going to train the block coordinators, who in turn, will train the ground-level facilitators. The facilitators, selected from the SHG groups, will conduct village-level PLA meetings with women, which reflects the fact that communities are being involved right from the first stage of the intervention. Stakeholders reflected on the clear need that this intervention is addressing:

"Even now women, in this block, have less knowledge and awareness about many health services like immunisation, malnutrition, etc. If their child is sick, they still visit [the] local priest for treatment. Their mindset needs a change. We are working on it but I cannot go alone to every place. Besides I have other responsibilities. Shakti Varta will certainly help in addressing this gap."

"'The intervention will come to our villages where child and maternal mortality is high. We are hopeful that the intervention and its activities will be good for our villages. It will definitely be useful if we motivate our children and mothers through the interventions. SHGs are going to play an important role in this intervention."

Source: Case study on Shakti Varta by IIHMR

Across all three states, supporting quality improvement (QI) interventions in selected public health facilities in the high-priority districts is considered to be timely. This is particularly true given that improving the quality of care has become one of the essential components under NRHM. For example, in Odisha, TA has been supporting a series of training programmes for frontline workers to strengthen capacity at various levels of the workforce in order to better implement interventions for maternal and child health care; and in Bihar, FA and TA support is being used to establish Nodal AWCs, which, according to the key government officials, are expected to improve the functioning of AWCs and the efficiency of the frontline workers (see Box 3).

Box 3: Uddipan Kendra (Nodal Anganwadi Centre) in Bihar

With DFID support, the Department of Social Welfare (DSW) is implementing *Uddipan*, a unique intervention to improve the functioning of *Anganwadi* centres (AWCs) with a stronger focus on children under two years old. Historically, the ICDS programme in the state has suffered from a lack of supervisory support to frontline workers (AWW) with a consequent lack of 'on-the-job' capacity building, supportive supervision and mentoring. Uddipan Kendra (or nodal AWC) was conceptualised by BTAST to address this critical problem. The nodal AWC will serve as a hub or resource centre of 8-10 AWCS in a particular area. This centre will focus on continuous interactive learning and skill development of AWWs within the cluster through one additional worker – an *Uddipika* – who will promote supportive supervision, peer learning and diffusion of best practices within its area of operation, through monthly meetings of AWWs at the nodal AWCs and undertaking monitoring visits to these clusters of AWCs. The recruitment of 1,700 *Uddipikas* is in process, and the higher officials at DSW were excited with the idea: *"The 'nodal' Anganwadi centre that is proposed (by BTAST) is needed. Messages to the community need to be sent out in their 'own language', which the nodal centre and the Uddipikas will help to accomplish. This is difficult to do at the moment".*

Source: 1) DFID India Nutrition Situation Report, DFID, Feb. 2014; 2) Nodal Anganwadi Centre: Concept and Plan for Pilot, BTAST, 2011; 3) interviews with key officials

5.2.1.3 DFID's concurrent support to multiple departments is targeted at creating an enabling environment for integration within the government, which is necessary for a holistic response to health issues; however, there are barriers to the implementation of integrated strategies within the government.

There is support for an integrated strategy within the government, but implementation poses a challenge to stakeholders. KIIs revealed that there is support for integration, but that there are administrative challenges. Traditionally, the 'sectors' in all states are vertically structured within the government and managed by separate 'line' departments (such as DHFW, DWCD, DRD), primarily for practical reasons such as budgeting and management, but with resulting structural barriers to dealing with cross-sectoral issues.

The gradual progress towards integration and convergence of health, nutrition, water and sanitation within DFID's sphere of support is a highly relevant strategy, which aligns with the global as well as the national approach towards development. Most health issues are 'multi-departmental' and therefore require an integrated response. Providing support to one department and leaving another unsupported would imply a partial and incomplete approach to tackling health problems. For example, progress in child health should involve not only paediatric interventions, but should also be integrated with interventions aimed at 'reducing maternal mortality, solutions for tackling undernutrition, and efforts to address the environmental factors that contribute to poor health, such as lack of clean water and poor hygiene practices'[87]. The concurrent support of DFID to multiple departments is targeted at creating such an enabling environment for this purpose.

The unanimity in views on the need for integration is fed by growing scientific evidence on some positive health outcomes of WASH interventions, especially in the context of child health. The evidence on impact of these interventions on child nutrition, on the other hand, is currently relatively weak. Some interventions in India have yet to produce adequate evidence of impact; for example, a cluster-randomised trial of a rural sanitation intervention in Odisha found no impact of the intervention on child diarrhoea or malnutrition.

[87] *Join up, Scale up: How integration can defeat disease and poverty.* Report co-authored by Action against Hunger, Action for Global Health, End Water Poverty, PATH, Tearfund, and Water Aid. September, 2011, p.3. Available at http://www.defeatdd.org/join-up-scale-up.html

5.2.1.4 TA is seen as highly relevant, whereas the main value of FA is its flexibility; however, there is also evidence of important added value in the combination of the two types of support.

The flexibility of FA has allowed the departments to fill in some critical infrastructural gaps in service delivery and to test the effectiveness of innovative interventions; however, this support is likely to be increasingly substitutable in the longer term. At the state level, DFID has tried to ensure that FA is earmarked for specific projects. So, for example, in Odisha, FA was earmarked for use in establishing a sickle cell diagnostic and treatment unit in six district hospitals of Western Odisha, where the prevalence of sickle cell anaemia among the poor and tribal population is high, but no facility was available to tackle the problem.[88] The FA support to build sub-centres (using pre-fabricated technology) and AWCs in the high-priority districts of MP can be justified due to huge infrastructural gaps on the supply side.[89] Similarly, in Bihar FA has been targeted for use in improving the functioning of tertiary health facilities[90] and building nursing colleges.[91] By definition, FA has an obligation to meet the government's expressed need in a particular context (and is doing so) and is valued for its flexibility, compared to state funding mechanisms. However, this type of support, especially in the context of health infrastructure, tends to be substitutable in the long run, and it is expected that the government, with increasing NRHM and ICDS support, will be able to fill this gap. This finding was echoed during interviews with government officials at the state level.

Overall, TA is perceived as relevant, and complementary to the financial support. For example, DFID's TA support at the decentralised level (in support to implementation and community mobilisation interventions) has been a logical extension, and complementary, to its upstream support. The support reaches the district level and below, where a huge capacity deficit, a stronger path dependence and resistance to the implementation of reforms means that the system moves at a slower pace than at state headquarters.[92]

The relevance of providing inter-linked FA and TA support is high; while FA fills in some critical infrastructural gaps in the system, TA creates an enabling environment to utilise them more efficiently. There are some clear examples of how TA and FA can complement each other to support to an intervention,[93] including:

- In MP, a portion of the FA has been 'ring-fenced' to support QA in the provision of maternal and child health (MCH) care in 39 facilities.[94] TA complements FA; for example, through the formation of QI cells in each facility, standard operating procedures, and assistance in obtaining required accreditation(s).
- In Odisha, the government launched an integrated and evidence-based Nutrition Operational Plan that aimed to reduce the prevalence of underweight children by 2015.

[88] Odisha ranks first in the country in terms of prevalence of sickle cell anemia, with about 0.53 million people affected by the disease. More than 90% of them are from 13 Western districts (Source: The Hindu, July 9, 2009).
[89] For example, by population standard, there is 26% shortfall of AWCs in MP (*Evaluation of ICDS,* Planning Commission, GoI, 2011, p.56).
[90] For example, about £15 million has gone from FA to support the establishment of V.M. Medical College in Nalanda.
[91] FA has been planned to establish nursing college at each medical college of the state.
[92] Path dependence implies a situation when the set of decisions one faces for any given circumstance is limited by the decisions one has made in the past, even though past circumstances may no longer be relevant.
[93] Evidence sources include: Bihar: The most recent PIP of DHFW (which includes additional demand (from NRHM) to continue DFID-supported programmes, such as NPSGY or scaling up APHC upgrades); a PIP of DWCD (2013-14) includes plan to scale up nodal AWCs in the high-priority district; KIIs; DFID India Nutrition Situation Report, DFID, Feb 2014; Nodal Anganwadi Centre: Concept and Plan for Pilot, BTAST, 2011; Case study on FFHI; OPRs; Odisha: recent PIPs of DHFW and DWCD; KIIs; DFID India Nutrition Situation Report, DFID, Feb 2014; OPRs; Madhya Pradesh: recent PIPs of DHFW and DWCD; KIIs; DFID India Nutrition Situation Report, DFID, Feb 2014; OPRs.
[94] A select number of upper-level health facilities (sub-district and district hospitals) are being strengthened to enable them to provide Comprehensive Emergency Obstetric & Newborn Care (CEmONC); Basic Emergency Obstetric & Newborn Care (BEmONC) are provided by selected CHCs. BEmONC centres provide 24-hour delivery and neonatal services, while CEmONC centres offer additional services including caesarean section or blood transfusions.

The plan is being implemented with DFID's FA with a clear focus on the '1,000 days' window of opportunity' and with a focus on the most high-burden districts. The TA, on the other hand, is helping the DWCD to develop and institutionalise training policy, revised guidelines for feeding programmes and decentralisation of procurement, supporting preparation of district action plans to address the local gaps and bottlenecks and facilitating intersectoral convergence at the ground level.

5.2.1.5 Support to institutional reforms is aligned with the work of other development partners and there is some evidence[95] of inter-agency coordination; however, there is also persistent confusion about overlap of roles.

In Bihar, DFID is working in a setting characterised by both established and emerging development partners. In Bihar, UN agencies such as UNICEF and UNFPA have a long history, and the recent turnaround in the state has attracted new donors such as the Bill & Melinda Gates Foundation (BMGF) and the Norway-India Partnership Initiative (NIPI) that are providing support to the government in primary health care, focusing on Reproductive and Child Health (RCH) care and nutrition. BMGF's role is particularly important because its partnership with the Government of Bihar (*Ananya*) was launched in 2010 at the same time as DFID's programme, with some similar objectives and focus areas for example, work with community-based organisations. The Ananya programme initially implemented health, nutrition, water and sanitation interventions in eight pilot districts, which were then expanded to 16 and is planned to cover all districts in Bihar by the end of 2014.[96]

In-depth interviews with government representatives found that DFID's support is generally perceived favourably, primarily due to the lack of preconditions and associated flexibility. In Odisha and MP, this was corroborated by representatives of DPs who noted that the flexibility in support has helped DFID (and its TA agent) build a good rapport with the higher government officials. DFID's influential presence and alignment with other partners may be gauged by the example of the Reproductive, Maternal, Newborn, Child and Adolescents' Health (RMNCH+A) programme,[97] a recently announced call to action. DFID is the lead partner in Odisha and meets every month with the other development partners (UNFPA, NIPI, CARE, Save the Children) to discuss and take forward issues. However, the field interviews also revealed a widespread sense of confusion about potential overlap of roles and the boundaries of the different development partners in relation to this intervention; this persists, despite the use of DP forums in the states. There is concern that the partners and the government need either to allocate the districts among the partners or better define the partners' respective roles through the steering committee of DPs.

5.2.2 Summary of findings relating to relevance

- There is strong evidence[98] of alignment between DFID programmes and the strategy of the state governments.

[95] Evidence sources include: KIIs in all three states with DPs and the local TA teams.

[96] Ananya focuses on four elements of the Bihar system –namely, improving the knowledge and skills of frontline health workers, improving services for women and children in government primary health care facilities, working with private health care providers particulary on common childhood illness, and working with community-based organisations on knowledge sharing and health care-seeking behaviour (www.ananya.org.in/what-we-do).

[97] The RMNCH+A programme is an initiative under the NRHM programme started in 2013 to provide comprehensive and integrated health services to adolescents, mothers and children on a 'continuity of care' basis. For details, see "A strategic approach to RMNCH+A in India" published by Ministry of Health & FW, GoI, 2013 (http://childsurvivalsummit.in/1.%20RMNCH+A%20Strategy.pdf).

[98] Key informant interviews, plus: Bihar: Programme Memorandum, SWASTH (2010); Odisha: Orissa Vision 2010: A Health Strategy, DHFW, GoO, Feb. 2003 (http://203.193.146.66/hfw/PDF/vision2010.pdf; Odisha Health Sector Plan April, 2008-March, 2012: Policy and Activity Briefs 2008-12. TMST; Programme Memorandum, OHSP (2007); Madhya Pradesh: Programme Memorandum, MPSHRP (2007); Medium Term Health Sector Strategy (HSS), MP http://www.health.mp.gov.in/archives/mths.pdf

- Across the intervention areas, the evidence indicates that DFID support appears to be addressing a number of critical needs of the government.
- DFID's concurrent support to multiple departments is targeted at creating an enabling environment for integration within the government, which is necessary for a holistic response to health issues; however, there are barriers to the implementation of integrated strategies within the government.
- TA is seen as highly relevant, whereas the main value of FA is its flexibility; however, there is also evidence of important added value in the combination of the two types of support.
- Support to institutional reforms is aligned with the work of other development partners and there is some evidence of inter-agency coordination; however, there is also persistent confusion about overlap of roles.

Overall, the DFID support to the three states was found to be relevant to the needs and expectations of the state governments, and to a certain extent is aligned to the work of other development partners. Technical assistance, in particular, was reported to be a highly relevant strategy, and the flexibility linked to DFID funding is valued.

5.3 Economy

Economy is primarily concerned with whether the inputs/resources are purchased at the right price, in the right amount, and in the right quality, especially in the context of DFID-supported programmes. However, in complex health programmes, of course, a higher unit cost of inputs does not necessarily imply bad economics or poor VFM – for example, adverse geography may justifiably lead to higher transport budget lines.

5.3.1 Findings

5.3.1.1 The primary contribution of DFID-supported interventions in terms of economy is the support to reforms in procurement and the establishment of procurement cells, but there is potential for further contributions in the longer term.[99]

In all three states the establishment of a Procurement Cell within DHFW (through MPTAST, BTAST and TMST) is a significant driver towards saving resources and improving transparency. No assessments on specific cost savings in Bihar or Odisha were available (and most of the evidence for this conclusion came from KIIs), but there is compelling *reported* evidence that the reforms in the tendering process in Odisha have led to significant time savings: for example, in 2007-08, it used to take on average 150 days to complete the process of tender evaluation at DHFW, leading to sanctioned orders of Rs.400 million. The time drastically dropped to an average of just under a month, doubling the order spends.[100] Some data are available in MP, where the Health Department saved about 6%-8% of the total cost of procurement (approximately Rs.2,000 million) through the reduction in consultancy charges in the proposals submitted by various agencies to the department. The centralisation of the procurement system in MP helped the department to initiate radical reform measures, such as transparency in competitive processes (e-tendering) and purchase of low-cost generic drugs. DFID data on procurement processes in MP indicate that, as a result of the transparent rate contract, 56% of drugs were procured at a lower cost in 2012 than the year before.[101] Officials in the department confirmed that e-tendering has played a key role in increasing the transparency of the competitive process and achieving subsequent cost reductions.[102] The gain in economy in drug purchase through transparent rate contract is evident; but the rates are not

[99] Bihar:OPR (2013); Odisha: OPR (2013),'Analysis of tender process', TMST; Madhya Pradesh: An internal document on 'Procurement', DHFW (provided by DFID); OPR (2013).
[100] Analysis of tender process by TMST.
[101] MPHSRP Annual Review, 2013. Data from other states were unavailable.
[102] Other issues, such as QA, timeliness of delivery, etc. could not be assessed due to lack of adequate data.

always lower than those of Tamil Nadu Medical Services Corporation (TNMSC), the leading and pioneering state procurement agency in the country (see Table 13 below[103]). However, the price difference is probably due to natural economic advantage that TNMSC enjoys due to its long duration of operations and high scale of purchase. Given the current momentum of increasing scale of operation, the MP rate is likely to converge to benchmark (TNMSC rate) price in a few years.

Table 13: Comparative purchase price of drugs in Madhya Pradesh and Tamil Nadu

Selected drugs	**Benchmark costs** (TNMSC provisional L1 rates for the supply of drugs and medicines for the year 2013-2014)	**Approved rate by DHFW, MP** (March 2013, tender no. 176)	**Difference** (approved compared to benchmark)
Albendazole Tablet I.P. 400mg	Rs.63.95 (10x10 tablets)	Rs.72.00	**13%**
Paracetamol Tablets I.P. 500mg	Rs.21.29 (10x10 tablets)	Rs.21.95	**3%**
Ciprofloxacin Injection I.P. 100mg/50ml	Rs.10.49 (100ml FFS/BFS bottle)	Rs.8.15	**-22%**
Gentamicin Injection I.P. 40mg/ml	Rs.1.75 (2ml Amp)	Rs.2.43	**39%**
ORS Packet	Rs.1.73 (pouches 20.5 gm)	Rs.2.06	**19%**

In terms of other interventions targeted at strengthening institutional mechanisms, there is very little direct evidence in either MP or Bihar on how the TA support helped the system orient towards better economy through improving benchmarking data, with the exception of audit reports. For example, there is little evidence that TA has provided any direct support to improving estimates of standard costs or benchmarks for various inputs, such as building, training or manpower. However, there is evidence in Odisha of TA support to streamline the processes of transparency and accountability in expenditure and public finance management, especially with respect to national programmes. For example, TA efforts to infuse more transparency in the process are visible in the fact that the TMST regularly sends the analysis of reports on the utilisation of FA spent at the district and block levels to DHFW and DWCD, which help the administrators to take corrective measures. In addition, the outcome budget for key departments such as DHFW, a document annually prepared with TMST support, is made public to show the flow and utilisation of national programme funds. In general, the interventions have helped the departments replace some ad hoc – and non-transparent – measures to deploy various inputs with transparent and universally accepted norms.

DFID financial support to implementation (in terms of infrastructure building and service delivery) is not specifically targeted at improving economy, but may have indirect or longer-term contributions. DFID's FA support has been used (or is planned to be used) to purchase a variety of earmarked inputs for multiple activities, such as construction (e.g. sub-centres, AWCs), mobility support for primary-level health managers, training of frontline workers, QI in hospitals, and consumables (such as bed nets). The focus of the earmarked FA support has been on filling gaps, not necessarily on identifying those models that can deliver better economy; however, there has been a focus on supporting implementation of some innovative high-quality infrastructure interventions. In addition, the initiatives to strengthen the financial management systems within the legal framework may have a long-term effect in increasing economy. It is also notable that some of the DFID-supported interventions are being scaled up – for example, LLIN in Odisha – implying that they will deliver economies of scale.

5.3.1.2 Community mobilisation interventions have the potential to make a major contribution toward improving economy.

Given the use of existing structures (such as SHGs) and the emphasis on community inputs, the community mobilisation interventions have the potential to make a major

[103] For example, the purchase prices of selected drugs recently approved by DHFW, except one, are higher (3% to 39%) than those of TNMSC (source: DHFW (MP) and www.tnmsc.com).

contribution toward improving economy. The PLA-based models (such as Sanjhi Sehat, Gram Varta and Shakti Varta) or CLTS represent approaches that are potentially high-value low-cost interventions. The focus on delivery through community based inputs means that they represent an alternative to other, more resource-intensive behaviour change models with greater focus on external inputs such as project staff. There is scope for increasing the economy of these, and other, downstream interventions further with respect to the cost of technical inputs, and there is anecdotal evidence that in some cases (e.g. the TMST in Odisha) good progress has been made in this regard.[104] In addition, the experiences from Bihar show that these low-cost demand-side interventions have a high potential to influence government departments and have been scaled up. For example, Gram Varta, which was piloted in one block of Patna district, has now been scaled up to 11 districts (see Box 11). The full potential of such approaches has yet to be fully explored in MP, since the latest PIPs (DHFW and DWCD) do not reflect any plan to internalise PLA. On the other hand, the rapid increase in VHNDs in recent years does reflect a rapid transition to using a low-cost mechanism of providing outreach services and building interface with the community.

5.3.1.3 DFID's model of sub-contracting encourages 'internal' VFM for its investment.

The formats for reporting to and financing of TA teams from DFID, based on performance-based financing, reflect a consistent focus on accountability and economy from an 'internal VFM' perspective. The payment to TA teams is based on a set of 'payment-linked deliverables' planned by the TAST for each year and approved by DFID. The deliverables include documents such as reports, audio-visuals and software. A report on the progress of these deliverables is sent by TAST to DFID in quarterly progress reports (QPRs), along with invoices. The system is focused on better ensuring that DFID gets what it pays for in the TA outputs (which themselves comprise inputs into the system) and the QPRs provide a transparent and economic basis for managing contracts with low transaction costs.

Fee rates for TA teams in Bihar and Odisha are showing year-on-year reductions and compare favourably in the Indian market. Across the three states, a significant number of the contracts have been awarded to local consultants and individuals,[105] implying savings in overheads and fees. This is supported by the available data: over the two-year period (2010-12), BTAST utilised 87.5% of deliverable based on contract value and 72% of the total sub-contracting budget. In 2012-13, the sub-contracting budget represented an average daily fee rate of £152, which was 10% lower than the previous year's rate. Approximately 67% of procurement was undertaken through a competitive tendering process and 17% (£234,808) was saved by negotiating down original quotations.[106] In Odisha, the annual report submitted by TMST shows that the average fee rate of the sub-contract payments over the period from 2008-09 to 2012-13 was £85 per day, which is highly competitive in the context of the Indian market. The rates from MP compare less favourably but are reporting over a different time period – the 2012 annual review reported that average fee rates were £262 over the three previous years (although £249 in final three months).[107]

5.3.1.4 There are mismatches between central government norms and unit costs at state level, but these do not always imply poor economy,[108] especially in the context of use of DFID's FA.

[104]For example, the evaluation team was told in interviews that it costs Rs.7.5 million for UNICEF to make three villages open defecation-free. The TMST budget, on the other hand, is Rs.4 million per block. The difference is reportedly mainly due to a higher cost on the technical agency hired by UNICEF.

[105] Annual reviews report that the proportion of TA delivered by Indian nationals was 75% in Odisha (2013), 92% in Bihar (2013), and 90% in MP (2012 – proportion for 2013 not reported).

[106] OPR 2013.

[107] OPR 2012.

[108] Bihar: Ministry of WCD guideline for construction of AWC under MNREGA vide letter no. 19-3/04-CD-I (Vol.V); FA plan and statement of expenditures of departments; Odisha: data on construction of sub-centres through DFID's FA from TMST; FA plan and statement of expenditures of departments; data on LLIN inputs, sourced from TMST; OPR

Benchmarking may mask important contextual factors. An intervention with a higher unit cost of inputs does not necessarily imply bad economics in a hard-to-reach setting, for example, adverse geography may justifiably lead to higher transport budget lines. There is therefore widespread agreement that the uniform norms set by the central programme offices are sometimes inadequate or inappropriate to assure the quality of purchased inputs, due to inflation and an updating process that does not keep pace with contextual changes. Consequently, the state governments have resorted to their own estimations and using alternative flexible sources of funding that allow them to use it as a top-up over the base norm, particularly in construction in remote areas. Two examples in MP of the mismatch between central government benchmarking and actual costs are presented in Box 4.

Box 4: Benchmarking unit costs

The construction of AWCs through DFID's FA*:* DFID funded 400 (out of 9,142) AWCs that are under construction through various government schemes and the cost of each building was Rs.0.78 million, almost twice the GoI stipulated rate (Rs.0.45 million). However, considering that the GoI rate has not been recently updated and the GoI guidelines allow the states to meet the shortfall from other approved sources, a rational decision was made by the state to secure the additional Rs.0.33 million from other government schemes. The newly constructed AWCs in MP follow the recently developed 'child-friendly' designs/layout plans (with more amenities and resources at each AWC, compared to the traditional AWCs) published under the "Humari Anganwadi" developed with DFID TA in all the 9000 AWCs in the state; therefore, justifying the discrepancy between cost and benchmark.

The construction of health sub-centres by using pre-fabrication technology*:* DFID's FA was used to fund 85 (out of 469) sub-centres. The standard NRHM cost norm for building traditional sub-centres was lower, but inappropriate in this case; hence, the cost estimated by the state received special approval from the central programme office. The decision to adopt this new technology was justified primarily on the grounds that they are being constructed in remote and difficult areas where it is difficult to procure good quality materials and skilled construction workers, and it takes only 3-4 months to build a pre-fab sub-centre, while a traditional one requires around 1.5 years. Considering the quality and time benefits, the important message is that a pre-fab structure may be more economical than a traditional one, even if it costs more.

