WASHCost End-of-Project Evaluation

Main Report

Piers Cross WITH JOSE FRADE, A. J. JAMES AND SOPHIE TREMOLET



Acknowledgements

A great many people assisted the authors in undertaking this evaluation. In addition to the interviewees mentioned in the report, and those acknowledged in each of the country reports, the authors wish to thank and acknowledge the exceptional support given to the team on country visits (IRC country teams supported all country field visits providing relevant information and facilitating the contacts with the sector authorities and stakeholders): in particular, in Burkina Faso, Juste Nansi, Richard Bassono and Christelle Pezon; in Ghana, Dr Kwabena Nyarko, Vida Affum Duti and Victor Narteh Otum (especially when the field trip date changed at the last minute); in India, Dr M. Snehalatha, Aidan Cronin and Bharat Lal; and in Mozambique André Uandela, Julia Zita and Messias Macie. Evaluations can be an uncomfortable experience for those being evaluated and the WASHCost management team at the IRC have been highly supportive and showed an exceptional willingness to cooperate and share their insights. A very special thanks to Catarina Fonseca and Rutger Verkerk who managed the evaluation contract; and Deirdre Casella who had the unrewarding task of supporting the evaluation team—and did it with remarkable efficiency and good humour. Responsibility for the imperfections in the report remains with the authors.

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IRC International Water and Sanitation Centre based in The Hague, The Netherlands, is a global 'think-do' tank committed to the delivery of water, sanitation and hygiene services that last forever, for everyone. IRC is dedicated to achieving transformative change in the WASH sector, particularly in the developing countries where it works. In partnership with governments and a broad range of organisations, IRC's innovative work contributes in making services more sustainable, bridging the knowledge gap, and identifying solutions to WASH challenges.

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Abbreviations

AIIM Alignment, Interest and Influence Matrix

AP Andhra Pradesh (state in India)

CoP Community of Practice

DFID Department for International Development (*United Kingdom*)

DGIS Directorate-General for International Cooperation (Directoraat-generaal

Internationale Samenwerking, The Netherlands)

DNA National Directorate of Water (*Direcção Nacional de* Águas, *Mozambique*)

EPE End-of-Project Evaluation

GAS Water and Sanitation Group (*Grupo de* Água *e Saneamento, Mozambique*)

IAG International Advisory Group (WASHCost advisory group)

INGO International Non-governmental Organisation

IRC IRC International Water and Sanitation Centre

KNUST Kwame Nkrumah University of Science and Technology (Ghana)

LA Learning Alliance

LCCA Life-cycle Costs Approach

MDGs Millennium Development Goals

MTA Mid-term Assessment

NGO Non-governmental Organisation

SDA Service Delivery Approach

SWA Sanitation and Water for All

Triple-S Sustainable Services at Scale (an IRC International Water and Sanitation

programme)

WASH Water, Sanitation and Hygiene

WASHCost Quantifying the Costs of Delivering Safe Water, Sanitation and Hygiene services

(an IRC International Water and Sanitation programme)

Executive summary

This is the country synthesis and global report of the End-of-Project Evaluation (EPE) of the WASHCost project, carried out by a team of consultants from January to May 2013. WASHCost is a five-year, US\$ 14.5 million project, funded by the Bill & Melinda Gates Foundation (Gates Foundation) and executed by the IRC International Water and Sanitation Centre (IRC). Its objective was to improve access to accurate knowledge on disaggregated water, sanitation and hygiene (WASH) costs in rural and peri-urban areas. WASHCost set out to develop a methodology and data set for a life-cycle costs approach (LCCA) to assist sustainable water and sanitation service delivery. It aimed to inform and influence decisions and business models at local and national levels (focusing on Burkina Faso, Ghana, India [Andhra Pradesh] and Mozambique) and international levels. Globally WASHCost aimed for the adoption of life-cycle-costing terminology whilst influencing global sector agencies to incorporate these approaches into WASH policy and budgeting frameworks.