DFID processes aim to ensure that VFM is achieved in the spending of FA. Flexibility in budgetary support does not necessarily provide any incentive to regulate costs on economic grounds and there is always a risk of misuse of funds.[109] However, several safeguards were introduced by DFID in all three states to reduce the risk. These include strengthening internal auditing, regular tracking of FA by TAST/BTAST/TMST, and strict monitoring from the DFID office to ensure that the money is spent with economic prudence. Moreover, routing the FA through the finance department makes it accountable to established institutions, such as the Comptroller and Auditor-General (C&AG) and members of Legislative Assembly.

5.3.2 Summary of findings relating to economy

- The primary contribution of DFID-supported interventions in terms of economy is the support to reforms in procurement and the establishment of procurement cells, but there is potential for further contributions in the longer term.
- While there is little direct data on unit price savings, the savings in terms of time are clear, and there has been increased transparency. Support to implementation and community mobilisation interventions has the potential to contribute to improvements in economy;

(2013); Madhya Pradesh: internal communication, DHFW, dated 11 Jan, 2013 on the cost of sub-centres using pre-fabrication technology; FA plan and statement of expenditures of departments; OPR (2013); Other: for unit cost data on EMR services: Study of Emergency Response Service – the EMRI model (2009). A report published by National Health System Resource Centre, Ministry of Health & FW, GoI. (available at http://indiagovernance.gov.in/files/view.pdf) Data on Tamil Nadu Medical Service Corporation: (www.tnmsc.com).

[109] *The management of UK budget support operations*. ICAI report No 9, 2012, p.1.

however, these are likely to be longer term and there is not yet strong evidence to support this assumption.

- DFID processes aim to ensure VFM of its investment, both in the financing and reporting mechanisms for the TA teams (linking payment to deliverables) and in terms of tracking FA.
- There are mismatches between government norms and unit costs at state level, but these do not always imply poor economy, especially in the context of use of DFID's FA.

Overall, there is some limited evidence that the TA and FA support from DFID has helped leverage economy savings; however, as yet, there is little direct data on specific cost savings. The greatest evidence of the contribution of DFID-supported interventions in terms of economy relates to the support for reforms in procurement and the establishment of procurement cells, but there is potential for further contributions in the longer term.

5.4 Efficiency

Efficiency is concerned with maximising outputs for a given level of inputs.[110] This considers both the trends of efficiency indicators, and the extent to which DFID support might have contributed to increased system efficiency.

5.4.1 Findings

5.4.1.1 There is compelling evidence that the support to strengthening/reforming institutional mechanisms has high potential to deliver efficiency gains. However, at this stage the evidence for actual efficiency gains from these upstream interventions is mixed.[111]

Interventions supported by DFID that are designed to strengthen/reform institutional mechanisms in theory have significant potential to generate both technical and allocative efficiency gains. In terms of improvements to technical efficiency (achieving a higher output to input ratio), the interventions in this area can function in a number of ways: 1) adding missing but critical and complementary inputs to enable or activate the existing inputs; 2) restructuring health workforce governance to improve the service delivery chain; 3) reforming the existing logistic and procurement system to reduce leakage; 4) bringing flexibility in local use of resources to encourage local solutions; 5) focusing on performance monitoring at frontline units; and 6) empowering the decentralisation process for efficient resource management and public oversight. Improvements in allocative efficiency can be achieved through influencing the government to spend relatively more on the primary sector, high-burden districts and implementing demand-side interventions. TA potentially plays an important role in translating these strategies into specific actions. It is important to note that the efficiency gains in this case are at this stage largely potential, accruable only over time and are in a large part intangible in the short term.

[110] ICAI. 2011. ICAI's approach to value for money.

[111] Bihar: OPRs, KIIs, 'Government on health revamp overdrive' news report in *The Telegraph*, December 5, 2013; Odisha: OPRs, KIIs, For decentralisation of procurement: a study on status of service delivery of SNP & pre-schooling education under ICDS, Voice for Child Rights Odisha (VCRO); Madhya Pradesh: OPRs; KIIs, an internal document on 'Procurement', DHFW (provided by DFID).

The evidence is mixed on the level to which technical efficiency gains are being achieved. The support to the procurement reform process is a good example of how technical support at the right time and directed at the right target has driven technical efficiency with clear efficiency gains being achieved by 2012 (Section 5.2.1 and Box 5). In this example, the reform has led to increased coverage of government-procured medicines through ensuring the availability of a fixed number of medicines, depending on the level of the facility. There is strong evidence that the reforms are gradually leading to a more rational use of drugs and optimum utilisation of the available budget, i.e. maximising outputs for a given level of inputs. In other cases, the potential is there but has yet to be realised. For example in Bihar, the centralisation of drug procurement, equipment and even infrastructural materials through a dedicated agency (BMSICL), has the potential to improve the technical efficiency in procurement processes. However, at the time of the review the required human resources for the corporation were not yet in place (although informants interviewed expected that it will soon start running at full capacity).

Box 5: The development of the Procurement Cell in MP

In MP, the need for streamlining and decentralising drug procurement was highlighted in the drug policy of the government announced in 2009, which dictated that procurement of 80% of drugs would be through central rate contract and the rest (in urgent cases) through local tender. However, there was hardly any professional capacity in the department to determine the rate, hence the Tamil Nadu Medical Services Corporation (TNMSC) (a company set up by the Tamil Nadu State Government to manage the whole procurement system for public health facilities) was hired as a consultant to ensure rate contract of drugs through national competitive bidding. However, solving the problem by using an external consultant was found to be unsustainable and there was an urgent need to strengthen the internal capacity in the department to manage this complex process. The entry of TAST in 2012 radically changed the scenario. DFID's TA support helped set up a Procurement Cell with six technical consultants hired by TAST and embedded in the Department. The Cell, with TA support, was graduated to the MP Public Health Service Corporation by a cabinet decision in September 2013. With TAST support, the Cell no longer needed external support from TNMSC, the increased manpower from the embedded consultants reduced pressures on the government staff; and the transaction cost of receiving TA was drastically reduced.

The efficiency gain after 2012 is quite evident. The reform has led to increased coverage of government-procured medicines through ensuring the availability of a fixed number of medicines, depending on the level of the facility. This is gradually leading to a more rational use of drugs and optimum utilisation of the available budget. For example, the drug count of the Minimum Drug List of 147 medicines improved across all the 100 drug stores in 50 districts of the state from an average of 60 in July 2012 to 136 in July 2013 (source: internal MIS, Procurement Cell, DHFW). The overall supply efficiency has also shown considerable improvement. In less than a year, the average percentage of incomplete supplies fell from 57.6% to 36.6%. Constant follow up with suppliers by the TA consultants and monitoring, using the supplier module in the State Drug Management Information System (SDMIS) were instrumental in increasing the supplier efficiency.

This mixed picture is also evident in the case of interventions focused on strengthening human resource management. Here there is some evidence that such interventions are starting to contribute to technical efficiency gains, while for others the evidence is more nascent or mixed. The HR reform policy, when fully implemented, has as a primary objective the better allocation of human resources. While the actual progress with these reform programme is reported to be 'painfully slow', there is some reported evidence that there is a more rational allocation of human resources taking place in some states with, for example, a reduction in empty posts. In Odisha, for example, DFID data suggest that vacancies in doctors' positions reduced to 6.9% in 2012-13 from 30% in 2011-12; similarly the proportion of vacant nurses' positions reduced to 13% from 26% during the same period.[112]

With respect to allocative efficiency, there is emergent evidence that both FA and TA support has also improved allocative efficiency at the sectoral level. For example, the large-scale support to Odisha's nutrition sector illustrates how a combination of TA and FA

[112] Annual Review, OHSNP 2013.

support at the upstream level, combined with a strong political commitment, can drive – mainly allocative – efficiency. The NOP is being implemented with DFID's earmarked FA in the most high-burden districts, while the TA is helping the DWCD to develop and institutionalise a training policy, revised guidelines for feeding programmes and decentralisation of procurement (see Box 6). The political commitment manifests itself in the government's initiative to establish a State Nutrition Council for ensuring multi-sectoral convergence. In this case, the emergent result is that more efficient allocative decisions are being taken with respect to nutritional interventions. Other interventions in this category are also acting as drivers of efficiency, with reported varying degrees of success. In MP, the TA support to DWCD in preparing the annual plan (APIP) for ICDS has helped the department leverage substantial additional resources from the centre.[113] Similarly, the TA support has strengthened several components of the financial management system in DHFW.

At the overall policy level, there is some evidence of an improved environment for better allocative decisions. The changed environment at the top administrative level in both MP and Odisha over the past few years is evident – from a traditional, ad hoc and process-based management, evidence from interviews with stakeholders suggests that it may be slowly turning into a professional, focused and evidence-based decision-making unit. The majority of stakeholders interviewed flagged the important role that DFID's TA had in this transition, but it is important to note that this does not establish causality, because it does not control for the activities of other factors (for example the NRHM support), which has also been contributing to the same areas.

Box 6 Decentralisation of procurement and distribution of supplementary nutrition in Odisha

Following a Rs.7,000 million pulses scandal; in Odisha in January 2011, the Government of Odisha decided to decentralise the procurement of all items (except rice) in the supplementary nutrition programme (SNP) under ICDS and the midday meal programme in schools, dispensing with the contractor system, which was a source of corruption, and becoming one of the first states to implement the standing order of the Supreme Court to ban contractors in ICDS. Under the new system, joint accounts are opened in the names of the Anganwadi worker (AWW) and the ward member of the village who will purchase the ration from local SHGs of women, thus ensuring regularity and transparency in supply as well as entrepreneurial opportunities to rural women. In addition, there are mothers' and a *Janch* (enquiry) committee at the community level that act as monitoring agents.

According to a study on the functioning of decentralised procurement conducted in seven districts by the Voice for Child Rights Organisation (a civil society organisation working for children), by December 2011 the shift in paradigm had already started producing positive results. All the AWWs, including those located in remote tribal pockets like Koraput, had opened their joint accounts, 67% had started procuring food from the same village and 57% of the surveyed beneficiaries were getting regular cooked meals as per the menu chart. The cereals were not stored for more than one month in any of the surveyed AWCs, implying a better assurance for food quality.

DFID's TA acted as a catalyst in the process. It supported DWCD in conceptualising and rolling out this decentralised programme, including the development of guidelines, standard operating procedures, and monitoring mechanisms. The TA support is complemented by a part of FA (about Rs.35 million) to train, print and disseminate the approach across the state. An important FA-supported area is the training of about 1,800 SHG women, the local suppliers of take-home ration (THR), on the THR protocols and various nutrition-related concepts. The *Janch* committee members are also oriented to play an effective monitoring role.

The reform in procurement and distribution of SNP in Odisha has been able to attract attention from many quarters. It is recognised as 'best practice' by the Supreme Court Commissioners for replication by other states.

Sources: 1) Towards upping the ante in child nutrition, The Hindu, April 5, 2013; 2) A study on status of service delivery of SNP & pre-schooling education under ICDS, Voice for Child Rights Odisha (VCRO); 3) DFID India Nutrition Situation Report. Internal report, DFID, Feb. 2014.

[113] The additional resource is about Rs.10000 million (£1.25 million).

5.4.1.2 The strongest evidence for efficiency gains, achieved as a result of upstream support by DFID, is from those interventions that have resulted in increased utilisation of funds, more optimal use of infrastructure, and targeted allocation to high burden or poor districts.[114]

The analysis has generally demonstrated a trend of improved absorption capacity (i.e. how much of the allocated amount could be spent), which is an important indicator of system efficiency. For example, the analysis of allocation and spent funds for NRHM in MP compared 2007/08 and 2012/13 and showed improvement in all allocation items analysed, with the exception of National Disease Control Programme (NDCP): from a spend of 55.1% of funds allocated in 2007/08, the spend of the NRHM flexipool increased to 82.6% in 2012/13. In Bihar, the expenditure of allocated central funds (excluding state's share) was high in 2009/10 (96%), with a marginal decline in 2012/13 (90%); this reflects increased spend in some areas (e.g. RCH and NRHM flexipools) but declines in others (for example, infrastructure maintenance). In Odisha, the unspent utilisation of allocated funds under NRHM (including the state's share) remained high until 2009/10, but gradually declined to 18% in 2012/13. (These data are presented in Annex G). Overall, the states have been showing clear signs of increasing absorptive capacity implying an improved capacity to spend, a necessary condition for efficient delivery of services.

There are several examples of efficiency gains occurring in the states through more optimal use of infrastructure. In MP, the conditional cash transfer scheme (Janani Suraksha Yojana (JSY)) to increase the number of institutional deliveries has been one of the prime contributors to this achievement – the number of JSY beneficiaries has increased to 1.1 million in 2011/12 from only 68,000 in 2005/06,[115] without a major increase in infrastructure development. Therefore, arguably, the available infrastructure (district hospitals (DHs), community health centres (CHCs), and primary health centres (PHCs)) and other resources are being used more optimally, implying a gradual decrease in unit cost. Similarly, in Odisha the number of births in health facilities doubled between 2005/06 and 2011/12,[116] with only marginal changes in the number of health facilities (DH, CHC, and PHCs), indicating a potential decrease in unit costs.[117]

Allocative efficiency is reflected in relatively higher increases in resource allocations to high-burden (HB) or relatively poor districts. This is an appropriate strategy for improving efficiency, since the return to investment on health and nutrition is likely to be higher in these areas compared to their better-off counterparts. Allocation to these less-advantaged districts has indeed been increasing over the DFID period in both the health care and nutrition sectors – as well as representing a contribution to improved allocative efficiency, this is also suggestive of a contribution to improved equity (as detailed in section 5.6 below). The recent APIP submitted

[114] Bihar:For fund flow: NRHM MIS report (http://nrhm.gov.in/images/pdf/mis-report/Dec-2013/2-High_Focus_States_Other_than_NE.pdf; Demand for Grants (budget documents) of departments, various years; NRHM and ICDS PIPs (2012-14); Public Expenditure Review for DHFW (2012) ; for trend in outputs, Annual Health Surveys (2010-12); OPRs; Odisha: for fund flow: NRHM MIS report (http://nrhm.gov.in/images/pdf/mis-report/Dec-2013/2-High_Focus_States_Other_than_NE.pdf; Demand for Grants (Budget documents) of departments, various years; NRHM and ICDS PIPs (2012-14); for trend in outputs, Annual Health Surveys (2010-12); OPRs ; Madhya Pradesh: P:`For fund flow: NRHM MIS report (http://nrhm.gov.in/images/pdf/mis-report/Dec-2013/2-High_Focus_States_Other_than_NE.pdf; Demand for Grants (budget documents) of departments, various years; NRHM and ICDS PIPs (2012-14); for trend in outputs, Annual Health Surveys (2010-12); OPRs.

[115] NRHM MIS Report (MP), NRHM, GoI.

[116] AHS, Odisha Fact Sheet, 2011-12.

[117] A service provider can in principle reduce unit costs in two ways – either by trimming down the input costs and/or its usage, or by increasing the uptake of services. In the case of national programmes, the latter seems to be the only effective way, because input prices are mostly fixed by the norms of the national programmes (e.g. salaries/remunerations of frontline workers are fixed by state/national norms) and there is little scope for manipulating the input costs. Therefore, monitoring whether the uptake of services has increased to reach 80% or more of capacity is a robust way to assess the efficiency of a particular facility or service (e.g. immunisation, ANC, institutional delivery).

by DWCD includes an additional resource plan for high-burden districts to build new AWCs, hire additional workers (2nd AWW), and finance new initiatives.

Importantly, there is some evidence that increasing financial allocations to high-burden districts has been matched by a push to address the critical manpower shortage in these districts, especially for health service delivery. This is a difficult issue and DHFW has been struggling to cope with the problem in various ways. For example, in Odisha, newly appointed doctors are being posted to KBK+ as a priority. Financial incentives for peripheral (Rs.8000 per month) and district hospital doctors (Rs.4000 per month) in KBK+ are being tested and evaluated. Additional financial incentives are also provided to paramedics and other frontline workers (such as ASHA) working in these difficult areas.

There is clear evidence of an increasing focus on communicable disease, reproductive and child health, and malnutrition. This emphasis on the three most critical areas of intervention in primary health care is reflected in the increasing allocation from NRHM and nutrition programmes in all three states. In both Bihar and Odisha, total spending on NRHM in the state has more than doubled from 2009/10 to 2012/13.[118] But in both states the allocation for ICDS/nutrition component of the DSW budget is more significant; in Bihar it increased from Rs.13,900 million in 2009/10 to Rs.29,600 million in 2013/14, registering an almost 40% increase in the allocation compared to the previous year (2012/13)[119]; while in Odisha it increased from Rs.2,1600 million in 2007/08 to Rs.6,600 million in 2013/14, and registered almost a 100% increase in 2014/15 to Rs.12,930 million.[120] MP demonstrated a similar trend – total spend on NRHM in the state has almost doubled from 2007/08 to 2012-13 – from Rs.6,450 million to Rs.11,560 million. The allocation for nutrition component of the DWCD budget is more significant; it increased from Rs.2,900 million in 2007/08 to Rs.9,410 million in 2013/14, registering almost a 20% increase in the allocation compared to the previous year (2012-13). As NRHM (and ICDS) is focused mainly on improving primary care, the implementation of the programme is expected to improve allocative efficiency of public health spending.[121]

Across all three states, interventions to strengthen information systems have contributed to efficiency. Information systems developed for human resources (HRMIS) clearly drive efficiency because they facilitate a systematic and transparent method to identify need and undertake rational deployment of doctors and monitoring performance of frontline workers (for example, in Odisha the software maintained by the TMST to monitor the roster of physicians has led to visible gains in efficiency in monitoring. Data pertaining to personal details, qualifications and place of posting has now been entered for all doctors and is utilised for posting, promotion and transfer). As noted, the MIS support to the procurement cells has considerably changed the process of procurement, requisition and distribution of drugs, resulting in reduced costs. In MP, the ICDS MIS has streamlined the monitoring system of DWCD in MP.[122] The time saved by this process has been marked, with one report that the time to fill in reports has been reduced from two hours to less than 30 minutes.

5.4.1.3 While there are some examples of evidence generation to support policy and increased efficiency, in all three states, the high potential of these interventions has been largely unexplored.

There are documented examples of evidence-generation interventions that have been used to support policy and increased efficiency of programmes. For example, the regular

[118] Approved PIP (NRHM), 2013-14.
[119] APIP 2013-14 (DSW) and MTEF (DSW) 2012.
[120] Demand for Grants of various years, DWCD, GoO.
[121] Berman, P. *et al*. (2010). Government health financing in India: challenges in achieving ambitious goals. HNP Discussion Paper, The World Bank, p.2.
[122] Before 2010, the frontline workers (AWW) used to fill out multiple paper forms, which were then compiled at district level. With the help of TAST, an IT consultant was hired and the MIS software was developed. The digitisation of all data since 2011 now means that while the AWWs still fill out forms manually, these are now compiled by data entry operators at the block level with this software.

reports on QI interventions in selected health facilities and audit analysis of NRHM programme in MP have helped inform key officials of progress in removing bottlenecks and did result in an improvement in system performance. Similarly, the assessment of ICDS conducted during the first phase of DFID's programme in MP, and the analysis and dissemination of the National Institute of Nutrition (NIN) survey data on nutrition contributed significantly to the improved allocative efficiency in the design and implementation of the State Nutrition Mission.

However, overall, the full potential for efficiency-focused evidence generation does not seem to have been realised. For example, across all three states, there is a huge knowledge gap in tracking the utilisation of programme funds at the frontline, which could be filled in by TA. Similarly, costing of key interventions could be useful in assessing their efficiency. More fundamentally, from the in-depth review of documentation generated from the programme it was very clear that that relatively little effort and resources have been assigned to generating robust knowledge management and sharing processes across the programme. For example, the TAST in MP has not been able to set up a mechanism to concurrently monitor the progress in key health and nutrition outcomes, at least in the high-priority districts. There have been no significant initiatives in implementation research, except one on locally produced ready-to-use Therapeutic Food (RUTF) for community-based management of acute malnutrition. Implementation research remains under-addressed despite its immense relevance: the annual reports submitted by BTAST to DFID highlight hardly any initiatives in this area. The exceptions include a pilot study to investigate the impact of conditional cash transfers (CCTs) on nutrition impacts in Gaya district, and a pilot of special training of ASHA workers on Kala Azar.[123] This lack of ability to put in to place mechanisms for better knowledge sharing between states (and beyond) represents a substantial missed opportunity and overall efficiency loss.

5.4.1.4 There is some emergent evidence of efficiency gains resulting from 'downstream' interventions supported by DFID.[124]

Overall, a compelling case can be made that – by virtue of the projects that have been supported through DFID's downstream support – allocative efficiency has been increased. In all three states the projects supported through DFID downstream support (both FA and TA) are aligned with three national programmes – NRHM (health), ICDS (nutrition) and NBA (sanitation) – that are characterised by a set of mechanisms that are universally tested and recognised to be of high impact, especially in the context of maternal and child health care.

[123] Soni P et al (2013). 'Kala Azar: Pilot of most cost-effective, wide-scale, short and qualitative orientation training of ASHA workers on Kala Azar in Bihar utilizing the existing government resources and thereby reaching entire community'. *Indian Journal of Applied Research.* Vol: 3, Issue 9, Sept. 2013, pp.373-74.

[124] Bihar ;list of DFID supported interventions, from BTAST; OPRs; NRHM and ICDS PIPs (2012-14); case studies on FFHI and WATSAN; Odisha: list of DFID-supported interventions, from TMST; OPRs; NRHM and ICDS PIPs (2012-14); case studies on QI and WASH; Madhya Pradesh: list of DFID-supported interventions, from TAST; OPRs; NRHM and ICDS PIPs (2012-14); case studies; Other: Nutrition India Situation Report (2014), DFID.

There is evidence that community mobilisation can improve the efficiency of the provision of integrated services at the local level, but challenges remain, particularly linked to the integration of WASH programming.[125] Good examples are the initiatives around Village Health and Nutrition Days (VHND), where the frontline workers of health and nutrition pool their resources to meet the community's overall health needs. DFID support has functioned to catalyse this intervention (see Box 7[126]). However, although progress has been made, opportunities for further convergence remain. There are serious challenges, especially in integration of WASH initiatives (with health and nutrition). The convergence of health and nutrition in some areas (e.g. immunisation) has been in focus for a relatively longer time, while WASH services have historically been provided by the PHED, which does not have explicit public health (or nutrition) agenda or goals. Consequently, it is difficult to ensure participation of WASH providers in important health or nutrition initiatives (for example, VHND). As one medical officer of a PHC in Bodhgaya (Bihar) said 'For VHND, they need to come. But I have never seen any. We had a district-level meeting for VHND, the executive engineer was to come but he could not. We need coordination with them in VHND very badly. We need advice on water facilities and testing.'

Box 7: VHNDs and efficiency at community level

TA to VHNDs includes periodic assessment of VHSND's functionality for sites across the districts and sharing the feedback with the government. There is a strong emphasis on capacity-building in this area (e.g. preparing training modules for strengthening VHSND). Evidence suggest that VHSND is an excellent platform for the community to access a range of maternal, nutritional, and child health services. The MIS data from Bihar reflects this; for example, in one year (Jan-Dec, 2013), the percentage of VHSND sessions providing child health services increased from 6% to 17%, while the same for maternal health services increased from 37% to 53%. The data from Odisha reflects a jump in the number of VHSNDs in recent years: the total number of VHND sessions in the state increased from 241893 in 2009-10 to 438,873 in 2012-13, an increase of 80% in three years. A parallel process of capacity building of Village Health, Nutrition and Sanitation Committee (VHNSC) – the community watchdog for converged initiatives – is expected to utilise resources more efficiently.

It is anticipated that PLAs (Sanjhi-Sehat in MP, Gram Varta in Bihar and Shakti Varta in Odisha), modelled following the *Ekjut* intervention in two states (Jharkhand and Odisha), and similar other interventions in other countries, such as Nepal, Bolivia, and Bangladesh (see case study in Annex F), will promote system efficiency through leveraging significant increased demand for integrated services, while requiring very low-input costs. For example, the use of existing community-based organisations of local women (in the form of SHGs), to implement this intervention has required very little financial outlay. While it is too early to assess the interventions for their impact on health-seeking behaviour of rural women, the assessment of other, similar interventions has shown the extremely high potential for these kinds of interventions to improve people's demand for integrated services.[127]

[125] Bihar: for VHND: BTAST presentation on SWASTH, Feb. 2014, OPRs, KIIs at the district level; Odisha: for VHND: NRHM MIS report (http://nrhm.gov.in/images/pdf/mis-report/Dec-2013/2-High_Focus_States_Other_than_NE.pdf; OPRs; KIIs at the district level; Madhya Pradesh: for VHND: sourced from TAST; OPRs; KIIs at the district level.
[126] Sources: Presentation on SWASTH by BTAST, Feb 2014; NRHM MIS report (http://nrhm.gov.in/images/pdf/mis-report/Dec-2013/2-High_Focus_States_Other_than_NE.pdf); http://www.intrahealth.org/files/media/improving-the-coverage-and-quality-of-village-health-and-nutrition-days/VHND_UP_30_10_12.pdf)
[127] *Evaluation of DFID-supported HSDI in West Bengal (2005-2010).* Unpublished report, IIHMR, 2010.

Box 8: Quality improvement intervention in Tikamgarh district hospital (Madhya Pradesh)

The District Hospital of Tikamgarh (MP) is the only facility in the district with a functional CEmONC. The MPTAST team coordinated the entire CEmONC certification process with a key focus on infrastructure and human resources, but also looking at basic amenities, display of protocols and information, education and communication materials, along with various service delivery parameters, such as documentation and the hospital MIS. DFID supported this intervention by continuous supervision and training for key stakeholders, as well as sitting on the District Quality Assurance Committee (DQAC), where they share action plans and feedback on the service gap, as well as providing technical support for QI at block-level health facilities.

Key results of the CEmONC process include: the availability of Sick Neonatal Care Unit (SNCU), equipment for managing high-risk babies more efficiently, and the institution of a number of protocols (including infection control, biomedical waste management, treatment, documentation procedures and management of hospital information systems), leading to a more structured system in the hospital. According to the district immunisation officer, 80%-90% of the gaps have been filled as per CEmONC guidelines, and exit interviews conducted as part of the case study revealed a high level of patient satisfaction. Utilisation data confirms this, as an example: admissions of caesarean section cases have been steadily increasing – from 149 in 2011-12 to 215 in 2012-13, and 275 in 2013-14 (estimated).

The progress is impressive, but there are a few serious bottlenecks. Availability of required manpower is the biggest challenge. Against the requirement of 75 staff nurses only 22 are posted. A minimum of three gynaecologists are required at the district hospital, but currently only three female medical officers are working, none of whom are specialist doctors with the requisite qualifications.

Detailed analysis of efficiency from the case studies looking at DFID-funded interventions provides a generally positive story in terms of efficiency benchmarks. In order to quantify a measure of efficiency, a costing of two interventions – Odisha Emergency Medical Ambulance Services (OEMAS) and Long Lasting Insecticide Nets (LLINs) – where DFID resources (FA and TA) are extensively used, has been done. The details and results are given in Annex H; however, a summary is given in Table 14 below.

Table 14 Benchmarked output costs

Intervention	OHSNP unit cost	Benchmark cost	Source of benchmark
Emergency ambulance services (OEMAS)	Rs.677 ($11)	Rs.565 ($9.2)	Unit cost (operation) of AP's EMRI initiative
LLINs (Mo Mashari)	Rs.277 ($4.5)	Rs.431 ($7)	Evidence from interventions in LMICs (see below)

Table 14 shows that the cost of the ambulance service is slightly higher than its benchmark. According to a recent study, the unit costs (operation) of emergency ambulance services provided in three states (AP, Gujarat, and Rajasthan) in 2009 were: Rs.565 in Andhra Pradesh (AP), Rs.635 in Gujarat, and Rs.2,700 in Rajasthan.[128] The variation in unit costs is largely due to differences in utilisation rates (i.e. number of trips/day), so while AP reported 8.1 trips per day, Rajasthan reported only 1.14 trips. Taking the AP estimate as the benchmark, OEMAS is slightly above the minimum cost. However, given the fact that the AP programme has been running since 2005 and OEMAS is still in its early stages, the unit cost curve of OEMAS is still sloping downward and will converge with the benchmark in the near future. It is also noteworthy that the semi-fixed element in the costs – for example the per unit BCC cost – has markedly decreased from the second year onwards (from Rs.44 in 2010-11 to Rs.3.95 in 2011-12, and Rs.3.49 in 2012-13) contributing to a decrease in overall unit cost.

In terms of support to the distribution of LLINs, the estimates of unit cost from similar initiatives illustrate that *Mo Mashari* is highly cost efficient (see Box 9). For example, a recent study on an

[128] *Study of Emergency Response Service – the EMRI model (2009).* A Report published by National Health System Resource Centre, Ministry of Health & FW, GoI (available at http://indiagovernance.gov.in/files/view.pdf)

LLIN intervention in Ghana reports a unit cost of $5.38 for providing an LLIN (including only materials, transport and storage), which is higher than that of *Mo Mashari* (roughly $4.50).[129] Other studies in the context of low and middle income coutries (LMICs), as summarised in a systematic review of various anti-malaria interventions, presented estimates ranging between $2.97 and $19.20 with a median of $7.03.[130]

Box 9: Unit cost of distributing Long Lasting Insecticide Nets (LLINs) under *Mo Mashari*

The key initiative under the *Mo Mashari* programme is the distribution of LLINs to protect pregnant mothers from malaria. Starting as a pilot in five high-prevalent districts in 2009, the programme currently covers seven districts. LLINs are distributed through local health workers (ANMs) during antenatal check-ups, VHNDs, immunisation days, and other specified days. The programme invests substantial resources in behaviour change communication (BCC) to promote the use of LLINs and to ensure proper use and maintenance of the distributed nets by the users. About 2.9 million bed nets were distributed up until 2012-13. The table below presents the estimated unit cost of this service (i.e. cost per LLIN distributed).

	2010-11	2011-12	2012-13	Total
Cost of LLIN (Rs.)	29,690,483	631,985,450	126,901,350	788,577,283
Cost of transportation (Rs.)	50,675	2,914,852	268,000	3,233,527
Cost of Storage (Rs.)	100,000	600,000	200,000	900,000
Cost of BCC (Rs.)	4,478,000	8,995,503	1,871,250	15,344,753
Total Cost (Rs.)	34,319,158	644,495,805	129,240,600	808,055,563
Total LLIN distributed	101350	2278724	536000	2,916,074
Unit cost (Rs.)	**339**	**283**	**241**	**277**

Data Source: TMST

5.4.1.5 In terms of the organisation of DFID and its TA partners, the model shows promise as an efficient approach but there are issues with the interplay between TA and FA in this model that will still need to be addressed.[131]

Several components of DFID TA provision represent a low-transaction cost approach to delivery, in terms of 'internal' value for money. As discussed below in more depth, TA support is delivered primarily through three different modes: 1) consultants embedded in the departments and stationed at the TA team office or the concerned government department; 2) technical agencies sub-contracted by TAST/BTAST/TMST; and 3) other technical agencies directly contracted by DFID. The TA activities are supervised by an Indian-led team of DFID staff located in Delhi. Consultants are locally recruited, well-trained, and familiar with the context and people, implying a cost-efficient approach to staffing, with a low transaction cost of providing TA. In addition, the 'hub and nodes' model of state and district level TA represents a potentially low transaction cost way of delivering TA. The presence of the district teams has added significant value; for example, in developing district action plans, evaluation of VHSND, building capacity of Village Health and Sanitation Committees and frontline workers; and support to the QI process in selected hospitals. Overall, their presence and support is well appreciated by the government officials and frontline workers.[132]

[129] Smith Paintain *et al.* (2014). 'Evaluation of a universal LLIN distribution in Ghana: cost effectiveness and hang-up activities' *Malaria Journal* 2014, 13:71.
[130] White *et al*. (2011). 'Costs and cost-effectiveness of malaria control interventions – a systematic review'. *Malaria Journal 2011:* 10: 337.
[131] Bihar: field observations and KII; case studies on FFHI and Gram Varta; OPRs; Odisha: field observations and KII, case studies on QI and Shakti Varta, OPRs; Madhya Pradesh: field observations and KII, case studies on QI, OPRs.
[132] From KII at Jehanabad district (Bihar), Sehore (MP) and Kandhamal (Odisha),where the district programme managers (DPMs) of the government programmes unequivocally highlighted the TA support provided by the local consultants of the TAST/TMST.

There is evidence that the model of TA facilitates provision of complementary streams of support at the upstream and downstream levels. Across the three states, the FA is allocated to the districts according to the plan, but the support is not limited to DFID's priority districts.[133] The fact that the downstream FA does not strictly support the focus-district approach might be understandable in the case of a sector budget support, but the concern is that the FA will be too fragmented to create a critical and concentrated focus on improving state programmes. However, downstream TA is more intensively used in the high-priority districts through the district counterpart of the TA teams. The strategy of the TAST's extension to the district level is an appropriate mode of delivering TA downstream, where capacity is lower and bottlenecks are more difficult to negotiate (as compared to upstream units). In other words, the downstream TA potentially contributes to greater efficiency of the upstream support.

There is evidence from stakeholders that addressing bottlenecks is more difficult when there is no FA to leverage. The example of the CLTS approach in Odisha is a good illustration. Although it is reported by DFID that progress has since been made, at the time of data collection the implementation of the approach was at a preliminary stage and was being piloted in only six districts. There have been multiple documented blockages in the system, which include high demand-side barriers and the low priority given to the approach by government officials in comparison to the mainstream (subsidy-based) approaches[134] and this has resulted in significant delays in delivery. From DFID's side, it has proved quite difficult to address these bottlenecks since no FA is provided to DRD. The TMST has, as a result, reported that it has less bargaining power in its interface with DRD, compared to the same with DHFW and DWCD.[135]

5.4.2 Summary of findings relating to efficiency

- There is compelling evidence that the support to strengthening/reforming institutional mechanisms has high *potential* to deliver efficiency gains. However, at this stage the evidence for *actual* efficiency gains from these upstream interventions is mixed.
- The strongest evidence for efficiency gains, achieved as a result of upstream support by DFID, is from those interventions that have resulted in increased utilisation of funds, more optimal use of infrastructure, and targeted allocation to high burden or poor districts
- While there are some examples of evidence generation to support policy and increased efficiency, in all three states, the high potential of these interventions has been largely unexplored.
- There is some emergent evidence of efficiency gains resulting from 'downstream' interventions supported by DFID. The most significant of these relates to the role of community mobilisation interventions in improving efficiency of integrated services at local level.
- In terms of the organisation of DFID and its TA partners, the model shows promise as an efficient approach but there are issues with the interplay with TA and FA in this model that need to be addressed.

Overall, evidence of efficiency gains achieved to date is strong in some intervention areas but emergent in others. However, given that many of the DFID-supported interventions have either explicitly or implicitly been focused on improving overall efficiency of health systems in the three states, there is clear evidence of potential future efficiency gains.

[133] For example, Nalanda where the FA is used to build a medical college is not one of the DFID's priority districts.
[134] The major challenge in removing these blockages is the integration with other community-led initiatives on health and nutrition, and the routine surveillance works of the frontline workers.
[135] The statement should be taken with caution since it reflects the perception of the WASH team at the TMST, Odisha, and thus does not necessarily reflect a general view.

5.5 Effectiveness

Effectiveness is related to the outcomes of an intervention; therefore, the key question is: whether and to what extent the key interventions and partnerships under DFID initiatives are successful in achieving the desired changes in health outcomes. Given the limited resource envelope, it is also important to consider whether funds are being allocated to cost-effective interventions. This analysis considers trends in coverage indicators and in key impact indicators.

5.5.1 Findings

5.5.1.1 Trends in coverage indicators are mixed across the three states.[136]

During the DFID-supported period, progress in improving coverage of health services has been mixed across the states. Table 15 presents the progress in key coverage indicators related to health and nutrition programmes in MP, Bihar and Odisha, based on the three rounds of Annual Health Survey data. The progress is compared with Uttar Pradesh (UP), an NRHM-designated high-focus state,[137] but one which is not supported by DFID.

Across both MP and Odisha, all seven coverage indicators were higher in 2010/11 and 2012/13 when compared to UP, with the exception of the % safe delivery at home in Odisha. MP and Odisha showed better absolute improvements than UP in four and three of the indicators respectively, suggesting a reasonable performance given that they are likely to be more prone to diminishing returns. Overall, Bihar has performed comparatively poorly in terms of reported coverage in 2012/13, but showed better percentage point improvements than UP in three indicators (although this was very marginal [0.2%] in two cases). However, trends in Bihar should be interpreted with caution, given that DFID support started late (in 2010) and it may be too early to realise its effects on service indicators. Despite the lack of progress in several of these indicators, perceptions about the health service delivery system have improved remarkably in the past few years. The Citizens Report Card on public services in rural Bihar[138] conducted in 2013 reported that about 86% of the respondents were satisfied with improvement in health facilities, while 71% were satisfied with AWCs.

Table 15: Trend in coverage indicators: MP, Odisha, Bihar and UP

Key coverage indicators	MP		Odisha		Bihar		UP	
	2010/11	2012/13	2010/11	2012/13	2010/11	2012/13	2010/11	2012/13
% institutional delivery	76.1	82.6	71.3	80.8	47.7	55.4	45.6	56.7
% safe delivery at home	26.0	38.3	20.5	24.5	18.4	30.0	21.8	28.9
% children fully immunised	54.9	66.4	55.0	63.8	64.5	69.9	45.3	52.7
% full ANC	13.3	16.2	18.6	27.8	5.9	7.8	3.9	6.4
% PNC within 1 week	76.6	84.8	78.5	86.5	54.1	63.8	71.6	81.1
Contraceptive prevalence rate	57.0	59.4	44.0	46.3	33.9	36.5	31.8	37.6

[136] Bihar: National survey data (NFHS, SRS and AHS) for estimating and projecting outcomes: nutritional survey data (NIN), SWASTH logframe milestones on coverage; Odisha: national survey data (NFHS, SRS and AHS) for estimating and projecting outcomes, CCM survey data (NIN), OHNSP logframe milestones on coverage; Madhya Pradesh: national survey data (NFHS, SRS and AHS) for estimating and projecting outcomes; nutritional survey data (NIN), MP logframe milestones on coverage.

[137] Under NRHM 10 states are identified as high-focus states (excluding north-eastern states): Bihar, Chattishgarh, HP, Jammu and Kashmir, MP, Odisha, Rajasthan, UP, and Uttarakhand. Bihar, MP, Rajasthan and UP are traditionally grouped together as BIMARU (i.e. Ailing) states.

[138] *Citizens Report Card on public services in Rural Bihar.* Public Affairs Foundation, Bangalore, 2013.

% children breastfed <1 hour	61.5	68.8	71.5	78.7	30.3	37.0	32.9	39.4

Sources: Annual Health Survey, 2010-11; Annual Health Survey, 2012-13

Table 16: Overview of change in indicators between 2010/11 and 2012/13

Key coverage indicators	Absolute % point change			
	MP	Odisha	Bihar	UP
% institutional delivery	6.5	9.5	7.7	11.1
% safe delivery at home	12.3	4.0	11.6	7.1
% children fully immunised	11.5	13.8	5.4	7.4
% full ANC	2.9	9.2	1.9	2.5
% PNC within 1 week	8.2	8.0	9.7	9.5
Contraceptive prevalence rate (CPR)	2.4	2.3	2.6	5.8
% children breastfed <1 hour	7.3	7.2	6.7	6.5

How much these changes are attributable to the support provided by DFID (in the context of a complex system with multiple actors) is discussed in Box 10.[139]

Box 10: Attributing improvements in coverage to DFID in MP

In terms of coverage indicators in MP, as seen in the table below, the differences between DFID-focus and non-focus districts are not large in absolute terms, but the proportional change in the DFID-focus districts was significantly more than in the non-focus districts (with the exception of the assisted deliveries indicator). Where absolute changes were larger (or smaller) in focus districts, the proportional changes are larger (or smaller) as well.

Comparative changes in coverage indicators

Indicators (%)	Absolute average change in % points		Proportional change	
	DFID-focus districts	Non-focus districts	DFID-focus districts	Non-focus districts
Institutional deliveries	34.2	30.8	91%	61%
Assisted deliveries	23.8	34.4	688%	1216%
Full immunisation	26.4	20.2	137%	48%
ANC	6.0	6.0	154%	59%
CPR	7.5	4.8	15%	8%

Despite the changes being larger in DFID-focus districts than elsewhere, it is important to note that this does not establish causality, most importantly because it does not control for the activities of other actors (most importantly the government of MP), who may also be prioritising the same areas. Although the quantitative analysis cannot directly demonstrate this without more disaggregated (district-level) data on the activities or expenditures of all actors, many key informants felt that the DFID programme (through the activities of the MPTAST) has been well aligned with government priorities, which implies that the role of DFID has been to reinforce an existing focus on the poorer districts, rather than to introduce a new one.

[139] To estimate the changes presented in Box 10, two time points were taken: 2007/08 (baseline) and 2011-12 (most recent data available). The absolute change was calculated as the difference of absolute percentage values between these two periods. The proportional change was calculated as a percentage of the baseline value. For example, institutional deliveries increased by 34.2 points in DFID focus districts between these two periods (absolute change), while it increased by 91% with respect to its baseline value (proportional change). The district average is a simple (unweighted) value across two groups of districts, however, the weighted averages (using population size) are not significantly different from the unweighted results.

Overall, coverage of nutrition services is generally increasing, but there is still scope for improvement, which should lead to more positive outcomes. According to a government data source,[140] coverage of pregnant women and children in MP by supplementary nutrition has increased from 70% and 71% respectively (of total enrolled) in 2009-10 to 97% and 93% in 2012-13, and intensive efforts are being proposed to increase the coverage in high-burden districts. In Bihar, coverage of AWC beneficiaries has increased from 3.2 million in 2010-11 to 3.45 million in 2012-13. However, the increase in coverage masks the fact that about half of the eligible children are not yet registered (or covered) and about two-thirds of the registered children do not receive supplementary nutrition from AWCs.[141] In Odisha, coverage of children (enrolment) for SNP has actually decreased from about 3.9 million in 2008-09 to 3.6 million in 2012-13.[142] Almost all of the innovative initiatives undertaken in the WATSAN in Bihar and Odisha are at the pilot stage. The fact that this is at early stage, combined with the fact that they are scattered across many districts, means that it proved difficult to assess their combined effects.

5.5.1.2 Progress in outcome and impact indicators has also been mixed.[143]

In MP, progress against health outcome targets has been faster than progress against nutrition targets. In MP, most of the HSRP's health outcome targets as listed in the logframe have been achieved or are likely to be achieved very soon. It should be noted that, while some of the impact- and outcome-level targets listed in the logframe have not changed over the course of the programme, others have been revised to reflect progress for example, the targets for IMR have been made steadily more ambitious.[144] On the other hand, the progress in nutrition has been slow, at least until 2011-12. Despite the achievement records in Table 17, the relative position of the state vis-a-vis other comparable states remains unchanged.

Table 17: MPHSRP's targets and achievements (2010/11-14/15)

Key outcome indicators of MPHSRP	Baseline	MP target (2015)*	Achieved	Source of data
IMR	76	47	54	SRS, 2013
U-5 MR	94	73	73	SRS, 2012
MMR	335	230	230	SRS, 2010-12
% underweight children	58%	45%	50%	NIN, 2011

** MPSHRP logframe Nov. 2013*

There have been improvements in many health indicators in Odisha, although it is still performing comparatively poorly. Table 18 presents a summary of OHSNP's achievements in basic health and nutrition outcome indicators, with respect to the listed milestone targets.[145] It is important to note that the some of the original programme targets were ambitious (for example, target of underweight children: 25%); however, there has been a remarkable drop in deaths in Odisha from MDG-related health conditions. The drop in infant deaths is especially notable: about 62,000 infants were dying per annum in Odisha at the beginning of the DFID programme, with about 70% (43,000) dying within the first month of life. Despite substantial population growth over the decade, the numbers have gone down to about 44,700 infant and 33,000 neonatal deaths per annum in 2012-13. This sharp decline in IMR from 73 per 1,000 live births in the year 2006 to 53 in 2012 was also seen in many other states, but Odisha's IMR

[140] APIP, 2013-14, DWCD, GoMP.
[141] *Evaluation report on ICDS.* Planning Commission of India, 2011. p.47.
[142] APIP, 2013-14, DWCD, GoMP (p.53)
[143] Bihar: national survey data (NFHS, SRS and AHS) for estimating and projecting outcomes, nutritional survey data (NIN), SWASTH logframe milestones on impacts ; Odisha: national survey data (NFHS, SRS and AHS) for estimating and projecting outcomes, CCM survey data (NIN), OHNSP logframe milestones on impacts; Madhya Pradesh: national survey data (NFHS, SRS and AHS) for estimating and projecting outcomes, nutritional survey data (NIN), MP logframe milestones on impacts.
[144] Logframe target for IMR was revised from 52 per 1,000 (December 2011), to 51 per 1,000 (January 2013), to 4 per 1,000 (November 2013).
[145] Given the timing of this assessment, the November 2012 logframe was used as a basis for reporting targets. The team note that there has since been a subsequent revision (September 2014), but that there has not been a change in the targets listed.

declined at a slightly faster rate than those in the same group of low-performing states. Its state rank in terms of rural IMR dropped from second to fourth highest during the period, and will likely be fifth in 2013/14.[146]

Table 18: OHSNP targets and achievements in Odisha (2007/8-14/15)

Key outcome indicators of OHSNP	Baseline	OHSNP target (2015)*	Achieved	Source of data
IMR	69	50	53	SRS, 2013
U-5 MR	90	63	68	SRS, 2012`
MMR	258	200	235	SRS, 2013
% underweight children in HB districts	40%	25%	39%	NBLS, 2011
% anaemia among children in HB districts	67%	50%	66%	CCM-1
CPR	38%	50%	47%	AHS, 2011-12

**OHSNP logframe Nov. 2012*

The programme in Bihar has met its target for maternal mortality, but is showing slower progress in other health indicators. Table 19 below presents a summary of SWASTH's achievements in basic health and nutrition outcome indicators with respect to the targets spelt out in its milestones (as per the original logframe provided to the evaluation team). SWASTH's maternal mortality target has been achieved, and indeed the latest revision to the logframe reflects a revised target of 133 for 2016. On the other hand, the progress in child health (U-5 mortality and nutrition) has been slow, at least up to 2012.

Table 19: SWASTH's targets and achievements (2010/11-15/16)

Key outcome indicators of SWASTH	Baseline	Bihar target (2015-16)*	Achieved	Source of data
U-5 MR	77	58	70	AHS 2012-3
MMR	312	229	219	SRS, 2013
% underweight children	55%	46%	52%	CCM, 2011

** SWASTH logframe (undated)*

There is scope for better incorporation of health outcome data into government planning processes. The evidence generated through TA support primarily focuses on the process of innovations and, in some cases, outputs of specific interventions (e.g. assessment of emergency response services), but does not reflect much orientation to measure, assess or forecast the health outcomes. However, there is some evidence – for example, in Bihar – that TA might have contributed to the increased use of survey data (SRS, AHS, CCM) in government planning processes.

[146] In 2006, Odisha was following only one state (MP) in terms of rural IMR (76 in Odisha and 79 in MP). In 2012, it ranks 4th, after MP, Assam, and UP. Given the same rate, it is expected to go further one rank down (after Rajasthan) in 2013/14.

5.5.1.3 There is potential for support to both upstream and downstream interventions to improve health outcomes; however, this has not yet been proven.[147]

Upstream support should catalyse the effectiveness of downstream interventions and services, with resultant improvements in health outcomes. The support to establish various independent cells within government departments is expected to relieve some of the key bottlenecks in providing effective service delivery, and the establishment of the Procurement Cell is a good example. The upgrading of the Procurement Cell to a well-structured Public Health Service Corporation will help set a high standard for procurement, quality control, storage and distribution of all health commodities in line with international practices and thereby improve access to drugs. Improved access to drugs has gained more importance in recent times because MP, Bihar and Odisha, like some other states, have adopted a free drug distribution scheme in all public facilities as a part of their drive towards universal health coverage, the principle adopted in the 12th five-year plan. Similarly, the decentralisation of procurement and distribution of supplementary nutrition has already started showing improvements in service delivery. These combined interventions should function to improve basic health conditions through both direct improvements in nutrition levels and overall strengthening of the system.

The type of downstream interventions that are being supported show good potential to have a positive impact on health outcomes. Some good examples include: 1) the ABM programme and its subsequent implementation through extensive capacity building and complementary upstream support: here the downstream support is aligned with proven high-impact interventions such as strengthening CEmONCs to provide emergency and obstetric care to complicated pregnancy cases; 2) the ongoing process of building new infrastructure for training or service delivery through DFID's FA: here, these interventions are expected to contribute to improved MCH indicators; 3) in Odisha, the support of LLIN distribution for pregnant women has already been able to avert a good number of maternal and child deaths in high-burden districts; 4) the establishment of Skill Labs for training ANMs and staff nurses in the state is expected to significantly improve the skills of nursing staff in handling critical MCH cases, especially in rural and underserved areas where doctors and specialists are not easily available.[148]

The impact of community mobilisation initiatives (especially PLA) has yet to be assessed, but community ownership in integrating health, nutrition, and sanitation is potentially highly effective, as evidenced from similar approaches implemented in other states. For example, the *Johar* experiment by Ekjut Foundation had shown how the women's group members themselves became health advocates and steered positive health seeking

[147] Bihar: evidence on high level of clients' satisfaction and improved utilisation in case of FFHI intervention (case study on FFHI), qualitative evidence on community mobilisation (case study on Gram Varta); Odisha: evidence on high level of clients' satisfaction and improved utilisation in case of QI intervention in Kandhamal district (case study on QI), qualitative evidence on community mobilisation (case study on Shakti Varta); Madhya Pradesh: evidence on high level of clients' satisfaction and improved utilisation in case of QI intervention in Tikamgarh district (case study on QI); Other: existing evidence linking quality improvement strategies to improved MNCH outcomes is extremely limited, although there is a consensus among researchers that it is a worthwhile goal (Dettrick, Z., Firth, S., Jimenez Soto, E. (2013). Do Strategies to Improve Quality of Maternal and Child Health Care in Lower and Middle Income Countries Lead to Improved Outcomes? A Review of the Evidence. PLoS ONE 8(12): e83070. doi:10.1371/journal.pone.0083070); only a few evidences on the impact of community mobilization/empowerment on MNCH status are available. The evidences show positive results (e.g., Tripathy, P. *et al.* 'Effect of a participatory intervention with women's groups on birth outcomes and maternal depression in Jharkhand and Orissa, India: a cluster randomised control trial'. The Lancet. Vol. 375, Issue 9721, pp.1182-1192, 3 April 2010).

[148] The outcome of a series of TA initiatives to build capacity of frontline workers on modern and innovative approaches of MCH care have yet to be assessed, but given that poor capacity is one of the critical bottlenecks in the service delivery system, it is expected to be reflected in better health outcomes.

behaviour among rural women within a short span of time.[149] An intervention in rural Nepal, entailing women's groups convened by a local woman facilitator, demonstrated healthier behaviours in intervention clusters; for example, women in these clusters were more likely than in control clusters to have had antenatal care, to have given birth in a health facility, and to have used a clean home delivery kit.[150] Other interventions, such as the *Warmi* project of Bolivia in Latin America, have shown that women's groups working through the PLA cycle improved maternal and neonatal health-seeking behaviour substantially in a fairly short time.[151] Evidence from the case studies (see Box 11 below and Annex F) similarly supports the potential for these interventions to positively influence the health care-seeking behaviour of women, which is likely to lead to associated improvements in health outcomes.

Box 11: Gram Varta in Gaya district, Bihar: Community mobilisation for health, nutrition and WATSAN

Gram Varta is a community-based intervention that imparts knowledge and raises awareness through community dialogue on issues related to health (mainly maternal and child health), nutrition, water and sanitation (WATSAN). No impact evaluation of Gram Varta has been done to date; however, FGDs with several women's groups reflected a positive impact of the intervention on their knowledge and perception. For example, a young mother of a five-month old girl shared her experience:

> *The birth of my daughter was assisted by the auxiliary nurse midwife (ANM). I am breastfeeding my child and also fed her with first thick yellow milk (colostrums). I have a card given by ANM, which I carry when she visits village. This card also has information about my antenatal check-ups and the iron tablets which I had consumed. My child has also received immunisation doses. I have not yet started giving her any food but soon I will. I will give her bread mashed in milk with jaggery and continue to breastfeed her.*

The facilitators, the district programme coordinator of WCD, and the resource persons from *Reach India* concurred that the intervention has been successful in changing health-seeking behaviour in women, although no quantitative data was available to validate their claim. One of the facilitators shared her experience:

> *Women were reluctant to administer immunisation doses, thinking that their child will have fever. Such beliefs were more prevalent among women belonging to mahadalit (the lowest rung in the caste hierarchy) women. We address such misbeliefs in our community meetings. We are noticing changes in their behaviour. Now women from this section of society are coming forward and are bringing their children for immunisation.*

Source: Case study on Gram Varta by IIHMR

[149] Rath, S., *et al.* 'Explaining the impact of a women's group-led community mobilisation intervention on maternal and new-born health outcomes: the Ekjut trial process evaluation; *International Health and Human Rights* 2010, 10:25.

[150] Manandhar *et al.* 'Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised controlled trial' *Lancet* 2004: 364: 970-79.

[151] Vega, E S D L, 'WARMI II: Building bridges between the community and the health services with a gender and intercultural approach'. Series on 'Best Practices in gender, ethnicity and health'. Washington, D.C: PAHO 2008.

5.5.1.4 DFID's investment in MP's, Bihar's and Odisha's health sectors is expected to bring a high return and the evidence suggests that they are very cost-effective programmes.[152]

This section analyses the extent to which DFID's supported interventions have reflected a good investment in terms of funding cost-effective interventions. The present analysis highlights the gains made during the DFID support period and will present a quantitative estimate regarding DFID's attribution on the basis of a series of assumptions (see below and further details in Annex H). The analysis is based on three health 'goals' given in the revised logframe outcomes[153] of the DFID programme in the state, that imply reductions in: 1) U-5 deaths, 2) maternal deaths, and 3) prevalence of underweight among 0-5 years children.

The analysis is done in five steps:

Step 1: *Estimating deaths/cases from three health outcomes (U-5 mortality, maternal mortality, and underweight morbidity)*

Two scenarios were considered:
1) The counterfactual scenario, which assumes that the average rate of progress in health indicators during 2006-07 and 2010-11 will remain unchanged until 2017 (i.e. a trajectory of progress without DFID support)[154], and

2) The modelled scenario, which assumes that the rate of progress would follow the projected rate of progress given in the logframe (with DFID support). The projection stretches beyond 2014-15 (the last year of the current programmes), to 2016-17, based on the assumption that the impact of the DFID programme will continue to be seen even after its expiry, or at least until the end of the 12th plan period (2012-17).

Step 2: *Estimating lives saved /cases averted in three health outcomes (U-5 mortality, maternal mortality, and underweight morbidity)*

The estimates from Scenario 1 are subtracted from those of Scenario 2 to derive the net numbers of lives saved or underweight cases averted from 2011/12 through the end. These estimates reflect the net benefits accrued through the combination of national programmes and DFID-supported programmes.

Step 3: *Estimating net DALY gains*

[152] Bihar: national survey data (SRS and AHS) for estimating and projecting outcomes, WHO estimates on disability weights, http://www.who.int/healthinfo/ global_burden_disease/ GBD2004_DisabilityWeights.pdf ?ua=1; WHO estimated threshold for assessing cost-effectiveness; case study on Gram Varta; Odisha: national survey data (SRS and AHS) for estimating and projecting outcomes, WHO estimates on disability weights, WHO estimated threshold for assessing cost-effectiveness, LLIN programme data and 'Evaluation of use of LLIN by pregnant mothers under Mo Mashari Scheme'. DHFW, GoO (commissioned by TMST), case study on Shakti Varta; Madhya Pradesh: national survey data (SRS and AHS) for estimating and projecting outcomes, WHO estimates on disability weights, WHO estimated threshold for assessing cost-effectiveness; Other: World Malaria report for estimates on various parameters, various articles from *Malaria Journal* for benchmarking (e.g., White *et al.* (2011). 'Costs and cost-effectiveness of malaria control interventions – a systematic review'. Malaria Journal: 10: 337).

[153] Use of the projection is considered reasonable because the log-frame targets are regularly revised and updated by the respective state programme managers, based on the national survey data (e.g. annual SRS data on infant and maternal mortality) whenever available. The projections for the initial years (2011-12 and 2012-13) made in 2010-11 were replaced by the actual SRS estimates, and the projections for subsequent years were updated accordingly. The dynamic adjustment in the projected trajectory makes it reasonably acceptable as the basis for modelled projection.

[154]The validity of this assumption depends on the condition that the average growth rate of resource flow to the health sector during pre-intervention period remains the same in the post-intervention period. This is a reasonable assumption since, evidently, no significant 'additional' inputs were received from other development partners in the post-intervention period. Similarly, the total share of government expenditure on health, nutrition and WASH did not reveal any sharp upward trend during this period. However, the sensitivity of this assumption has been tested below by assuming an alternative trajectory path.

The health gains are converted into DALY gains based on a series of assumptions, as detailed in Table 20 below:

Table 20: Assumptions for calculating DALY gains

Indicator	Assumptions		
	BIHAR	MP	ODISHA
Under-5 MR	Life expectancy at 1-5 years of age in Bihar at 2006-10 was 68. We assume that it will increase to 70 in 2010-17 (source: SRS-based abridged life table 2006-10, Census of India).	Life expectancy at 1-5 years of age in MP at 2006-10 was 66.3. We assume that it will increase to 68 in 2010-17 (source: SRS-based abridged life table 2006-10, Census of India).	Life expectancy at 1-5 years of age in Odisha at 2006-10 was about 65. We assume that it will increase to 68 in 2010-17 (source: SRS-based abridged life table 2006-10, Census of India).
MMR	Life expectancy at 25-30 years of females in Bihar at 2006-10 was 48. We assume that it will increase to 50 in 2010-15 (SRS based abridged life table 2006-10, Census of India).	Life expectancy at 25-30 years of female in MP at 2006-10 was 48. We assume that it will increase to 50 in 2010-15 (SRS based abridged life table 2006-10, Census of India).	Life expectancy at 25-30 years of female in Odisha at 2006-10 was about 45. We assume that it will increase to 50 in 2010-15 (source: SRS based abridged life table 2006-10, Census of India).
Underweight children (0-5 years)	Disability weight of wasting (0.053) is used as the proxy for the same of underweight (WHO estimates[155]). Life expectancy is same as U-5 MR (68). An underweight child will bear the disability burden until death.		

Table 21 below illustrates the lives saved and associated DALY gains:

Table 21: Estimated lives saved, underweight cases averted and DALYs gained for MP, Bihar and Odisha

	Odisha		MP		Bihar	
	Lives saved	DALY gained	Lives saved	DALY gained	Lives saved	DALY gained
U-5 mortality	17,170	1,167,559	23,176	1,575,955	185,609	12,992,602
Maternal mortality	2,571	128,574	5,184	259,208	1,0571	528,566
Underweight cases	2,986,340	10,762,768	1,421,617	5,123,506	2,720,416	10,092,744
Total DALY		**12,058,901**		**6,958,669**		**23,613,912**

Step 4: *Estimating DFID's attribution rate*

It is assumed that the generation of the additional gains after 2010-11 was possible due to the combined extra push exerted by the national programmes – primarily NRHM, ICDS, national WASH programmes and the complementary DFID support. In other words, the base health system (without this extra push) would still be able to improve the health outcomes, as given in the counterfactual estimates. Hence, DFID's contribution to these incremental gains is logically determined by the share of its investment in total incremental programme investments in the state, as per the assumptions in Table 22[156]:

Table 22: Assumptions for estimating DFID's attribution rate

Calculation	Assumptions

[155] http://www.who.int/healthinfo/global_burden_disease/GBD2004_DisabilityWeights.pdf?ua=1

[156] Relevant expenditure by other DPs is not included in total programme expenditure. This is a limitation of the analysis, which is primarily due to unavailability of complete actual expenditure data incurred by the DPs. However, given that the non-budgetary support by other DPs accounts for a small percentage of the resources used in public service delivery, the exclusion is not expected to have a serious effect on the results. The sensitivity of this assumption has been tested below by assuming a higher and a lower attribution rate.

DFID's attribution %	The additional gain is due to incremental programme support. Hence, DFID's attribution is estimated as a % of DFID's contribution in the total allocation in NRHM + ICDS + DFID's FA and TA.
DFID's projected investment	Whole allocation will be utilised.

Step 5: *Calculating cost per DALY gained in DFID's programme*

Finally, the cost per DALY gained is estimated adding the DALY gains from Table 21. The proposed DFID investment in the state is divided by this number to obtain the cost per DALY gain (Table 23).

Table 23: Cost per DALY gained for MP, Bihar and Odisha

	MP	Bihar	Odisha
Net DALY gains	6.96	23.61	12.06
DFID's attribution rate	0.04	0.05	0.04
DFID attributable DALY gains	0.30	1.25	0.53
Total DFID investment (£million)	120.00	145.00	100.00
Cost per DALY gained	**401.97**	**115.64**	**189.33**

Notwithstanding the limitations highlighted in Chapter 4, DFID's investment in MP's, Bihar's and Odisha's health sectors is expected to bring a high return and stands out as a very cost-effective intervention (see Table 24 for summary of results, and Annex H for further details.)

Table 24: Cost-effectiveness analyses for MP, Bihar and Odisha

State	Cost per DALY	GDP per capita	Cost-effectiveness judgement[157]
Madhya Pradesh	£401.97	£360 (2010-11), which is £720 when adjusted to PPP	**Very cost-effective**
Bihar	£115.64	£300 (2012-13), which is £600 when adjusted to PPP	**Very cost-effective**
Odisha	£189.33	£260 (2012-13), which is £520 when adjusted to PPP	**Very cost-effective**

Step 6: *Sensitivity analysis*

The sensitivity of the results depends primarily on two crucial assumptions: (1) the counterfactual scenario, and (2) the attribution rate:

- For the counterfactual scenario it was assumed that the rate of progress in health outcomes in the pre-intervention scenario would have remained the same in the post-intervention period (without DFID support). An alternative scenario would be that there was an *increase* in this rate, for example due to increased activities under national programmes.
- The attribution rate was estimated based on DFID's share in the total programme expenditure incurred by the governments. There are two alternative possible cases in relation to this assumption: (a) a *lower attribution* rate due to contribution by other DPs, and (b) a *higher attribution* rate if we consider the potential additional (but intangible) system-wide effects of DFID's investment (see Annex H).

Based on the above assumptions, the following sensitivity analysis presents two alternative scenarios, linked to feasible variations in the key assumptions, which represent upper and lower limits for estimates of cost-effectiveness:

[157] WHO uses the following thresholds to assess cost-effectiveness of interventions: an intervention that saves one DALY for less than three times GDP per capita is considered cost-effective, and one that saves a DALY for less than GDP per capita is deemed very cost-effective (http://www.who.int/choice/costs/CER_levels/en/index.html).

Alternative scenario 1: Increased rate of progress in the post-intervention period without DFID support and lower attribution rate

We assume that the decline in deaths of U5 children and mothers and the underweight prevalence among U5 children has been increasing 25% more on average than the assumed rate throughout the post-intervention years. It is also assumed that DFID's contribution to total state programme expenditure is as low as 3%. Taken together, these new assumptions provide the upper bound of the CE ratios (Table 25).

Table 25: Cost per DALY gained, based on conservative assumptions

	MP	Bihar	Odisha
Net DALY gains	4.82	16.19	9.01
DFID's attribution rate	0.03	0.03	0.03
DFID attributable DALY gains	0.14	0.49	0.27
Total DFID investment (£million)	120.00	145.00	100.00
Cost per DALY gained	**829.5**	**298.5**	**369.8**

Alternative scenario 2: Increased attribution rate

We assume that the attribution rate is 7% (the estimated rate ranges between 3-5%) considering the externality and long-term effects. The new set of estimates may be considered as the lower bound of the CE ratios (Table 26).

Table 26: Cost per DALY gained, based on assumption of increased attribution rate

	MP	Bihar	Odisha
Net DALY gains	6.96	23.61	12.06
DFID's attribution rate	0.07	0.07	0.07
DFID attributable DALY gains	0.30	1.25	0.53
Total DFID investment (£million)	120.00	145.00	100.00
Cost per DALY gained	**246.4**	**87.7**	**141.8**

The sensitivity analysis suggests that DFID's investment is likely to be cost-effective in both scenarios. Even using more conservative interventions described above, the DFID interventions in Bihar and Odisha are still *very cost-effective.* The MP programme is judged as *cost effective.*

In the main analysis, the lower costs per DALY in Bihar and Odisha may be attributed to several factors. As illustrated in Table 27, the projected DALY gain in Odisha accrued from substantial reduction in underweight cases (422 per 100 population, compared to 113 and 154 in MP and Bihar respectively). This is evidently due to the state's better performance in nutrition sector, fuelled by a strong political commitment and strengthened management of nutrition programmes. The DALY gain in Bihar, on the other hand, is at least partly driven by the much larger size of the U-5 population and faster drop in U-5 mortality rate – the U-5 population in Bihar is approximately 1.4-1.5 times higher in a given year than that in MP; in addition, the U-5 mortality rate in Bihar is projected to drop by 25 points between 2011/12 and 2016/17 compared to 18 points in MP. Consequently, the lives of U-5 saved in Bihar is projected to be 8 times higher than that of MP.

Table 27 Comparative analyses of DALY gains for MP, Bihar and Odisha

	Odisha		MP		Bihar	
	% of DALY	DALY gained per 1,000 target	% of DALY	DALY gained per 1,000 target population	% of DALY	DALY gained per 1,000 target population

		population				
U-5 mortality	9.7%	45.3	22.6%	34.2	55%	195.2
Maternal mortality	1.1%	25.3	3.7%	21.7	2.2%	29.4
Underweight cases	89.2%	421.9	73.6%	112.9	42.7%	153.7
Total	**100**		**100**		**100**	

* Target population for U-5 mortality and Underweight cases = cumulative population of U-5 children (2012/13–16/17); for maternal mortality = cumulative live births (2011/12-16/17).

Box 12 presents an intervention-wise cost-effectiveness analysis, based on the case study of LLINs done in Odisha. The cost per case and per child death averted compares well with those reported in other studies; however, the cost per maternal death averted is high. There are likely to be economies of scale associated with planned scale-up.

Box 12: Case study of cost-effectiveness of *Mo Mashari* in Odisha (see Annex H for full analysis)

The *Mo Mashari* programme, designed and implemented by DFID-supported OHNSP targets pregnant women since they are highly vulnerable to malaria and at greater risk of serious sequelae. The programme runs in parallel with a GoO-sponsored LLIN distribution intervention for general population (including pregnant women) in 26 high-burden districts (see Box 8).

It is estimated that the LLIN distribution to pregnant women and children over three years (2010-13) averted an estimated 285 maternal deaths and 2,305 child deaths, and the table below shows that the estimated cost per averted case is $11-$13, which compares favourably with other studies. For example, according to a recent study, the gross cost per averted case in a child-focused LLIN intervention in Uganda was $28. More evidence is available for cost per death averted, which ranges from $468 to $4,300. The *Mo Mashari* result is much higher if only pregnant women are considered ($9,106 per maternal death averted), but within the range if only children are considered ($2,504). Given that there are potential economies of scale associated with expansion, as the *Mo Mashari* programme is scaled up across the state then costs should fall and there should be an associated reduction in cost per case or death averted.

	In Rs.	In $
Cost/Pregnant woman malaria case averted	678	11
Cost/Child malaria case averted	796	13
Cost/Pregnant woman malaria death averted	546,377	9,106
Cost/U-5 children malaria averted	150,225	2,504
Cost/Any malaria death averted	267,179	4,453

5.5.2 Summary of findings relating to effectiveness

- There is mixed evidence of progress in coverage, outcome and impact indicators across the three states. In MP, most of the HSRP's health outcome targets as listed in the logframe have been achieved or are likely to be achieved very soon; however, progress in nutrition has been slow. There have been reductions in many health indicators in Odisha, and the drop in infant deaths is particularly notable, although it is still performing comparatively poorly. The programme in Bihar has met its target for maternal mortality, but is showing slower progress in other health indicators.
- There is potential for support to upstream interventions to improve health outcomes; however, this has not yet been proven. It would also be difficult to attribute this to DFID.

There is a clearer link to the downstream support, where quality improvements and infrastructure can be expected to result in better healthcare and thus improved outcomes.

- The analysis suggests that DFID's investment in the three states is cost-effective based on international benchmarks for cost per DALY.

Overall, while it is clear that many of the interventions that have been supported by DFID have the *potential* to improve the effectiveness of the health system, there is insufficient evidence to demonstrate that significant improvements in effectiveness have been achieved to date because progress in terms of key coverage, outcome and impact indicators has been mixed. In the longer term, however, there is evidence to support an assertion that DFID's investments in Bihar, MP and Odisha's health sectors will be associated with significant improvements in these key indicators. The analysis suggests that, if these trends are consolidated, the programmes as a whole will represent cost-effective investments.

5.6 Equity

The key considerations for assessing equity relate to the extent to which equity was considered in the initial design of the programme, how these considerations have been operationalised and how the different categories of intervention have contributed to improvements in equity. Consideration of equity is important in the context of the three states, given the geographical and social disparities,[158] and associated differences in health outcomes and there are clear implications for value money, in terms of allocative efficiency. For example, a child born to an ST or SC household in India has a 50% higher chance of dying before reaching her/his fifth birthday than their higher-caste counterparts.[159]

5.6.1 Findings

5.6.1.1 There is strong evidence of the consideration of equity issues in the design and implementation of the three projects.[160]

Considerations of equity issues are clear in documentation on the inception of the projects. The analysis of headline documentation showed that equity issues were a priority consideration in the formulation of the DFID programmes. For example, in the Odisha Project Memorandum, the purpose of OHSNP is explicitly stated as 'to provide equitable quality health services for the SC, ST, women and other groups ensuring equitable outcomes'[161] and similar references to poor, excluded or underserved groups are made in the memoranda of the other two projects.

A key component of DFID's equity strategy across the three states has been the targeting of priority districts. This is consistent with DFID's strategy of area-based targeting, which is justified as a cost-effective way to reach poor populations when poverty is spatially concentrated.[162] In MP, the project memorandum proposed the 10 poorest districts where DFID would support the reform more intensively. After 2011, 3 districts[163] were dropped and 9 new districts were added to make a set of 16 high-priority districts. The selection of the districts covers about one-third of the state's population, and with one exception, all of the selected districts are ranked as low on the HDI, contain a large number of socially marginalised groups (such as, SC/ST populations), and/or are marked by an above average IMR.[164] DFID's interest to work with tribal populations is clearly reflected in the choice of the districts, which include the 6 districts with the highest proportion of tribal population. The 16 districts, while covering about one-third of the total state population nevertheless include about 45% of total tribal population of the state.

However, in Bihar, the perception of some key informants interviewed was that planned targeting of high-priority districts has been less successful. The departments and programmes

[158] For example, poverty in MP is concentrated in the northern, south-western and the south-eastern districts. The northern region has a high proportion of SCs among its population, while the south-eastern and western regions have a high proportion of STs. These two groups together account for one-third of the total population and roughly two-thirds of the poor.
[159] Thomas, D. A. *et al.* (2013). "Closing the health and nutrition gap – Strategies and Progress in Odisha" Unpublished paper.
[160] Bihar: Selecting Priority Districts for SWASTH Bihar – Concept Note – BTAST 2010; Census 2011; Odisha; Programme Memorandum, OHNSP, Census 2011, Thomas, D. A. *et al*. (2013). 'Closing the health and nutrition gap – Strategies and Progress in Odisha', unpublished paper; Madhya Pradesh: Programme Memorandum, MPHSRP (for selection of districts).
[161] Support to Government of Orissa for Orissa Health Sector Plan Programme Memorandum, DFID.
[162] An alternative could be 'means testing' based on an assessment of income or wealth of individuals irrespective of their geographic location. However, the administrative cost of this is highly prohibitive.
[163] The 10 districts were Sheoppur, Shivpuri, Tikamgarh, Chhatarpur, Panna, Umaria, Dindori, Sidhi, Jhabua and Alirajpur. In the second phase, Sheopur, Shivpuri, and Umaria were dropped.
[164] The IMR data, obtained from Annual Health Survey 2011-12, are much higher than the most commonly used SRS data. The State IMR by AHS is 65, while SRS reports it as 56. SRS does not report district-wise data. We assume that the relative position of the districts remains unaffected by the absolute differences between these two estimates.

supported by DFID have their own priorities and political concerns, and this has significant influence on DFID's selection of districts. In addition, the departments (especially DHFW and PHED) do not always fully accept the district targeting concept. This has resulted in a perception by some stakeholders that DFID support is being 'diluted' across all 38 districts in the state.

The major impetus for dealing with inequities in all three states came from the government itself. There has been growing political will over the past decade to work more for the disadvantaged populations, which has been combined with the transition of national programmes towards a more targeted approach. For example, in MP there has been increasing attention to the quality of MCH and nutrition care, especially in underserved areas. DFID's upstream support helped MP's DHFW to set up a QA Cell in the state headquarters and to design a QA roadmap, a Maternal Newborn Health (MNH) toolkit and a supportive supervision checklist. The MP government has also been addressing gender disparities in the state. A number of new interventions were announced and a few of them were adopted by other states (for example, the *Ladli Laxmi* Scheme targeted at girl children of poor families to combat declining sex ratios[165]). DFID has provided support in this area (as well as for similar initiatives in Bihar and Odisha), a recent example being the TA support provided by the TAST to redesign and refine the existing Woman Empowerment Policy.

In Odisha, a Health Equity Strategy (2009-12) was adopted at DHFW along with the Nutrition Operational Plan (2009-2013) at DWCD to reduce adverse health and nutritional outcomes in high-burden districts with equity-based targets. An Equity Cell has been established at DHFW to implement the strategy, which will act as an internal source of TA for the Department, well placed to guide and support gender and equity mainstreaming, strengthen coordination on gender and equity within the health sector, and improve linkages to nutrition and other key sectors. DFID's support through OHSNP envelops the whole process, and is often inseparable from the subsequent implementation of the equity-related reforms of the concerned departments. The recent PIPs of DWCD, which propose several new initiatives in the KBK+ districts, clearly bear the imprint of the TMST's influence.

In Bihar, DFID has had some success in influencing the department's focus on priority districts. The recent annual plan of the department (APIP, 2013-14) explicitly proposes the establishment of 3,000 nodal AWCS 'across the nine priority districts of SWASTH'.[166] Other areas of support include advising WDC to redesign its organisational structure and enable it to meet the government's ambitious women's empowerment agenda in the state.

5.6.1.2 Many of the DFID-supported interventions at the downstream level have the potential to contribute to improving equity.[167]

Technical support at a decentralised level has functioned to focus attention on the specific needs of priority districts with severe accessibility problems. In all three states, the most important achievement in the area of implementation support is the TA support provided at the district level to prepare district action plans by DHFW and DWCD. This was followed by FA and TA support for implementation, which attempts to address inequity in MCH and nutritional care, and to bring additional resources to poorer districts. According to the district programme managers and several key state officials, the process has been able to highlight the special needs of these districts.

[165] Under the scheme, a National Savings Certificate worth Rs.6000 would be gifted by the government to a newborn girl child each year for the first five years of her life. The girl will start getting cash returns at various stages of her schooling period. Finally, on completion of her 21st birthday she will get the remaining amount, which would be more than Rs.100,000.

[166] APIP 2013-14, DSW, p.11.

[167] Bihar: the recent annual plan of DWCD (APIP, 2013-14), which explicitly proposes the establishment of 3,000 nodal AWCS 'across the nine priority districts of SWASTH'; case study on the quality improvement initiatives (FFHI) in health facilities; Odisha: Thomas, D. A. *et al*. (2013). 'Closing the health and nutrition gap – Strategies and Progress in Odisha'; Madhya Pradesh: KIIs, case study on QI, unpublished paper.

The other forms of implementation support, most of which were initiated in these districts as pilot interventions, have been able to effectively upgrade the districts' position as 'intensive activity centres' and also included intensive capacity building of frontline workers on equity issues in the high-priority districts. In Bihar, for example, the WATSAN support is also addressing inequity through initiatives that are directly linked with poverty or the empowerment of women; for example, the pilots on women caretakers of hand pumps or mini water schemes in Mahadalit habitations in Gaya district.

Community mobilisation has some potential to address core equity issues such as social and power imbalances that act as barriers to women, especially disadvantaged women, in accessing care and promoting maternal and newborn health. Evidence from similar interventions elsewhere suggests high potential for SHGs to address demand-side barriers for disadvantaged women and create conditions favourable for greater empowerment. The PLA initiative under the DFID programme Sanjhi Sehat, Gram Varta and Shakti Varta are designed to use the potential of women SHGs to address the key demand-side barriers faced by women in health, nutrition and WASH. A recently published paper on the trial of a similar intervention in Jharkhand and Orissa (*Ekjut*) suggests that increased women's empowerment in terms of decision making has been one outcome of such interventions.[168] The operational procedures of the DFID-supported PLA initiatives are based on *Ekjut* experiences, which indicate that groups should preferentially be located in the poorest areas, and that programmes should aim for coverage of roughly one group per 500 population. The equity impact of the *Ekjut* intervention was assessed through a trial of PLA intervention. Among the most marginalised, the neonatal mortality rate was 59% lower in intervention than in control clusters; among the less marginalised, the NMR was 36% lower. The intervention effect was thus found to be stronger in the most marginalised groups.[169] The positive impact of community-based health initiatives on behaviours and practices has also been documented; for example, in a study in Uttar Pradesh the equity of programme coverage and antenatal and newborn care practices improved from baseline to endline in the intervention district (with NGO-supported community mobilisation), while showing little change in the comparison district.[170]

5.6.1.3 While there is some consideration of equity issues in upstream support, there is scope for a more systematic focus on equity in support for evidence generation.

There is some evidence of positive results in the context of health inequity. For example, in Odisha, there has been a faster decline in the percentage of moderately underweight children in high-burden districts among STs than others (from 54.4% to 42% for ST, compared to 41% to 39% for others), indicating early signs of closing the gap. In both MP and Bihar, there are a few initiatives in this area that may have indirectly influenced the policy processes to target poorer districts or socially excluded populations. In Odisha, the evidence from CCM has been potentially useful for tracking the progress of OHSNP in high-burden districts.

Tackling violence against women and girls (VAWG) has attained significant attention for evidence generation and interventions, especially in Bihar. For example, with DFID support, a collaborative effort by Population Council and its partners has been launched that focuses on increasing understanding of the risk and protective factors underlying domestic violence. The goal is to identify the interventions that are most effective in reducing the incidence of violence and the perceived threat of violence among women and girls, and promoting the scale-up successful approaches in Bihar. The initiative, which is currently in its

[168] Tripathy P. *et al.* 'Effect of a participatory intervention with women's groups on birth outcomes and maternal depression in Jharkhand and Orissa, India: a cluster randomised control trial'. *The Lancet. Vol. 375, Issue 9721, pp.1182-1192, 3 April 2010.*

[169] Houweling, T. *et al.* 'The equity impact of participatory women's groups to reduce neonatal mortality in India: secondary analysis of a cluster-randomised trial'. *International Journal of Epidemiology* 2013;42:520-532.

[170] Baqui *et al.* 'NGO facilitation of a government community-based maternal and neonatal health programme in rural India: improvements in equity' *Health Policy and Planning* 2008;23:234-243.

second year, aligns with DFID's policy of support to Bihar's health sector and is expected to generate significant evidence through a series of implementation research products and provide support to the government in implementation of the Domestic Violence Act. [171]

There is evidence that upstream interventions provided timely support to the key decision makers in designing and modifying women empowerment polices. The interventions in this category are largely aligned with the governments' policy and initiative to empower women, especially among weaker and socially excluded groups. A recent example is the TA support provided by MPTAST to redesign and refine the existing Woman Empowerment Policy in Madhya Pradesh. The support led to inclusion of several new components in the policy document, such as nutrition and health indicators (including anaemia at all stages of the life cycle), rights to equal opportunities, safe, secure and violence free environment for women in the workplace and educational institutions, delaying age at marriage, and informed choices relating to family planning spacing methods. In Bihar, substantial investment has been made by DFID to strengthen the WDC the state nodal agency for women empowerment filling gaps in human resources and infrastructure, restructuring the programme focus for women's empowerment and violence against women, and preparing a draft policy for women's empowerment.

However, there are clear opportunities where support to evidence generation could be used to improve equity. Although in terms of women's empowerment, a parallel process of informing policy through generating scientific research has also been set up (for example, work on VAWG), the overall focus on equity is arguably limited. With regards to wider equity issues, there has been hardly any systematic or focused effort to generate evidence, such as benefit incidence studies, on how well the benefits of the targeted programmes are reaching the poor (for example, the RSBY health insurance scheme for poor households, or free drug distribution schemes). The barriers to access, faced particularly by socially excluded groups, remain unexplored in the typical assessment studies, which usually present the change in utilisation rate of a service or a facility without much disaggregation. The scope of using recent analytical tools[172] to systematically assess equity aspects of health and nutrition also remains unexplored.

5.6.2 Summary of findings relating to equity

- There is strong evidence of the consideration of equity issues in the design and implementation of the three projects. A key component of DFID's equity strategy has been the targeting of priority districts.
- Many of the DFID-supported interventions at the downstream level have the potential to contribute to improving equity, for example in terms of addressing demand-side barriers for disadvantaged women.
- While there is some consideration of equity issues in upstream support, there is scope for a more systematic focus on equity in support for evidence generation.

Overall, it is clear that equity issues have been a significant consideration during the life of the three projects, although there is room for a greater focus on equity in relation to some intervention areas.

[171] http://cedpaindia.org/banner-project/gender-and-governance/addressing-violence-against-women-and-girls-in-bihar.htm

[172] For example, Analysing health equity using household survey data, The World Bank.

5.7 Sustainability

The key issue in relation to sustainability is the extent to which there is evidence of transfer (or planned transfer) of ownership of the functions of DFID's support from DFID to the state governments. In the context of the three state programmes, ownership can be measured by the government's preparedness to lead and finance the DFID-supported reform initiatives. Sustainability needs to be considered in relation to FA, given that this will cease at the end of the current programmes, but also in relation to TA, i.e. the extent to which TA is capacity building and stimulating permanent reforms within the government.

5.7.1 Findings

5.7.1.1 There is strong evidence that interventions funded through DFID's FA will be taken over by the government.[173]

While the flexibility of DFID's FA is valued, its withdrawal is unlikely to adversely affect the interventions that it is currently funding. DFID FA has been allocated to the governments as long-term budgetary support, providing them with substantial time to prepare for financial sustainability. Importantly, this additional funding is also small in comparison to the increasing NRHM assistance from the central government, implying that the downstream interventions should not be affected by the eventual withdrawal of DFID's FA. KIIs revealed two clear messages from officials at DHFW across the states with more or less the same frequency: firstly, the flexibility in FA use has helped them to fill in some small but critical gaps, and secondly, they know that FA will cease to flow after 2015 and they are fully prepared to continue the interventions with NRHM support. It is, however, important to note that both the departments value DFID's TA more than its FA and expect that it will continue in some form even after 2015.

The FA support at the downstream level is highly substitutable. This is evident from the fact that the departments have already started to scale up some of the DFID-sponsored interventions using their own resources – there are examples of this in all three states. In MP, the most recent PIP of DHFW includes an additional demand (from NRHM) to supplement QI interventions in EmONCs, which is currently ongoing in selected hospitals with DFID's FA support.[174] In Bihar, there is a similar plan to supplement the school health programme (NPSGY) by aligning it with the National Child Health Programme (Rashtriya Bal Swasthya Karyakram). In Odisha, the most recent APIP of DWCD (2013-14) includes an additional demand (from ICDS) to meet the infrastructure and manpower gap in high-burden districts, a clear indication of carrying DFID's pro-poor agenda forward. Similarly, DFID's support to

[173] Bihar**:** The most recent PIP of DHFW (which includes additional demand (from NRHM) to continue DFID-supported programmes, such as NPSGY or scaling up APHC upgrading); APIP of DWCD (2013-14) includes plans to scale up nodal AWCs in the high-priority district., MIS report on fund flow to NRHM. (http://nrhm.gov.in/images/pdf/mis-report/Dec-2013/2-High_Focus_States_Other_than_NE.pdf), KII; Odisha: The most recent APIP of DWCD (2013-14) which includes an additional demand (from ICDS) to meet the infrastructure and manpower gap in high-burden districts. Similarly, according to DWCD's plan, AWCs that have own buildings and are lacking in infrastructure, would be provided funds for upgrades, including provision of child-friendly buildings and water supply and sanitation up to Rs.1,00,000 per building (including provision for AWC cum crèche) on 75:25 cost-sharing basis would be provided under the ICDS Mission, KIIs at DHFW indicate that '... there is no dearth of resources and the government can take care of its own requirements'; Madhya Pradesh: ROP (PIP) of DHFW, 2013-14, item number B.23.2 (http://nrhm.gov.in/nrhm-in-state/state-program-implementation-plans-pips/madhya-pradesh-pro.html), which includes an additional demand (from NRHM) to supplement QI interventions in EmONCs, which is currently going on in selected hospitals with DFID's FA support, ICDS APIP (2013-14), DWCD, MP, P-12, which shows that the state is increasingly leveraging other resources for construction of new child-friendly AWCs in the high-priority districts, such as Backward Regions Grant Fund (BRGF), tribal development, and so on, KII (in DHFW and DWCD).

[174] ROP (PIP) of DHFW, 2013-14, item number B.23.2 (http://nrhm.gov.in/nrhm-in-state/state-program-implementation-plans-pips/madhya-pradesh-pro.html).

construct a new child-friendly model AWC in the high-priority district has been internalised by DWCD and it is most likely that these will be scaled up using internal resources.[175]

5.7.1.2 There is some evidence of sustainability of DFID's technical support to institutional reforms, strengthening information systems and in some areas of implementation.[176]

There are examples of sustainable reforms to institutions. The primary mode of support in this area is TA, which has been focused on the transfer of ownership of the upstream reform process initiated by DFID. The focus here is to build capacities at the state and district levels to sustain the process, an approach in line with DFID's exit strategy. A good example of strategic sustainability is the building or development of institutions within the department (e.g. specific cells to lead on QA, procurement or human resourcing). These cells are led by government officials and supported by TA consultants embedded within the relevant departments.

There is good evidence of sustainability in the field of information systems. The initiatives of MPTAST, BTAST and TMST to improve monitoring and management information systems (MIS) are already owned by the departments, and more similar initiatives are expected. This is especially true for procurement MIS and the MIS for ICDS, where the internal capacity to maintain and upgrade the system has been established through support of TA. The sustainability of the human resources MIS in the DHFW, on the other hand, depends on the department's continuing commitment to update the database on a regular basis.

There is good potential for sustainability of community mobilisation interventions that are not under NRHM, but continued TA is required to sustain current momentum. The interventions in this category are mostly based on TA. The PLA support involves local community-based organisations (such as women's SHG). The intensive focus on the demand side is a recent phenomenon, especially for sanitation, and the TA support is an important catalyst in this process. The responses from the state governments in terms of owning and scaling up the PLA initiatives have been positive so far. For example, starting from a pilot in one block of Odisha, Shakti Varta is now being implemented by the state government in the 15 high-burden districts; similarly, Gram Varta has been scaled up and now covers 9 districts in Bihar, and Sanjhi Sehat in Madhya Pradesh has reached 5 districts with DFID support. It will cover over 180,000 SHGs with a membership of over 2 million women and directly reach a population of over 10 million.[177] Sustaining these initiatives is highly achievable because they use the existing platforms of women's empowerment in the states - for example, the Rural Livelihood Mission (*Jeevika*) and *Mahila Samakhya* in Bihar, Women's Empowerment Programme (Mission Shakti) in Odisha, and the State Rural Livelihood Mission in MP - that have already established and work closely with a large number of women's groups. The administrative and human resource structure of these programmes provide a ready platform for scaling up PLA based initiatives supported by DFID. The findings from *Ekjut* trial also suggest that community mobilisation through women's groups can produce a sustainable and reproducible improvement in neonatal survival in rural areas of India.[178] However, the TA support from DFID is expected to remain relevant high as government's capacity and the TA support from other development partners, such as UNICEF, MI and BMGF, are limited. Other interventions, such as support to VHND and VHSC are relatively sustainable since these are highly focused under the NRHM programme.

[175] For example, according to DWCD's plan, AWCs that have their own buildings and are lacking in infrastructure, would be provided funds for upgrades including the provision of child-friendly buildings and water supply and sanitation up to Rs.100,000 per building (including provision for AWC cum crèche) on 75:25 cost-sharing basis would be provided under the ICDS Mission.

[176] Bihar:MIS for HR and procurement (BTAST report, KII; Odisha: e-Swasthya initiative by NRHM under Odisha e-governance plan (OHNSP brief, TMST) ; Madhya Pradesh: MIS for HR and procurement (TAST report, KII).

[177] Women's Group Led Community Empowerment for Improved Nutrition, Health and Water, Sanitation and Hygiene Outcomes. A draft policy note, DFID India, 2014.

[178] Roy, S. S. *et al.* 'Improved neonatal survival after participatory learning and action with women's groups: a prospective study in rural eastern India' *Bulletin of the World Health Organization* 2013;91:426-433B

5.7.1.3 However evidence for the sustainability of some functions of TA is more limited.[179]

Further support is needed to ensure sustainability in the functions of evidence generation. There are indications that some of the initiatives in the area of evidence generation will continue without any external support, given that the departments are now more inclined to use independent sources of evidence. In Bihar the departments still draw heavily upon the evidence generated by BTAST, while in MP the departments have already demonstrated willingness and capacity to independently contract knowledge institutions for evidence generation. However, for sustainability in evidence generation, it is important that there is a parallel process of institutionalising these activities within the government systems (for example the State Resource Centre) with a greater degree of autonomy. There is little evidence that such a process is currently being implemented. For example, in MP, while one role of the TAST has been to strengthen the State Resource Centre, some key informants suggested that the existence of the TAST has paradoxically also delayed the maturation of the resource centre, because the TAST is performing its function.

Sustaining and scaling up TA in the area of implementation support is a challenging task, but one which seems necessary. Large parts of the TA support across the three states have been directed to strengthen the management of health, nutrition and WATSAN at the district level, some phases of which did not commence until 2012-13. Considering the widespread and chronic problems of managerial weakness at the district level and a high need for technical capacity, it is highly unlikely that the need will be met in 2-3 years. This is particularly true for the nutrition and sanitation sectors, where the frontline needs to receive technical support for the complex inter-sectoral integration process. In addition, although the TAST, BTAST and TMST have helped to improve standards and obtaining accreditation in hospitals, it is not clear whether systems have been put in place to assist institutions to maintain their accreditation in the post-project period.

5.7.1.4. Sustainability of outcome gains is high due to improvements in both supply and demand.

Gains in mortality and nutrition status are largely sustainable. The MDG targets related to health, nutrition and WASH are yet to be achieved in the three states; however, substantial progress has been made through restructuring and renovating a series of national programmes. As discussed earlier in this chapter, a part of the gains (in terms of reduced mortality and child undernutrition) could be attributed to DFID-supported programmes. The combination of upstream and downstream support, integration of health, nutrition and WASH, and demand-side interventions steered by DFID-supported initiatives have helped strengthen the health system and imply the sustainability of gains achieved so far.

5.7.2 Summary of findings relating to sustainability

- There is strong evidence that interventions funded through DFID's FA will be taken over by the government.
- There is some evidence of sustainability of DFID's technical support to institutional reforms, strengthening information systems and in some areas of implementation. However, evidence for sustainability of some other functions of TA is more limited.
- Sustainability of outcome gains is high due to improvements in both supply and demand.

Overall, the evidence for sustainability of the DFID-supported initiatives is mixed. FA funded interventions are broadly being taken over by government, and the gains achieved with respect to health outcomes are expected to be sustained. In relation to

[179] **All states**: Key informant interviews; OPRs.

activities supported with TA, the picture is more mixed - some initiatives are more likely to be assimilated than others.

6 Strategic assessment of DFID's TA

6.1 Introduction

The DAC defines TA as 'the provision of know-how in the form of personnel, training, research and associated costs' and this is very similar to the definition of TA found in DFID documents.[180,181] It comprises two main types of TA provision: a) donor-financed activities that augment the level of knowledge, skills, technical know-how or productive aptitudes of people in developing countries (i.e. free-standing technical co-operation); and b) donor-financed services such as consultancies, technical support or the provision of 'know-how', including contributions by the donor's own personnel that contribute to the design or implementation of projects or programmes aimed at increasing the physical capital stock in the recipient country (i.e. investment-related technical co-operation)

DFID is engaged in the provision of TA of the second type (i.e. TA that complements its health sector budget support FA) in Bihar, Odisha and Madhya Pradesh through three health sector support programmes. This chapters presents the findings of an analysis of DFID's TA, using the TA provided by other DPs in the same states as a basis for comparison.[182] In addition to informing the findings of this VFM assessment, it provides a framework considering DFID's post-2015 strategy in India, when FA will cease. Section 6.2 contains the framework and data sources of analysis, and Sections 6.3 and 6.4 present findings. Further details are included as an annex to this report (Annex I).

6.2 Framework and data sources for analysis

In order to be able to address the TOR objectives linked to TA, we undertook two types of analysis. Firstly, we compared DFID's TA provision model in the three states with that of other DPs[183]; and secondly, we assessed DFID's TA provision in the context of the Paris Declaration principles of aid effectiveness. Details of each are as follows:

1) **A comparison of the provision of TA by DFID with that by other DPs** was undertaken along parameters that broadly capture the modality of TA provision as well as the nature/content of the TA. These include the following:

> a) ***Purpose of the TA***: depending on the broad purpose(s) it fulfils, this may be transformational, transactional or substitutional. DFID's guidance on aid instruments suggests that *transformational* assistance is more focused on '*building the sustainable capacity of an organisation to produce [these] outputs in the future*'. In this context, it is important to assess the transfer of skills that has taken place and the exit strategy that the DP has in place to ensure sustainability. *Transactional* assistance, on the other hand, can be defined as 'helping the organisation to develop systems and deliver

[180] For example https://www.gov.uk/government/publications/glossary-of-terms-used-by-the-department-for-international-development/glossary-of-terms-used-by-the-department-for-international-development#t (accessed 7 Dec 2013).
[181] OECD DAC Statistical Reporting Directives pp 47-50 (http://www.oecd.org/dac/stats/38429349.pdf (accessed December 2014)
[182] The focus in this chapter is not on the effectiveness in terms of impact of the TA, but rather on the process and nature of assistance. DFID's assistance (FA and TA) in the health sector support programmes has been discussed in other chapters of the report (namely Chapter 5) based on the elements of the REEEES framework (relevance, economy, efficiency, effectiveness, equity and sustainability).
[183] It should be noted that this is based on KII with representatives of DPs and the findings of the document review. The findings presented in this chapter present the team's assessment based on this qualitative evidence and should not be taken as a broader judgement on the performance of DPs in the three states, rather as a basis for comparing DFID's model and learning lessons.

outputs in the shorter term.' [184] *Substitutional* TA refers to assistance that is provided to government/organisations in performing their regular tasks/functions – it may overlap with transactional TA but is more akin to 'gap-filling' and generally does not entail any explicit attempt to strengthen capacity or systems.

b) ***Nature of the TA***: i.e. the extent to which it is 'supply-led' (i.e. the needs being decided by the DP) or 'demand-led' (i.e. responding to needs expressed by the government).

c) ***Relationship with FA***: i.e. whether TA is provided in isolation or as part of financially supported projects.

d) ***Issues related to procurement and management***: including the selection and recruitment of staff, the management of the staff providing the TA, the quality of hired staff, and the manner in which the TA provision is monitored and evaluated.

2) **An assessment of DFID's TA against international best practice** (as embodied in the Paris Declaration on Aid Effectiveness and the Accra Agenda for Action) was undertaken along the dimensions listed in the Paris Declaration:

- Ownership
- Alignment
- Harmonisation
- Managing for results
- Mutual accountability

The findings presented in this chapter were informed by a desk review of DFID's support to the health sector in the three states of MP, Bihar and Odisha, as well as in the South Asia region. In addition, primary data was obtained during field visits to the state capitals as well as case studies in the districts. KIIs were a key source of evidence for this chapter.[185]

6.3 Findings

6.3.1 Comparison of DFID's TA with other models[186]

The key issues for consideration are the extent to which the provision of TA (with and without FA) works; the nature of TA provided by most DPs and its acceptability to governments; the extent to which it contributes/adds value to governments own programmes; and the suitability of the structures used by DPs to deliver their TA.

[184] The international benchmarks for aid provision have changed considerably. In an assessment performed by OPM (2003), the term transactional was used to describe what would now be seen largely as gap-filling.

[185] At the national level two group discussions were held with DFID staff who are involved in the three states. Face-to-face discussions were held with eight DPs at their headquarters in Delhi and others (mainly UNICEF, UNFPA and NIPI) in the three states. Semi-structured interviews with a range of stakeholders, including government officials, DFID staff, and the TAST staff and DPs were conducted during field visits (as detailed in Annex E).

[186] Evidence sources include: KIIs in all three states and national offices in Delhi with DPs and the local TA teams in the states as well as DFID staff in Delhi. Other sources which contributed to the evidence discussed in detail in Chapter 5, and from which relevant aspects have been briefly highlighted here, include the following: KII (Departments and BTAST); demand for grants (budget documents) of the departments; case study on WATSAN and Gram Varta; OPRs; Odisha: KII (Departments and TMST); demand for grants (budget documents) of the departments; case study on WASH and Shakti Varta; OPRs; Madhya Pradesh: KII (Departments and TAST); demand for grants (budget documents) of the departments; case study on WASH; OPRs

DFID's combined FA and TA has advantages when compared to the provision of TA alone. TA promotes achievement of the milestones/targets linked to FA, and the flexible funds are greatly appreciated for their easy accessibility.

FA and TA complement each other in DFID's programmes. Currently, in the majority of DFID programmes, TA is provided together with FA in the context of a specific programme designed in consultation with the government. Evaluations have suggested that TA is an important corollary of budget support[187] and, in the three states, they play a complementary role; for example, in Odisha the NOP is being implemented with DFID's earmarked FA in the most high-burden districts. The TA is assisting the DWCD in developing and institutionalising training policy and revised guidelines for feeding programmes and decentralisation of procurement.

Given the delays often associated with accessing government funds, the flexibility offered by DFID funds is greatly valued. Government functionaries, as well as TA team members, were of the view that, although DFID's FA is proportionately small (accounting for only a minor proportion of the states' health sector budgets), it is significant because funds can be mobilised quickly for tasks for which obtaining government funds is difficult. Similarly, the small amount of funds that the TA teams are able to access to undertake immediate tasks for government is considered a critical contribution, in addition to the other TA it provides. This was repeated by almost all government officials who were interviewed.[188]

The TA from other DPs is valued, but some of the parameters are considered less flexible than those of DFID. For example, UNICEF, UNFPA, NIPI, USAID, and BMGF provide TA in the three states, but it is not accompanied by FA. Separate funds for addressing government gaps or requirements are not usually available. In the case of NIPI, while some funds may be used for gap-filling, they are routed through NRHM routes and processes are similar to that of other government funds. This can cause delays in accessibility, although clearly the use of government financial management systems is in line with principles of aid effectiveness and mutual accountability.[189]

DFID's TA responds to government priorities and needs, while endeavouring to respect the boundaries of its programme. The provision of more TA in the form of introducing innovations has the potential to give DFID's TA additional value.

All DPs respond to government priorities, albeit often within their own priorities or expertise. DPs work in areas of expressed government need, even if working on specific projects (e.g. BMGF/USAID). Some, like NIPI, have tried to identify niche areas (e.g. newborn health) that may not have been adequately addressed, but are nevertheless important for government to achieve its own targets of IMR. UNICEF and UNFPA have a specific mandate within which they work, which may limit flexibility but does mean that they have clear areas of technical expertise within which to support the government. For example, they provide technical support in the form of training (e.g. UNICEF) and implementing innovative pilots (e.g. UNFPA) within these broad parameters, responding to government areas of need.

DFID's TA is appreciated for being demand led. An assessment of a range of documents suggests that DFID worked closely with governments when designing the health sector support programmes. The extent depends on the length of DFID's engagement within the state. Engagement has, for example, been extensive in the case of Odisha, starting from a strategic

[187]The Joint OECD-DAC Evaluation of General Budget Support (2005) e.g. suggested that technical cooperation (TC) inputs may often be critical to the success of GBS and contribute to expansion of service delivery, institutional strengthening and public financial management improvement.

[188] Note that where DFID has provided only TA, e.g. for WASH to the PHED in MP, since implementation has only just begun, it is early to draw any lessons.

[189] The strengthening and use of government financial management systems represents one of the seven behaviours highlighted by IHP+ as priorities for development partner behaviour in order to accelerate progress towards the MDGs (http://www.internationalhealthpartnership.net/en/news-events/ihp-news/article/seven-behaviours-how-development-partners-can-change-for-the-better-325359/)

review of the health sector in the late 1990s and culminating in the OHSNP, which was designed to be consistent with the Paris Declaration. DFID's engagement in MP started in 2004, continuing with an involvement in the development of the Medium Term Health Sector Strategy in 2006-07, and subsequently a gap analysis resulting in the extension of the strategy to 2015. Similarly the NOP was designed with DWCD in 2009 as a response to the alarming rate of child undernutrition in the state. Since both conceptualisation and implementation of the strategies were supported by DFID, as a consequence there was a close alignment between 'what the Government wants to do' and 'what DFID wants to do'. DFID's entry into Bihar took place later but similar consultations have been undertaken with government. A proposal for DFID support was submitted and following approval by the government, BTAST was subsequently appointed to prepare the detailed design document. A reallocation of funds took place from FA to TA, at the request of the government of Bihar since there was more demand for TA. The alignment with government priorities in the three states is therefore not surprising.

DFID's TA also advances approaches that, while arguably more supply led, have added value, such as those promoting multi-sectoral convergence. Introduction of further innovations would be welcomed. An area where DFID TA has played an important role in extending the boundaries is that of promoting convergence, especially at the district level, through supporting community mobilisation initiatives (Sanjhi Sehat in MP, Gram Varta in Bihar and Shakti Varta in Odisha were designed to use the potential of women's SHGs to address the key demand-side barriers faced by women in health, nutrition and WASH). Greater innovation and introduction of newer approaches addressing problems identified by the government were expressed as needs.[190]

In terms of the purpose of TA, some DPs undertake largely gap-filling tasks. Others operate in a fairly strict framework within which to provide support, with a focus on transformational assistance and with less flexibility to be responsive to governments' immediate needs. The DFID TASTs have achieved a relatively good balance between helping government address management gaps, as well as supporting long-term systems strengthening.

DPs usually provide transactional support; some also provide substitutional support, but may have a limited locus of control over their embedded consultants. UN agencies like UNICEF and UNFPA (given their technical focus areas and international standing) tend to focus more on training and providing transformational support and arguably this means they have less scope to be flexible about responding to government requests for gap-filling help. Others (for example, USAID and BMGF) have more of a project focus, working towards specific project-related targets (providing transactional support) with a less explicit focus on strengthening systems at a broader sectoral level. While they respond to government requests, mainly through providing consultants, there is some expressed dissatisfaction with them largely undertaking substitutional work.

DFID's TA provides ad hoc support, as well as embedded support for management-related gap-filling areas of need. TAST teams provide two types of support that may be perceived as substitutional. Firstly, they may respond to immediate government requests that may often not be related to their mandated tasks; for example, in MP there was a request to immediately undertake an assessment of the provision of the emergency ambulance service. TA teams also provide extensive support through embedded staff, who are usually providing management as well as technical support within the context of a particular project; for example, there are consultants in the Procurement Cell in MP. This support may be perceived as being beyond the TAST mandate, and also results in technical teams' resources sometimes being greatly stretched, drawing time and people away from other milestone linked tasks - it was highlighted by other DPs that the gap-filling nature of some of the TAST support may function to delay the strengthening of government systems, and indeed detract from the strategic focus of the DFID programme.

[190] KIIs with government functionaries

However, it is clear that the provision of such support responds to the government's needs and helps build rapport as well as the base for the provision of other transactional and transformational support.[191] The TAST approach is generally considered to be more flexible and responsive to government needs than that of some other development partners – for example, while the structured annual plans used by UN organisations function as a clear strategy for implementation, they do not provide much scope for flexibility based on changing government requirements.

DFID provides support to longer-term systems strengthening and strikes a balance where its substitutional work helps build the ground for the transactional and transformational tasks. The broader mandate is one major difference between DFID's support and that of some other DPs. DFID has been able to provide support at a broader systems-strengthening level (at the state level), as well as to implementation at the district level. In all three states, for example, TA has helped strengthen capacity to help achieve short-term goals (e.g. hospital quality improvement initiatives in MP), as well long-term strengthening of systems (in Odisha, examples include the MIS for human resources and the support in streamlining the processes of accountability in expenditure and public finance management; in MP, examples include the MIS for ICDS and for drug procurement). District-level support has played a key role in promoting the agenda of intersectoral convergence (e.g. through the community mobilisation projects). The support goes beyond gap-filling and has involved the building of capacity at the individual and organisational level.[192.]

DFID's model of having a TA team at the state level works well for the provision of systems-strengthening support.

Hiring of teams with broad expertise based at the state level, rather than a single specialised agency engaged in a project, is conducive to DFID's role in systems strengthening. The TA provided by DFID in the three states, as well as a number of other DFID projects in neighbouring South Asian countries, is provided through a TAST or TAST-like structure. It involves the hiring of a consortium (of one or multiple agencies) with a large team that is present in the state capital, providing support at the policy level as well as implementation in districts.[193] The use of a multi-speciality team with a mandate to support systems strengthening, allows DFID to work in non-traditional areas such as financial management, procurement and HR. This has the potential to create additional convergence between departments. However, in reality, interactions across team members working in the different sectors is limited, reflecting the silos in government, and promotion of the convergence agenda seems to be higher at the district level. Nevertheless, the specialised agencies work under one TAST umbrella and government officials find it very useful that there is a single point of contact. Many of the DPs that provide project-based support hire the services of a number of specialised agencies to implement different components. Since each agency largely has its own direct relationship with the DP, a combined front is not always presented to the government. This is mitigated partially by branding of the programme with a specific name (for example in the case of USAID), but conversely, it was also suggested that this may confuse government officials who don't necessarily associate the programme with the DP.

The perception of many DPs was that embedded consultants, provided in response to government's requests, don't necessarily provide technical expertise in line with their

[191] The importance of providing substitutional/gap-filling work that the TAST teams would classify as management (as opposed to technical) support has also been pointed out by earlier OPM studies – e.g. OPM (2006) Evaluation of DFID funded TC for economic management in Sub-Saharan Africa.

[192] The distinction between the three levels institutional, organisational and individual (although not representing watertight categories) is a useful tool for analysis – see for example DFID (2003), Promoting Institutional and Organisational Development. Very simply, this can be explained as follows: institutional referring to the rules of the game (e.g. laws, rules, regulations, relationships between ministries, between different levels of governance), organisational referring to the teams playing the game (e.g. structure, staffing, processes systems within an institution or department) and individual referring to the individuals within the team (e.g. personal capabilities like knowledge and skills of people working in the organisation).

[193] For example, in MP, the consortium is led by FHI 360 and in Bihar, BTAST is led by CARE and IPE Global.

***TOR*.** A particularly contentious issue raised during KIIs with DPs was the provision of embedded consultants. Most DPs were critical of the practice of providing consultants (in response to government demand) who are embedded within government. The issue was linked with the nature of work undertaken by these consultants rather than the practice itself. DPs felt that the TORs were not often adhered to and the consultants largely served a gap-filling role, rather than providing any particular technical expertise. While this was a criticism of DFID's TASTs, it was also noted that DFID usually embed consultants within the context of a larger systems strengthening task that is being supported; for example, in the procurement cells of the government in MP. Therefore, while these embedded consultants undertake management-related gap-filling tasks, these are able to contribute to allowing more technical work to move forward.

Given current government capacities, DFID undertakes procurement, but ensures government involvement in the entire process, from agreement on TORs to the TA team head being answerable to government officials. While DFID takes the lead in setting up the TA teams at the state level, the TORs for the TA are approved before procurement and during the selection process, the government is represented on the board. Where possible, attempts are made for the TAST to work from within government departments, and it reports to the government official heading the department. KIIs reveal that, as suggested in the literature, while governments want a greater say and choice over TA options and the recruitment process and direct accountability of TA personnel, they do not appear to be keen on taking over the procurement process (ECPM 2007). This may partially explain why DFID's approach differs from the mechanisms of the World Bank. While programme implementation (usually involving systems strengthening) is undertaken by the World Bank (by what is essentially a TAST kind of structure), the procurement of the TA agent is done by government rather than the World Bank.[194] During the KIIs, World Bank officials mentioned the challenges faced with this approach, mainly in terms of delays; however, the sense of ownership and the building of government capacity in the area of procurement are considered to be big advantages. [195]

6.3.2 Analysis of DFID's support along Paris Declaration principles[196]

DFID has been at the forefront of attention to international best practice in the delivery of its aid. An assessment against the principles set out in the Paris Declaration is essential to place the findings in a broader international context that considers the benchmarks of aid effectiveness.[197,198]

[194] This approach has already been partially explored by DFID in the Technical Resource Facility (TRF) in Pakistan.

[195] The importance of procurement by governments was discussed by OPM (2003) and reiterated in the DFID note on How to provide technical co-operation personnel (2006). The note also discusses market failures in this context and how weak capacities of the development partner and the government can reinforce these.

[196] Evidence sources include: KIIs in all three states and national offices in Delhi with DPs and the local TA teams in the states as well as DFID staff in Delhi. Other sources that contributed to the evidence discussed in detail in Chapter 5, relevant aspects of which have been briefly highlighted here, include the following: KII (Departments and BTAST); demand for grants (budget documents) of the departments; case study on WATSAN and Gram Varta; OPRs; Odisha: KII (Departments and TMST); demand for grants (budget documents) of the departments; case study on WASH and Shakti Varta; OPRs; Madhya Pradesh: KII (Departments and TAST); demand for grants (budget documents) of the departments; case study on WASH; OPRs

[197] The Paris Declaration on Aid Effectiveness and the Accra Agenda for Action – 2005/08. Note however that partner countries and donors/DPs are jointly responsible for the successful implementation of the aid effectiveness principles. Here the actions taken by the respective state governments have been outside the scope of this study

[198] A caveat specific to this assignment (as stated in the Paris Declaration and the Accra Agenda) is that the aid effectiveness principles apply equally to development co-operation in situations of fragility, including countries emerging from conflict. However, these principles need to be adapted to environments of weak ownership or capacity. This is particularly relevant for the three states under study because, regardless of high economic growth rates, the states have relatively weak institutional capacities and may be unable to embark upon reform processes successfully without external help.

6.3.2.1 Ownership

The Paris Declaration on Aid Effectiveness definition of ownership is that 'Partner countries exercise effective leadership over their development policies, and strategies and co-ordinate'[199]. The focus here is thus on the degree to which TA is led and driven by the state partners, and the extent to which this TA is managed and embedded in state programming.

Overall, DFID's mode of TA provision seems to ensure active government engagement through the entire process of procuring and managing the TASTs. DFID could do more to increase government ownership; however, it was noted that this may be at odds with the government's own preferences and existing capabilities.

There is evidence of sustainability linked to the different elements of DFID's TA support that are being mainstreamed. Evidence of the transformational nature of TAST support and sustainability is linked to the elements of support that the government expresses interest in mainstreaming into its system. In MP, for example, the government is committed to absorbing and continuing changes, such as rationalising drug supply, initiated through DFID support. The state has exceeded one of the stipulations of the memorandum of understanding, which was to commit to a 10% increase in the health budget each year. Similarly, the TAST approach has played an important role in the transfer of ownership of some of the upstream reform processes initiated by DFID, for example the building of institutions (e.g. procurement cells) within the department led by government officials and supported by TAST consultants. In Bihar, the sustainability of these cells is high, since there are already commitments expressed from the government to continue the initiatives using internal resources. In MP, there has been a transfer in ownership in the Drug Corporation - the six procurement consultants hired by MPTAST will be absorbed in the MPPSC.

Incorporation of interventions into government PIPs imply willingness to own and pay in the longer term; however, more systems may be needed to ensure sustainability of some TA functions. In both MP and Bihar, the most recent PIP of DHFW includes an additional demand (from NRHM) to supplement QI interventions in EmONCs, which is currently going on in selected hospitals with DFID's support[200] (in MP) and to supplement the school health programme (NPSGY), aligning it with the National Child Health Programme (Rashtriya Bal Swasthya Karyakram) (in Bihar). There is, however, room for improvement – for example, while all three TA teams have helped to improve standards and obtain accreditation of hospitals, it is not clear whether systems have been put in place to assist institutions to maintain their accreditation in the post-project period.

6.3.2.2 Alignment

The Paris Declaration's definition of alignment is that '…donors base their overall support on partner countries' national development strategies, institutions and procedures'[201]. Here the focus is on the extent to which TA is relevant to state programmes and priorities, and TA systems and processes are aligned to state systems.

Overall, there is evidence of good practice in terms of alignment, from the inception of the process and alignment of the programme to government needs, to the processes used for M&E. The extent of engagement that DFID has had with governments is quite extensive in breadth (across different priorities) as well as depth.

DFID's TA support is largely aligned with government policies and programmes. As discussed in Chapter 5, DFID staff ensure extensive engagement and consultation with the government, and interventions in the three states are aligned with major national and state

[199] The Paris Declaration on Aid Effectiveness, 2005.
[200] ROP (PIP) of DHFW, 2013-14, item number B.23.2 (http://nrhm.gov.in/nrhm-in-state/state-program-implementation-plans-pips/madhya-pradesh-pro.html)
[201] The Paris Declaration on Aid Effectiveness, 2005

programmes – e.g. NRHM (for health), ICDS (for nutrition), and Nirmal Bharat Abhiyan (NBA) (for sanitation).

DFID's model of procuring TA avoids challenges linked to government procurement capacity, but may lead to the perception that there is a parallel system.. DFID's TA teams are procured by DFID and finally answerable to DFID (although the government is extensively involved). There is some concern that that maintaining the model of a separate TAST may result in the creation of a parallel system and reduce the incentive for the government to build capacity in certain areas, for example through undertaking recruitment of technical assistance staff. This is in contrast to the scenario in, for example, World Bank projects where government capacity is strengthened to undertake the TA procurement, thus ensuring greater integration. However, as discussed with World Bank staff in the context of their India-wide nutrition-related project, such an approach can result in inordinately long delays and may not be aligned with governments' own perceptions of their needs and their capacities.

6.3.2.3 Harmonisation

The Paris Declaration definition of harmonisation is that 'Donors' actions are more harmonised, transparent and collectively effective'.[202] Here the focus is on the extent to which TA provision has been harmonised between donors in the focus states.

Overall, there is evidence of harmonisation and there are some positive examples of proactive attempts to increase donor co-ordination (often driven by DFID) between donors. However, there is still considerable scope for improvement, which would require the government to take the lead.

DFID's TA teams have contributed to increased harmonisation through their active role in key health related initiatives. The central government's RMNCH+A 'call to action' provides an effective mechanism for increasing the co-ordination of donor support. The allocation of districts to different DPs has been important in ensuring more equitable development. In Bihar, BMGF is the lead donor, whereas in Odisha and MP, it is DFID. Other DPs were appreciative of DFID's role in organising regular meetings and co-ordinating the role of the DPs. The allocation of districts by central government has also been important in ensuring more equitable development and has resulted in DFID's TAST teams being able to focus on high-priority districts.

While there are some positive examples of harmonisation, in some cases, there is evidence that more work is needed. Donor activities were found to be relatively well co-ordinated in some states. In MP, in particular, co-ordination was ensured through regular meetings of the Health Committee Forum (chaired by a government official), which includes representatives from the DPs. There are examples of constructive collaboration between different partners (e.g. a DFID grant to UNICEF for Sick Newborn Care Units (SNCUs) and Nutritional Rehabilitation Centres (NRCs)). However, not all DP respondents were positive about the degree of convergence between donors – it was noted that effective co-ordination has become more difficult as the number of partners working has increased. The supply-demand mismatch in the availability of good quality technical staff has also led to the issue of 'poaching' of technical staff among DPs. In fact in MP, there was an attempt made to establish some agreement between the DPs not to hire people who were already working with one of the DPs in the state.

The distinction between DFID and the programmes of other DPs is not clear-cut. For example, BMGF's state programme *Ananya* was launched in 2010 at the same time as DFID's programme, with some similar objectives. A new technical support unit has recently been set up with BMGF support, but it is not clear whether and to what extent this new structure will substitute BTAST's role in the near future. The field interviews revealed a widespread sense of

[202] Ibid.

confusion about the possible overlap of roles and the boundaries of the different development partners, in which case the partners' respective roles need to be defined through the steering committee of DPs.

DFID TAST teams seem to have often been on the forefront of trying to harmonise DP efforts. DFID teams play an important role in trying to bring together the DPs, something which is also appreciated by other DPs. It is clear, however, that the most successful harmonisation initiatives are those where the government plays an active and predominant role, and these are currently limited.

6.3.2.4 Managing for results

The Paris Declaration defines managing for results as the process whereby better 'managing resources and improving decision-making for results' is achieved.[203] Here the focus is on the extent to which DFID has put in place systems to effectively manage TA to maximise expected results.

Overall, DFID has put in place relatively robust results-based management system for TA providers. The indicators have been selected to ensure that data are largely obtained from government systems in line with international best practice. However, the assessments are largely output based, and DFID has been trying to link TA to outcomes and impacts to allow for attribution.

The formats for the reporting to and financing of TAST from DFID, based on performance based financing, reflect a consistent focus on accountability and economy. The payment to TAST is based on a set of 'payment-linked deliverables' planned by TAST for each year and approved by DFID. The deliverables include documents such as reports, audio-visuals, software, etc. A report on the progress of these deliverables is sent by TAST to DFID in QPRs, along with invoices. The system is focused on better ensuring that DFID gets what it pays for in the TA outputs and that the QPRs provide a transparent and economic basis for managing contracts.

Governments are involved in the management and monitoring of programmes. Joint Annual Reviews, which monitor financial and technical progress against the programme logframe and milestones, include representatives from the central government and officials from the state governments. The logframes, as well as the reviews and evaluations, largely utilise existing data sources, targets and indicators in use by the government.

There are significant issues with measuring attribution of TA, which other DPs also struggle with. At present, DFID's assessments largely focus on outputs. The recently convened 'Attributing the Results of Technical Assistance' DFID working group considered a number of methods for attributing results of technical assistance. However it was noted that each method comes with its own set of limitations, therefore the working group proposed that results are reported on a pro-rata basis of overall funding for central reporting and operational plans. An accompanying narrative was suggested to highlight higher results achieved/forecast alongside a method of attribution considered appropriate in that context. It is worth highlighting that most DPs interviewed were firmly of the view that in the context of TA, attribution should not be attempted (see box 13).

Box 13: Development partner approach to attribution

Attributing impacts to donor interventions, particularly with regard to TA was discussed during the KIIs with the DPs (see annex I for further details). It was universally agreed that such a task is very challenging for TA, particularly given the multiplier effects or catalytic role it may be expected to perform and the fact that there is rarely a control group to provide counterfactual outcomes.

[203] Ibid.

6.3.2.5 Mutual accountability

The Paris Declaration defines mutual accountability as the process by which '…donors and partners are accountable for development results'.[204] Here the focus is on how TA delivery is linked to common accountability systems, which in turn are linked to progress against development results.

DFID has helped improved government systems of accountability, but this is currently closely intertwined with the provision of FA. A TA-only incentive structure to ensure delivery of programmes supported only by TA and ensure mutual accountability is not yet in place.

DFID's TA teams have been contributing towards developing government systems to increase accountability, as well as involving the government in the assessments of its own programmes, as mentioned above. The main progress made in this area is on streamlining processes of accountability in expenditure and public finance management. The interventions have helped departments replace some ad hoc and non-transparent measures to deploy various inputs with transparent and universally accepted norms. In the context of TA provision without FA, significant further work is needed to develop and test an incentive structure that is not interlinked with financial incentives to ensure programme milestones are met.

6.4 Summary of findings relating to TA

- DFID's combined FA and TA has advantages when compared to the provision of TA alone. TA promotes achievement of the milestones/targets linked to FA, and the flexible funds are greatly appreciated for their easy accessibility.
- DFID's TA responds to government priorities and needs, while endeavouring to respect the boundaries of its programme. The provision of more TA in the form of introducing innovations has the potential to give DFID's TA additional value.
- In terms of the purpose of TA, some DPs undertake largely gap-filling tasks, in a project mode. Others are given a fairly strict framework within which to provide support, with a focus on transformational assistance and with less flexibility to be responsive to the government's immediate needs. TASTs have achieved a relatively good balance between helping government address management gaps, as well as supporting long-term systems strengthening.
- DFID's model of having a TA team at the state level works well for the provision of systems-strengthening support.
- There is evidence of good practice in terms of alignment, from the inception of the process and alignment of the programme to government needs, to the processes used for M&E. The extent of engagement that DFID has had with governments is quite extensive in breadth (across different priorities) as well as depth.
- There is evidence of harmonisation and there are some positive examples of proactive attempts to increase co-ordination (often driven by DFID) between donors. However, there is still considerable scope for improvement, which would require the government to take the lead.
- DFID has put in place a relatively robust results-based management system for TA providers. The indicators have been selected to ensure that data are largely obtained from government systems in line with international best practice. However, the assessments are largely output based and DFID has been trying to link TA to outcomes and impacts, to allow for attribution.

[204] Ibid.

- DFID has helped improve government systems of accountability, but this is currently closely intertwined with the provision of FA. A TA-only incentive structure to ensure delivery of programmes supported only by TA and ensure mutual accountability is not yet in place.

7 Assessment of DFID's monitoring of VFM

7.1 Introduction

Box 14. What represents a good VFM indicator?

To be classed as a true VFM indicator, an indicator must consider both "cost" and "value." Reporting on VFM must link costs with the M&E reporting, it should not just be a repetition of reporting on outputs, outcomes etc.

Therefore, **economy** indicators should measure the costs of inputs, **efficiency** indicators should measure the relationship between inputs and outputs by cost, and **effectiveness** indicators should link outcomes with costs.

This chapter presents the findings of an analysis of the reporting on VFM of the three DFID projects. The aim is to provide a simple and objective analysis of the extent to which DFID project documentation has captured VFM issues and to identify which aspects of VFM are being looked at. The team began by making an assessment of the VFM indicators in the ToR considering their strengths and typology, and the extent to which they are reported on in DFID's annual reviews. An assessment was then made of all of the VFM indicators reported on in DFID's annual reviews. For each of the three Es reported on in DFID's annual reviews, the indicators have analysed by strength and typology (for full details of the methodology, see Chapter 4) this analysis has been performed for both the "performance on VFM measures" sections of the reviews, which deals with performance of the programme, and the "commercial improvement and VFM" sections, which deals with processes that are more specific to the performance of DFID and the TA teams (i.e. what could be considered indicators of 'internal' VFM). Full details of the analysis, including classification of the indicators is contained in Annex J.

7.2 Mapping the VFM indicators listed in the ToR

The ToR for this assignment provided a list of VFM indicators suggested by DFID India. Annex J provides the team's assessment of which of these indicators represent true indicators of VFM, and the strength of these indicators. Overall, the analysis demonstrates that most of the indicators from the ToR are not classified as VFM indicators, as they did not link cost and value, leaving only a small number in the list. For example, an "increase in OPD attendance in the public health institutions during the intervention time period"[205] does not represent a true VFM indicator, in that it is reporting on outputs but does not link this to a cost.

The strength and typology of the VFM indicators identified is plotted in Figure 4 below:

Figure 4: Assessment of the strength and typology of the VFM indicators presented in the study ToR

ECONOMY	Benchmark	Trend	Stand-alone
Monetary	1		3
Quantitative			
Qualitative			
Process			

EFFICIENCY	Benchmark	Trend	Stand-alone
Monetary			3
Quantitative			
Qualitative			
Process			

EFFECTIVENESS	Benchmark	Trend	Stand-alone
Monetary			1
Quantitative			
Qualitative			
Process			

[205] One of the indicators listed in the annexes of the ToR for this evaluation.

Considering only those indicators that represent VFM indicators, the team analysed the extent to which they have been reported against in the annual reviews of the three states. This is illustrated in Table 28 below.

Table 28: Reporting of VFM indicators from ToR in annual reviews

#	Indicator	MP	Bihar	Odisha
Economy				
1	Cost per unit of infrastructure (Anganwadi centre) built (compliance to GOI unit cost specification or in comparison to benchmarks)		✓ (Quantitative comparison of AWC cost)	
2	Cost per unit of essential MCH drugs procured	✓ (Proportion of drugs procured at lower cost; proportion of local purchase of drugs)		
3	Cost per unit of services procured (including human resources)		✓ (Cost of SHG meeting; cost of ASHA training)	
5	Cost per unit of TA procured (or components/outputs thereof)	✓ (Average fee rate)	✓ (Average fee rate)	✓ (Average fee rate)
Efficiency				
23	Cost of delivery of key services (institutional delivery, child vaccinated, ANM visit)			
24	Cost per child reached with nutrition intervention		✓ (Cost per beneficiary reached)	
27	Benefit cost ratio/utilisation			
Effectiveness				
29	Cost per additional disability adjusted life years averted	✓		✓

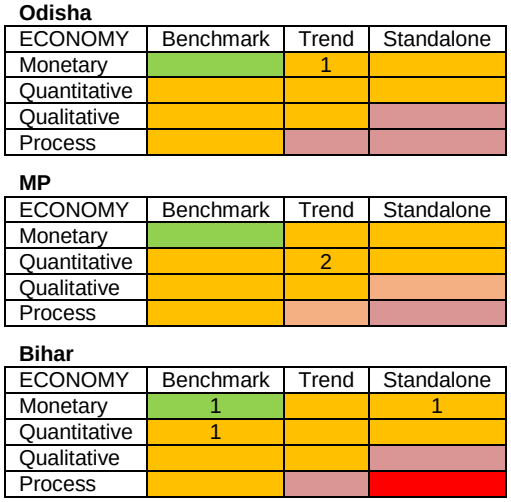
Figure 4 and Table 28 illustrate that:

- There is good evidence of monetisation of indicators;
- Most indicators are currently framed as stand-alone with minor reworking, they could be reframed as either trend or benchmarks; and
- VFM indicators are not consistently reported across the states, and over time.

7.3 Assessment of DFID's economy indicators

In comparison to other VFM dimensions, the indicators for economy reported in DFID annual reviews are strong; however, there are opportunities to increase their utility.
Figure 5 below presents an assessment of the strength and typology of the economy VFM indicators reported in the annual reviews of the three states.

Figure 5: Assessment of the strength and typology of economy indicators



Odisha

ECONOMY	Benchmark	Trend	Standalone
Monetary		1	
Quantitative			
Qualitative			
Process			

MP

ECONOMY	Benchmark	Trend	Standalone
Monetary			
Quantitative		2	
Qualitative			
Process			

Bihar

ECONOMY	Benchmark	Trend	Standalone
Monetary	1		1
Quantitative	1		
Qualitative			
Process			

All of the three states are reporting at least one economy indicator in the VFM sections of the annual reviews and the majority are either reported as trend indicators or benchmarked, which facilitates an assessment of VFM, be it demonstrating improvement over time or comparing with other standards. However, as Figure 5 above illustrates, there are also opportunities for strengthening these indicators (for example, through framing them in monetary terms) and improving their utility for to demonstrate trends in improving VFM over time. Table 29 below presents some examples of how the indicators might be strengthened, and overall, if the three states reported a standard set of economy indicators, this would facilitate comparisons.

Table 29: Economy indicators reported in VFM section of DFID's annual reviews

State	Type of indicator	Source	Comments	Suggestions for improvement
Odisha	Cost of LLIN	2012 Annual Review 2013 Annual Review	Benchmarked well in 2012; however, this is not carried forward into the 2013 annual review.	Continue to monitor this indicator, to identify year on year trends, and report against GoI benchmark. e.g. "The cost per LLIN was X INR in year Y, compared to a GoI cost of X per LLIN"
MP	Trend in cost of drugs	2012 Annual Review 2013 Annual Review	This indicator is currently reported as a % and would be strengthened if the cost saving could be monetised.	Continue to monitor the cost of drugs; however, select examples for which savings can be monetised. e.g. "Reduction in the unit cost of drug X from X INR to X INR"
MP	Proportion of local purchase drugs	2012 Annual Review 2013 Annual Review	This indicator would be strengthened if the cost saving could be monetised. It also needs to be made more specific, because it is unclear if the % relates to budget or to units, and changes in % could simply reflect increases in central procurement.	Either remove this indicator from the data set, or reframe in monetary terms and more specifically: "Reduction in funds spent on locally purchased drugs from X INR to X INR."
Bihar	Cost of	2013 Annual	Good comparison with	Monitor annually, to identify

	AWC construction	Review	"conventional construction cost", but this indicator would be strengthened if the cost saving could be monetised.	year on year trends, and, if possible, report against GoI benchmark. e.g. "The cost per AWC constructed was X INR in year Y, compared to: a conventional construction cost of X INR *or* a cost of X INR in year Y"
Bihar	Cost of meeting	2013 Annual Review	This indicator would be strengthened if benchmarked, or at least reported annually to allow comparison of trends. Ideally, a "meeting" should be specified, to ensure like for like comparisons are being made.	Monitor annually, to identify year on year trends (and if possible benchmark): "The cost per meeting (defined as Z) was X INR in year Y"
Bihar	Cost per ASHA trained	2013 Annual Review	Good benchmarked indicator.	

Reporting of commercial, or 'internal,' VFM in terms of economy is consistent across the states, but there are missed opportunities to monitor improvements.
Much of the 'commercial improvement and VFM' section of the annual reviews (which deal with VFM more closely linked to DFID and the TA teams' organisation) are just qualitative descriptions of process which are not always defined as indicators in a way that facilitates an analysis of improvements in VFM over time. Figure 6 presents the assessment of the indicators reported for economy:

Figure 6: Assessment of the strength and typology of commercial economy indicators

Odisha

ECONOMY	Benchmark	Trend	Stand-alone
Monetary			2
Quantitative			
Qualitative			
Process		1	1

MP

ECONOMY	Benchmark	Trend	Stand-alone
Monetary			2
Quantitative			
Qualitative			
Process			1

Bihar

ECONOMY	Benchmark	Trend	Stand-alone
Monetary		1	1
Quantitative			
Qualitative			
Process		2	

Figure 6 shows that, with the exception of Bihar, the majority of indicators in each of the states are stand-alone, although there is good evidence of monetisation. The two strongest economy indicators are reported consistently across the states, but there are opportunities to strengthen them:

- Average fee rate of consultants: ideally this would be framed as a trend indicator (for example ""Change in average fee rate from £X to £X during the period X" or benchmarked against a standard).

- Cost savings achieved: ideally this should be monetised (i.e. savings reported in monetary terms) and reported consistently year-on-year.

There are also examples of indicators that are not strictly VFM indicators but do provide a useful indicator of managing for VFM; for example, the proportion of TA delivered by national consultants and the proportion of procurement done through open and limited tendering.

Overall, across the three states, similar commercial economy indicators are being reported. However, there are differences in the consistency with which they are being monitored over time, and therefore missed opportunities to be able to demonstrate trends and make comparisons across states.

7.4 Assessment of DFID's efficiency indicators

The assessment of VFM reporting in DFID annual reviews revealed that reporting on efficiency is by far the weakest dimension.
Out of the six annual reviews that were analysed as part of this indicator assessment, five reported on outputs in the VFM sections of the reviews, but did not provide any "true" VFM efficiency indicators, which link cost to output. The assessment of the efficiency indicators of the three states is shown in Figure 7 below:

Figure 7: Assessment of the strength and typology of efficiency indicators

Odisha

EFFICIENCY	Benchmark	Trend	Stand-alone
Monetary			
Quantitative			
Qualitative			
Process			

MP

EFFICIENCY	Benchmark	Trend	Stand-alone
Monetary			
Quantitative			
Qualitative			
Process			

Bihar

EFFICIENCY	Benchmark	Trend	Stand-alone
Monetary			2
Quantitative			
Qualitative			
Process			

Therefore, the efficiency sections primarily constitute a repetition of the performance monitoring in the remainder of the annual review, rather providing good evidence of VFM in terms of efficiency. The exception to this is the 2013 Annual Review of the Bihar programme[206], which has two good examples of efficiency indicators, linking cost to outputs. Their utility in terms of monitoring VFM could be improved through more consistent reporting, as per Table 30 below:

Table 30: Efficiency indicators reported in VFM section of DFID's annual reviews

State	Type of indicator	Source	Comments	Suggestions for improvement

[206] DFID. 2013. Annual Review Sector Wide Approach to Strengthen Health (SWASTH) in Bihar.

Bihar	Cost per beneficiary reached	2013 Annual Review	Could be strengthened through benchmarking or framing as a trend indicator; should also be as specific as possible in terms of services provided	Monitor annually, to identify year on year trends (and if possible benchmark). e.g. "Cost per beneficiary reached with Z service was X INR in year Y"
Bihar	Cost of tube well installation	2013 Annual Review	This is reported for a discrete group of SHGs; it would be more generalisable if reported for a larger population. It could also be benchmarked against the standard.	Monitor annually, and if possible benchmark. e.g. "Cost per tube well installed was X INR in year Y, compared to a GoI standard of X INR"

In terms of DFID's own internal processes, reporting on efficiency is generally very qualitative, for example "efficiencies were achieved by ensuring cost sharing for short term consultants working across all 3 states…". The team did not identify any true commercial efficiency indicators being reported.

7.5 Assessment of DFID's effectiveness indicators

Much of the reporting on effectiveness in the VFM sections of the annual reviews constitutes a repetition of data reported elsewhere in the annual reviews and is therefore performance monitoring rather than VFM reporting.

The indicators reported in the VFM sections of the annual reviews are effectiveness indicators, in that they are reporting on outcomes, but the majority are not VFM indicators because they do not link cost to value. However, both the MP and the Odisha annual reviews make an attempt to link cost to value, reporting "cost per DALY." In both states, this indicator represents a robust VFM measure, in particular because it can be benchmarked against accepted thresholds such as those used by WHO-CHOICE.[207] However, in order to maximise its utility as an indicator of VFM, it should be reported consistently to monitor trends over time.[208]

Figure 8: Assessment of the strength and typology of effectiveness indicators

Odisha

EFFECTIVENESS	Benchmark	Trend	Stand-alone
Monetary	1		
Quantitative			
Qualitative			
Process			

MP

EFFECTIVENESS	Benchmark	Trend	Stand-alone
Monetary	1		
Quantitative			
Qualitative			
Process			

Bihar

EFFECTIVENESS	Benchmark	Trend	Stand-alone
Monetary			
Quantitative			
Qualitative			
Process			

[207] http://www.who.int/choice/costs/CER_levels/en/

[208] For MPHRSP, this indicator was reported in 2012 but then not in 2013.

7.6 Summary of findings

- In terms of VFM of the programme, there are limited numbers of true VFM indicators (that link costs and value). These are clustered in the dimensions of economy and cost-effectiveness.

- There are good example of VFM indicators (for example, unit costs and cost per DALY); however, these are missed opportunities for monitoring trends (i.e. inconsistent reporting) and benchmarking (i.e. against other states, Government of India, or international standards such as those for cost-effectiveness). Consistent annual reporting would mitigate this, and allow trends in performance on VFM to be more systematically considered.

- In terms of 'internal' VFM the focus is on economy. Again, there are good examples of VFM indicators (for example, average fee rates) and other process indicators that are useful for managing VFM. There are instances where qualitative descriptions of process could be converted into indicators that can be monitored over time.

Overall, while there are good examples of VFM indicators, there are clear opportunities for DFID to strengthen its monitoring and reporting on VFM.

8 Conclusions and recommendations

8.1 Introduction

Chapters 1-4 of this report detailed the objectives and parameters of the study, the conceptual framework, the state programmes to be reviewed, and the methodologies through which the objectives of the study were to be achieved and the major questions addressed. Chapter 5 presented the results of an analysis of the programmes on the basis of the REEEES criteria and the intervention areas in the form of main findings. This was then followed by a summary of the main findings from the assessment of DFID's approach and methods of TA (Chapter 6) as well as the findings of an assessment of the way DFID has monitored VFM to date

This final chapter begins with a discussion of the ToC that, in its early conceptualisation, guided the study and has subsequently been significantly elaborated as a result of the findings. The findings of the assessments are then summarised into overarching conclusions that emerged from the study. Finally, a series of recommendations are proposed, linked to both the projects under investigation, but also more broadly in relation to DFID's model of TA.

8.2 An emergent theory of change

Figure 9 below (see also chapter 2) provides a high-level summary of an emergent generic ToC for the DFID-supported interventions in the three states and maps how these relate to the REEEES dimensions. This ToC builds on the original ToC that was developed (and presented in the inception report for this study) but has now been expanded and informed by the detailed findings from the state studies. As discussed in chapter 2, this ToC helps to illustrate how the upstream and downstream interventions that have been supported by DFID are intended to contribute to improving the overall VFM of state-level programmes.

1) The sequential nature of the Es (bottom to top) in the core of the ToC follows the 'traditional' understanding of how the VFM 'Es' map over the value chain of inputs to impact. **This sequence in the ToC illustrates the logic of how 'value' is increased through the interventions supported by DFID TA and FA and has implications for how the overall VFM of the DFID portfolio support in a state can be better assessed in the future** (see Annex K).

2) The findings of the study clearly identified that the five intervention categories contribute, or have the potential to contribute, to improving VFM in different ways and interface with each other through a complex set of value chains from right to left and left to right (the dark arrows in Figure 9). While this ToC begins to articulate some of these interrelationships, **we found little evidence that a systematic and strategic analysis of how these interventions can and, more importantly, should interface with each other has been done to date in any of the three states**.

3) The centre of this model is dominated by the efficiency 'E'. **This reflects the fact that many of the interventions that have been supported through DFID FA and TA have either explicitly or implicitly been focused on improvements in the efficiency of the states' systems**. This is a key finding and highlights the fact that there is a clear need for more analysis of how the specific causal pathways that in theory lead to improved efficiency of state-level health system can be measured and understood.

4) The ToC model shows how the VFM questions of relevance and sustainability are usefully presented as 'framing concepts' around the core four 'Es':

- In terms of relevance, the key questions relate to how the specific interventions supported by DFID fit with the overall programmes at state level, and specifically how

they contribute (in theory and in practice) to improving the VFM of these programmes. As highlighted in the state analysis, **we found strong evidence of a high level of relevance of interventions supported by DFID in the three states**.

- In terms of sustainability, the key questions relate to how the set of interventions supported can contribute to longer-term and sustainable health system developments that contribute to ongoing improvements in health outcomes. The analysis found that **the evidence for sustainability is weaker, with particular concerns about the sustainability of some of the TA interventions**.

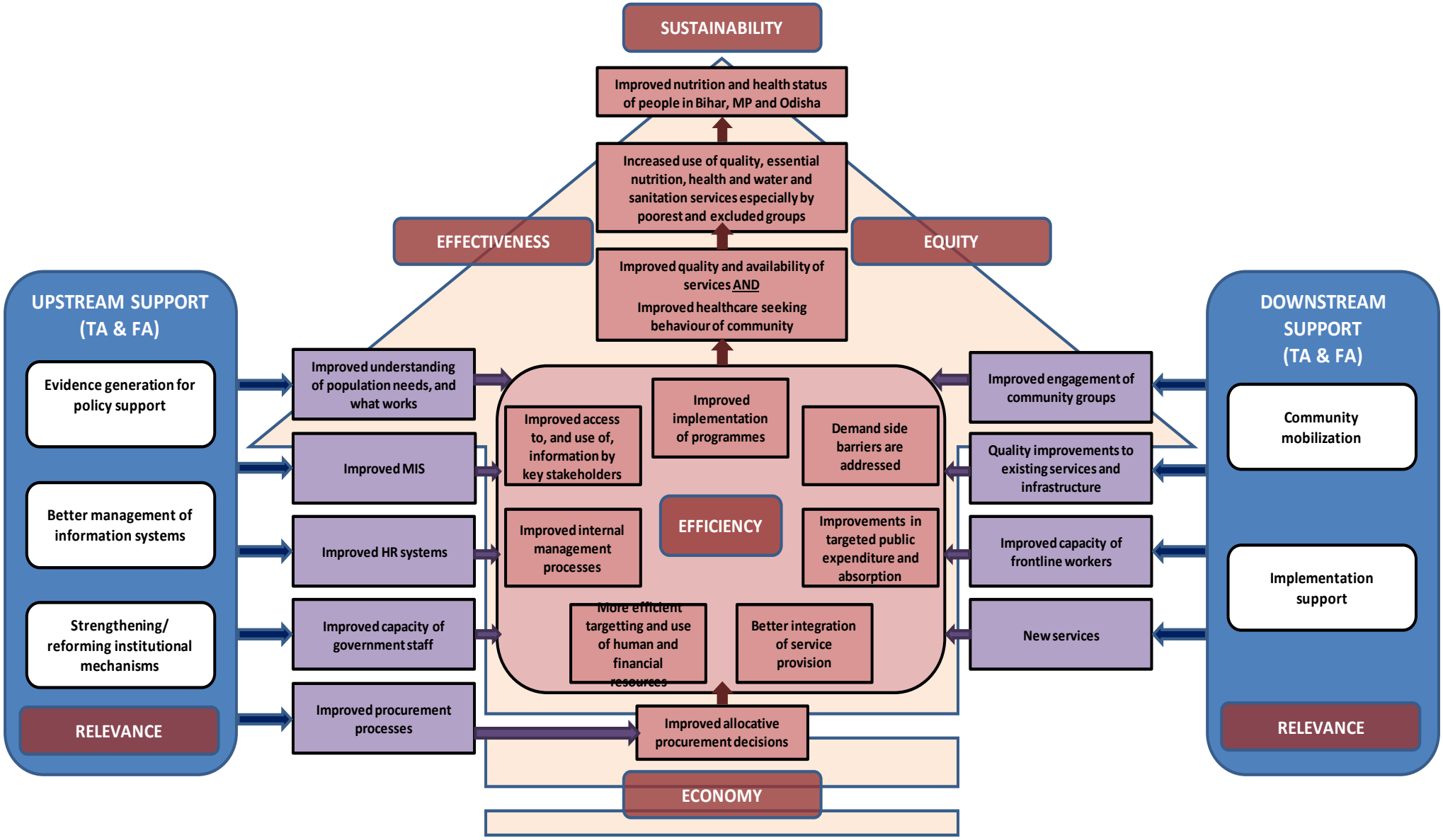
5) The ToC model helps to highlight why there are such significant issues relating to assessing or measuring the overall attribution of DFID support from a VFM perspective, particularly with respect to attributing DFID interventions to overall programme effectiveness. While downstream interventions can be more closely linked to improvements in health outcomes in some key geographical locations, the fact that many interventions that have been supported by DFID have predominantly focused on improving health system efficiency (especially with respect to the upstream interventions) means that unpacking attribution pathway(s) with respect to effectiveness is very difficult. Analysis is further complicated by the fact that **many other development partners are also operating in this sphere, so attribution is, by definition, diluted**.

6) The evidence base on how DFID support has contributed to increased equity is also greatest with respect to the downstream interventions, for example, community mobilisation interventions and support to implementation. **However, as with the effectiveness dimension, evidence for how more upstream interventions contributed to increased equity is limited and attribution pathways are very complex**.

The approach taken in this study has been to generate better understanding of how DFID has performed on the VFM dimensions within the REEEES framework by assessing the evidence base from the intervention perspective of what has happened to date in each of the three states. In other words, the unit of analysis has predominantly been the specific categories of interventions supported by DFID through FA and TA, as presented in Chapter 2. This *intervention-focused* assessment was the right approach for conducting a VFM assessment at this stage of the programme, given the timescales of many interventions, and the fact that there was a clear need to generate a better understanding of how the various interventions have contributed to improving different aspects of VFM.

The subsequent work on developing an overall ToC has highlighted that it is increasingly critical that DFID (as well as other key stakeholders) explore ways of assessing the *overall portfolio* of support from a VFM perspective. Key issues here are the need to understand the specific interrelationships between interventions and how collectively they can be expected to contribute to increasing the overall VFM of health programming. The generic ToC presented below could serve as the basis for better framing this analysis; and, specifically, for developing a monitoring and reporting system (with focused VFM indicators) that generates better VFM data across the REEEES framework. This will allow for clearer analysis of how different interventions contribute to VFM at different levels so that overall portfolio analysis can be undertaken. Further details of the team's emergent thinking are presented below.

Figure 9: Theory of change for state interventions mapping REEEES components

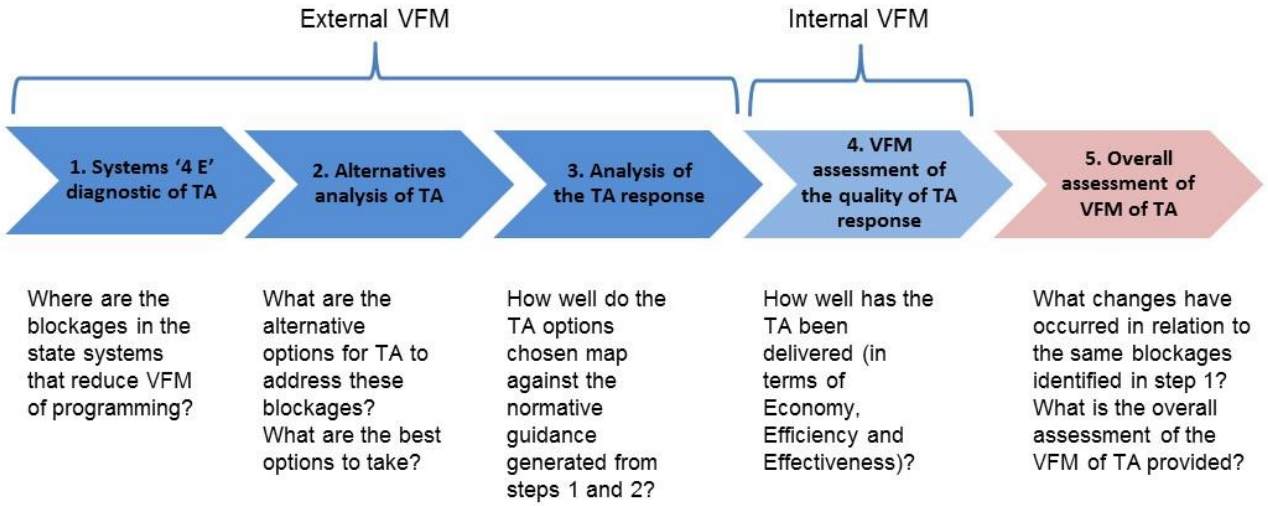


8.3 Assessing the value for money of technical assistance

As an output of this study we have developed a 'skeleton' assessment framework which can be further refined to allow DFID to undertake a systematic VFM analysis of technical assistance (TA) in the future. Its primary objective is to provide a simple management and decision making tool for DFID India and its partners as it moves forward in to a phase of TA only provision.

This assessment framework builds on the REEEES VFM framework deployed in this review but is designed to provide a simple and user friendly **VFM assessment tool,** to allow for focused and strategic analysis of TA provision in the states. The framework is designed in order that it can be adapted as a planning, monitoring or review tool. The framework proposes a five step assessment process as summarised in figure 10.

Figure 10: Overview of 5 Step VFM assessment process



This five stage assessment requires data to be generated on a core set of agreed indicators across the REEEES framework and facilitates judgements of 'performance' at each stage. A clear differentiation is made between VFM performance 'externally' – the impact of TA on addressing blockages in state delivery systems and ultimately on development outcomes, and 'internally' – the performance of TA delivery. The five step process will generate a 'TA assessment dashboard' which can be then be analysed and interpreted by stakeholders collaboratively to allow for an overall assessment of the VFM of TA.

An outline of this tool has been developed – and is presented in annex K. This tool will require significant further work and refinement as well as testing with actual data and in the field[209].

[209] Please note this framework/assessment tool is an ***additional product*** to the deliverables required in the ToR

8.4 Conclusions

The analysis generated a number of detailed findings both across the REEEES framework and with respect to the strategic assessment of TA and VFM reporting. These findings were drawn together to develop 15 overarching conclusions as summarised below:

1. The TA and FA support to three states provided by DFID has been highly relevant to the needs and expectations of the state governments. The choice of interventions supported has been well aligned with government needs and strategy, and to some extent, with other DPs (according to the principles of aid effectiveness).

Overall, there is evidence of good alignment between DFID programmes and the strategy of the state governments, particularly in MP and Odisha where DFID has a history of engagement. DFID's support is generally perceived favourably compared to that of other DPs, primarily due to the lack of preconditions and associated flexibility. Across the intervention areas, DFID support appears to be addressing a number of critical needs of the government, in terms of reforms to procurement, strengthening management information systems (MIS), quality improvements, and addressing demand-side gaps through community mobilisation. The gradual progress towards integration and convergence of health, nutrition, water and sanitation within DFID's sphere of support is a highly relevant strategy that aligns with the global as well as the national approach towards development. Support for institutional reforms is broadly aligned with the work of other DPs in the three states and there is evidence of inter-agency coordination. However, there is also persistent confusion about the overlap of roles and potentially a need for clarification.

2. The relevance of providing inter-linked FA and TA support is high, especially in the context of improving VFM; while FA fills in some critical infrastructural gaps in the system, TA creates an enabling environment to utilise funds more efficiently.

Across the three states, TA represents a *reported* high-value addition and there are examples of how technical support is being used to leverage greater value from initiatives being funded through FA – for example, in MP where FA has been allocated to support quality improvements in maternal and child health services, TA provides complementary support to the formation of quality assurance cells and accreditation procedures.

3. Financial support to implementation is likely to be substitutable in the longer term and therefore is arguably less relevant to the needs of state governments. However, DFID funds are valued for their flexibility and TA is reported to be a highly relevant strategy.

Considering the ongoing underspend in the states, and the increasing funding available through NRHM, it is clear that FA is becoming less and less relevant to the needs of the states in which DFID is working; however, there is an ongoing appetite for TA and the flexibility of DFID support, in comparison to other DPs, is reported to be highly valued. An important element of reported value is the availability of discretionary funds which are linked to TA.

4. There is some limited evidence that the TA and FA support from DFID has helped leverage some important economy savings; however, as yet, there is little direct data on specific cost savings in terms of, for example, commodity price reductions being achieved directly as a result of these interventions. The greatest evidence of the contribution of DFID-supported interventions in terms of economy relates to the support for reforms in procurement and the establishment of procurement cells, but there is potential for further contributions in the longer term and a need for better measurement of changes.

The primary contribution of DFID interventions in terms of economy is the support for reforms in the processes and systems relating to procurement and the establishment of procurement cells in the three states. While there is little direct data on cost savings, the savings in terms of time are

clear, and there has been increased transparency (for example, linked to tendering processes and the generation of reports on fund utilisation). Key downstream interventions that have been supported by DFID in all three states, such as community mobilisation support, have the potential to leverage significant economy savings. However, these are likely to be longer term and there is not yet strong evidence for their contribution.

5. Many of the interventions that have been supported through DFID FA and TA have either explicitly or implicitly been focused on improving overall efficiency of health systems in the three states. There is evidence that the support for strengthening/reforming institutional mechanisms has high potential to deliver efficiency gains; however, at this stage the evidence for actual efficiency gains from these upstream interventions is mixed. There is strong evidence that DFID support is contributing to significant efficiency gains through interventions that have resulted in increased utilisation of funds, more optimal use of infrastructure, and targeted allocation to high-burden or poor districts.

There is a clear focus on efficiency in the support to strengthening/reforming institutional mechanisms. This can be achieved through improvements to technical and/or allocative efficiency, but the gains are likely to be longer term. Efficiency gains are being achieved through increased fund utilisation, use of infrastructure and differential allocation to districts. The combination of these factors is promoting improved efficiency because the return on investment is likely to be better in high-burden districts, and there are clear efficiency gains in the more optimal use of infrastructure; for example, through increasing utilisation. Allocative efficiency is being promoted through the downstream support mechanisms. Both FA and TA are closely aligned with the national programmes for health, nutrition and sanitation, which are characterised by evidence-based interventions, particularly in maternal and child health.

6. There is good evidence of consideration of equity in the design of the three state programmes and many of the downstream interventions show clear potential for improving equity.

It is clear that equity was a key consideration during the conception of the three state programmes, and an important element of DFID's approach was the targeting of high-priority districts. Many of the DFID-supported interventions, especially at the district and community levels, have the potential to contribute to improving equity outcomes. Community mobilisation interventions are particularly targeted at empowering women, and also targeted at children and other excluded groups, and evidence from similar interventions elsewhere suggests high potential for self-help groups to address demand-side barriers for disadvantaged women

7. While there is some consideration of equity issues in upstream support, there is scope for a more systematic focus on equity in support for evidence generation and translation into policy.

There is some evidence of considerations of equity at the policy level; for example, in support for generation of policies linked to women's empowerment and the strengthening of institutions with an equity mandate (such as the Women Development Corporation). However, there is less evidence to show that there has been a strategy to systematically generate policy-relevant evidence about the impact of interventions on the poorest and most vulnerable populations through TA.

8. It is clear that many of the interventions that have been supported by DFID have the *potential* to improve the effectiveness of the health system, but this has not yet been definitively realised. In terms of upstream support, improvements to efficiency may have a 'trickle-down' effect but this would be difficult to attribute. There is clearer potential for more directly attributable results to be generated from downstream support – improvements to quality of services and to demand and utilisation should lead to better

health outcomes. DFID's investment in MP, Bihar and Odisha's health sectors is expected to bring a high return, and initial evidence suggests that they are potentially cost-effective programmes.

Progress against coverage and outcome indicators has been mixed, within and across the three states. There is potential for support to upstream interventions to improve health outcomes; however, this has not yet been demonstrated. There is a clearer link to the downstream support, where quality improvements and infrastructure can more reasonably be expected to result in better healthcare and thus improved outcomes. Evidence from community mobilisation interventions elsewhere suggests potential for contributions to improvements in health outcomes; however, the interventions are currently at too nascent a stage of implementation in the three states. The analysis suggests that, if logframe targets are achieved, then DFID's investment is likely to be cost effective based on international benchmarks for cost per disability-adjusted life year (DALY).

9. There is good evidence for the sustainability of the implementation of interventions funded with DFID's FA.

There is good evidence that interventions funded through DFID's FA will be taken over by the government; the government was given plenty of time to plan for the cessation of FA and the removal is more than counteracted by increased NRHM funding. In terms of implementation support, the government has already scaled up some of the DFID-supported initiatives; for example, community mobilisation interventions have been extended within each of the three states.

10. Evidence for the sustainability of initiatives supported with DFID TA is mixed – while there is evidence of ownership and scale-up in some functions, in others implementation is at too early a stage to conclude that they are sustainable.

The government has taken ownership of the MIS strengthening, and further initiatives are planned. However, evidence for the sustainability of other functions of TA is more limited; for example, in terms of support to implementation where, in the case of quality improvement initiatives, there do not yet appear to be strategies in place to transfer ownership of the functions of TA. Implementation of a number of initiatives is at an early stage, and TA is required to sustain momentum and capitalise on the progress that has been made to date.

11. DFID's strategy of concurrent support to multiple departments, and the alignment of upstream support with a set of downstream interventions, has helped create an enabling environment for integration and innovation.

The concurrent support of DFID to the departments responsible for health, nutrition and WASH is targeted at overcoming the challenges linked to the operationalisation of an integrated strategy. This upstream support is combined with a 'bottom-up' approach of integrating services at community level and increasing demand for integrated services. The strategic focus on the integration of multiple sectors in delivering health related services has the potential to contribute substantively to VFM, and DFID's approach aims to create an enabling environment for this to evolve. Linking upstream and downstream support maximises the opportunities for TA to add value to interventions funded through FA and promotes innovation through a learning-by-doing approach.

12. There is substantial added value in the TA that DFID provides, but also clear opportunities for optimising the model to maximise the potential for significant and sustainable transformation.

DFID and its TA teams have an established presence and relationship with the governments and it has emerged as a leading player in the three states, especially in the context of addressing systemic and strategic issues, such as human resources, procurement and distribution of health

commodities, and quality of care. The parallel and complementary technical support through a dedicated and expert team has helped the government agencies adopt a more professional and evidence-based approach, and there are clear examples of how DFID support has contributed to critical system reforms. The responsiveness of the TA teams to the needs of the government represents a good strategy for gaining buy-in and building rapport with the government; however, there is a risk that taking on routine or 'gap-filling' activities detracts from the support aimed at effecting sustainable transformation. There is a clear need to continue maintaining an appropriate balance between meeting the immediate needs of the government, and effecting longer-term change and capacity building.

13. DFID's model of TA (the use of multi-sectoral teams at the state and district levels) represents an efficient and effective approach, particularly in relation to health-system strengthening.

Most DPs that offer TA do so through the use of specialised agencies at the level of individual projects, which may, if successful, sometimes be scaled up by government, with the support of the DP. DFID has been offering broader support at the level of strengthening of systems in less traditional areas – such as financial management and developing information systems. The presence of a state-level TA team with expertise in multiple different areas is necessary for the provision of such support. However, there is scope for further convergence at the state level, including greater interaction between different sectors within the TA teams.

14. There are significant knowledge gaps that need to be addressed in order to maximise the impact of DFID's support and facilitate assessment of attribution.

This study found no evidence that a systematic and strategic analysis of how DFID-supported interventions can – and, more importantly, should – interface with each other has been done to date in any of the three states. This represents a missed opportunity in terms of analysing the opportunities to maximise VFM for DFID's, and the state governments' investments. A strategic analysis would allow attention to be focused, and avoid limited resources being stretched too thinly to be able to trace their impact. There is similarly a huge knowledge gap in tracking the utilisation of programme funds at the frontline, which presents a challenge for attribution.

15. There are clear opportunities for DFID and state governments to strengthen their monitoring and reporting on VFM.

DFID's reporting on economy indicators is reasonably strong (in comparison to other VFM indicators); however, there are opportunities for improving the utility of the indicators to DFID and its partners. These generally relate to consistency in reporting over time, in order to demonstrate trends in improving economy, and the strengthening of the indicators through monetising cost savings or benchmarking. Current monitoring and reporting systems do not allow for systematic assessment of performance in relation to efficiency – for example, the indicators being reported by DFID in its annual reviews do not collect data on the efficiency savings and most information provided is framed through qualitative descriptions. There are good examples of cost-effectiveness indicators, which should be reported on consistently over time and across the three states, to facilitate comparisons of trends in VFM.

8.5 Recommendations

The report has identified a number of recommendations to structure the future development of DFID's support for health programmes in India. They have been structured around four areas:

A. The current programmes;
B. The next phase of DFID support;
C. Improving the measurement of the VFM of TA; and
D. Longer-term sustainability.

All recommendations are designed to be actionable and the key responsibilities for each recommendation are *underlined.*

A. Recommendations for the current programmes

Recommendation 1: Within the existing programmes, *DFID TA* should be targeted to increase the momentum within three critical areas, to ensure transformational and sustainable change: a) human resource-related issues; b) monitoring performance of innovations in health, nutrition and WASH; and c) demand-side interventions.

- **Human resource-related issues**: TA initiatives have focused on streamlining the human resources (HR) information system and supporting the government's initiative to frame appropriate HR policies and norms. There is an urgent need to push the reform further and ensure effective implementation of some important, but sensitive, HR policies (for example, rationalisation of workforce allocation). *State TA teams* should steer further consultation with the departments on this unfinished but achievable agenda.
- **Monitoring performance of innovations in health, nutrition and WASH:** monitoring and evaluation (M&E) indicators for process and results of innovative interventions need to be developed by *state TA teams*. For example, the quality improvement initiative at hospitals, community-based WASH interventions, and innovative nutrition interventions need to be assessed with an increased focus on equity, based on a well-defined set of M&E indicators.
- **Demand-side interventions:** community mobilisation initiatives (especially those based on a participatory learning approach) are at crucial stage in the scale-up process. Emphasis needs to be on ensuring the sustainability of these developments and *state TA teams* should push harder to institutionalise and fully integrate them into national programmes.

B. Recommendations for the next phase of DFID support

Recommendation 2: *DFID India* should continue to work together with *state governments* and other stakeholders to identify where ongoing TA should be provided to departments with responsibility for health, nutrition, and WASH. The next phase of TA should be based on reassessment of key blockages to progress, and a systematic and evidence-based analysis of potential TA responses, and learning from the previous phase of support.

- *DFID India*, in close consultation with the *state governments* and other key stakeholders, including *TA providers,* should assess the TA needs in each state, with a focus on identifying critical blockages and the appropriate TA response.
- The critical blockages to delivery of integrated programming across the sectors should be systematically assessed and the TA requirements to mitigate these barriers should be defined.
- Prioritisation of strategies for TA should be informed by the implementation of a systematic and transparent assessment framework that is based on clear, simple and mutually agreed VFM criteria and has a strong focus on supporting long-term, and sustainable, transformation across the three sectors.

Recommendation 3: TA should balance flexibility and responsiveness to meet the state governments' short-term priorities with provision of long-term strategic and 'transformative' support.

- Effective TA requires a balance between the need to be responsive and meet the government's immediate priorities, and a desire to ensure sustainable transformation. Being reactive and flexible has been one of DFID's key strengths, and maintaining this is fundamental to ensuring continuing successful collaboration with the government; however, this should not be a barrier to long-term capacity building.
- There should be a transparent process of consultation between *state governments,* *DFID*, and the *TA providers* to gain consensus on, and clearly articulate, the functions of the TA teams. This agreed mandate should allow space to be flexible to the immediate needs of the government, while ensuring the long-term focus is on sustainable transformation. The consultation process should also identify the appropriate structure to operationalise this balance; for example, flexibility may be created by a small discretionary pool in the grant, while the major share is allocated to long-term transformative TA that focuses on capacity building and systems strengthening.

Recommendation 4: *DFID India* should continue to support capacity building of state governments using a multi-speciality TA team structure.

- Provision of DFID TA to strengthen systems across sectors – as opposed to individual sector-specific projects – is an important contribution that the current multi-speciality TA teams have provided. This cross-sector support should be maintained and indeed deepened for the next round of TA provision.
- This will require *TA providers* to implement recruitment strategies that ensure the hiring of appropriate technical specialists with a robust understanding of inter-linkages between these sectors across systems. It is important that the organisational structure of TA providers maximises opportunities for integration and, for example, does not create sector-specialist silos.

Recommendation 5: *DFID India* should continue to advocate for state governments to increase their roles in donor coordination. *State governments* should take a leading role in initiating and managing DP co-ordination according to their own needs.

- DFID is one of a number of DPs providing TA in the three states. Given some of the concerns raised about co-ordination between donors and the fact that there are both strengths and weaknesses implicit in different models of TA, there is an opportunity for mutual learning and a more harmonised approach to TA during the next phase of assistance.
- DFID's co-ordination efforts are greatly appreciated (e.g. in the context of RMNCHA+), but future co-ordination initiatives will work best when initiated and organised by *governments*.
- *DFID India* should leverage its strong position as a convener and co-ordinator among DPs to consolidate the extensive body of knowledge and practical experience possessed by the TA teams currently working in the three states and to facilitate a collective learning exercise.
- *DFID India* should advocate to *state governments* and support them to adopt a leadership and co-ordination role in initiating and managing DP assistance according to their own needs. This could include specific initiatives, such as providing support to the government to set up a result-oriented and specific TOR-based donors' co-ordination platform.

Recommendation 6: *DFID India* should articulate an explicit strategy for supporting state governments and research partners in the generation, and translation into policy and practice, of evidence relating to how programming can improve equity.

- The TA provision for evidence generation has high potential to leverage better equity-focused programming; however, to date this potential has not been sufficiently realised. *DFID India* should work with *state governments* and *research partners* to identify a clear research agenda to better understand what works and what does not in relation to equity-focused programming
- This support for evidence generation should incorporate an explicit emphasis on using evidence to inform ongoing policy making and programming.

Recommendation 7: *DFID India* and *state governments* should agree a revised incentive structure for ensuring mutual accountably around the delivery of TA.

- Provision of TA without FA will require *DFID India* to develop a revised incentive structure *in consultation with the government* to achieve set milestones. Continuing DFID's TA support, in the absence of FA, will require DFID to work together with state/national governments to design health systems strengthening programmes that clearly respond to their needs and TA requirements. Currently, the release of tranches of FA according to achievement of milestones provides a key incentive for the government to work jointly with the TA support teams (TASTs) towards targets. Without FA, such an incentive structure will no longer exist, but given the governments' expressed need for DFID's TA, it should prove possible to collaboratively develop a mutually agreeable accountability and incentive framework.
- *DFID India* should undertake a broad global review of provision of TA to governments, with a view to understanding the incentive structure that will obtain maximum co-operation from the governments in the absence of FA. The focus could be restricted to systems-strengthening technical support.

C. Recommendations to improve measurement of the VFM of TA

Recommendation 8: *DFID India* should focus its attention on a consolidated set of indicators of VFM in the state health systems. *TA providers* should work closely with *state governments* on ensuring that data is collected and used to improve the economy and efficiency of use of public funds.

- *DFID India's* reporting on VFM should be strengthened through refinement of its indicators, and consolidation around a limited basket of markers of VFM that are systematically monitored over time and across states.
- VFM indicators could be used to help inform risk analysis around TA provision.
- *TA providers* should use these indicators as a basis for advocating with state governments around the systematic collection of data on health-system performance on VFM, and the translation of this evidence into policy changes.

Recommendation 9: In developing its TA strategy, *DFID* (in conjunction with *state governments* and *TA providers)* should devote resources to developing a clear and simple 'VFM framework' for jointly planning monitoring and assessing TA provision in the future.

- Building on the extensive work that has been done on measuring TA provision globally and the more recent work that has been done with respect to the VFM agenda, *DFID India* should devote resources to the development of a clear and simple TA VFM assessment framework.

- This framework should cover the REEEES components, but should be more explicitly focused on generating data that will help decision makers at all stages of the TA cycle (planning, implementation and review) to have an overview of performance across these VFM elements so that strategic choices can be made. Practically, this means that the framework needs to be simple, transparent and adaptable.
- This framework needs to be explicit about the need to generate evidence of both the 'external' VFM of TA provision (i.e. where possible, the impact of TA on contributing to state objectives relating to health outcomes), as well as 'internal' VFM of the TA provision (i.e. the extent to which TA provision itself is meeting VFM criteria) and to use this evidence to inform ongoing decision making.

A VFM Framework for Technical Assistance

As an output of this study we have developed a 'skeleton' assessment framework which can be further refined to allow DFID to undertake a systematic VFM analysis of TA in the future. Its primary objective is to provide a simple management and decision making tool for DFID India and its partners as it moves forward in to a phase of TA only provision. This assessment framework builds on the REEEES VFM framework deployed in this review but is designed to provide a simple and user friendly **VFM assessment tool,** to allow for focused and strategic analysis of TA provision in the states. The framework is designed in order that it can be adapted as a planning, monitoring or review tool. The framework proposes a five step assessment process and is presented in Annex K of this

Recommendation 10: *DFID India* and *DFID Headquarters* should be realistic and pragmatic about the extent to which 'external' attribution of their TA in India can be achieved.

- Evaluating TA for purposes of attributing impact is difficult, and even more so in the case of broader systems-strengthening support, which has multiplier effects. This fact is well recognised by other DPs operating in India, the majority of which do not attempt to measure the extent to which 'their' TA has an impact on key development outcomes. Rather than focusing on quantifying and attributing the impact of its TA, DFID should work on refining qualitative methods (for example, the use of a detailed theory of change) of exploring the broader impact of its TA on both development outcomes and intermediate outcomes (such as strengthened systems).
- A key strength of DFID has been its ability to be flexible and responsive, and there is a danger of losing this if a focus on results means that aid effectiveness principles are disregarded as the TA provision becomes fixated on achieving milestones and organisational incentives are created to reach (DFID-mandated) targets.

D. Recommendations on longer-term sustainability

Recommendation 11: *DFID India* should ensure that consultation with the government around priority areas for the next phase of TA explicitly considers longer-term capacity building, ownership and exit strategies.

- DFID's leadership in the procurement of TA and responsiveness to state government requests for substitutional tasks has been necessary, given current government capacity and administrative structures in the three states. Building the governments' own capacity to lead on the delivery of these functions will need to be a high priority as part of the longer-term exit strategy and also maximising ownership.
- *DFID India* should work with *state governments* and other *DPs* to develop a joint policy paper on the long-term expectations from the TA provided by DPs, working towards an eventual exit.

Recommendation 12: *TA providers* should support capacity building and organisational development of State Health Resource Centres, with a view to transferring responsibility for TA provision to the centres in the longer term.

- The possibility of increasing the state governments' capacity to procure their own TA in the long term (when DFID's TA will be phased out) is not just about providing organisational support. It is about institutional change; for example changes in pay structures, and government procurement and hiring procedures.
- TAST support should be provided to develop the nascent resource centres, which could then continue providing TA to the government in a sustainable manner when DFID TA is phased out.

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