The EPE is an independent assessment of WASHCost's achievements and is conceived as part of a *Critical Review*—a suite of products to document results and reflect on project experiences. The EPE undertook five separate analyses: assessments in each of the four focus countries and a global assessment. Each country was scored on progress towards achieving project outcomes. The global assessment undertook a survey of 220 sector leaders drawn from different constituencies, and held in-depth interviews with 28 key informants. The terms of reference required the assessment to focus on six areas of enquiry: uptake and use of LCCA; the potential of continued adoption and growth of LCCA; the record of WASHCost's management in learning and adaption; what has changed as a result of WASHCost; how well the initial project design worked; and what unexpected outcomes had occurred.

Evaluation conclusions

WASHCost's importance: WASHCost, in setting out to unpack all the costs that lead to sustainable WASH outcomes, has focused on a very strategic and much neglected area of sector discourse.

Remarkable project in difficult terrain: Costs in the WASH sector are affected by many different factors and there has been a historic reluctance to examine them comprehensively. WASHCost has been a remarkable project: a bold conception that has made a substantial contribution to transforming the global debate on WASH in rural and peri-urban areas. Powerful conclusions have been reached on the costs of water, sanitation and hygiene, which can help to improve the design and impact of sector financing.

Not everything has been achieved in the original expectation of five- and ten-year outcomes:

The project has made excellent progress especially in articulating LCCA, spelling out its implications, and linking this to a Service Delivery Approach (SDA). Extensive field-based research presented new insights, confirmed facts already known (but not substantiated), and marketed costing issues at a scale that has not been done before in the rural and peri-urban sectors. But this good work has not yet been translated into large-scale impact on the ground in terms of new policies being implemented, changed budget processes, new investments, new financing strategies, and in triggering institutional change.

7

Critical elements missing from the theory of change: Achieving this less than anticipated impact was not for lack of trying. WASHCost made a substantial effort, learnt a great deal about how to manage a global learning project and developed a nuanced approach to helping reformers to reform and create country-owned change on the ground. Missing elements in WASHCost's theory of change are: (i) evidence alone will not create large-scale change: political will is a vital ingredient and mobilising political support should be integral to action research activities like WASHCost; (ii) the theory lacks a detailed analysis of the "dynamics of acceptance", in particular by governments; (iii) the good work on better understanding costing will not translate into impacts until this critical information is used to design and implement innovative financing strategies to cover all identified costs (stopping the project at costs has been a significant limiting factor on project impacts); and (iv) since rural and peri-urban WASH management are mainly a local concern, ultimately LCCA needs to be adopted by local decision makers (in local governments, municipalities and amongst community managers).

Yet WASHCost has achieved most impressive results: WASHCost can count amongst its achievements: helping to shape the post-MDG debate, bringing attention to life-cycle costs; galvanising attention on sustainability; influencing the approaches of several major donors and some planned investments in focus countries; making significant contributions to the policy dialogue on costs in the four focus countries, in particular in Ghana; developing a methodology for assessing costs, which is now being applied in at least eight other countries (Bangladesh, Colombia, El Salvador, Honduras, Nepal, Paraguay, Sierra Leone and Uganda); developing an off-line and on-line training facility which has already trained more than 1000 people from 91 countries in LCCA and SDA; establishing a WASHCost network of over 1200 people interested in costing in the WASH sector; establishing a dialogue with over 70 organisations/ governments in at least 20 countries and including 34 organisations with global outreach; and so far produced an extraordinary array of 176 high quality publications. A tool to better navigate this large body of publications would be helpful.

Using WASHCost's impact on NGOs: The EPE shows that WASHCost achieved an especially positive impact on INGOs (International Non-governmental Organisations) and NGOs (Non-governmental Organisations). A conscious strategy of adopting NGOs as a "vehicle for change" might be an additional strategy to encourage adoption of LCCA and SDA, and in future IRC learning activities.

The project achieved widespread adoption of LCCA and SDA: Through persuasive argument, credible research, good quality publications and hard work, WASHCost achieved a high level of LCCA and SDA adoption. LCCA is a powerful concept especially when linked to a SDA, but it applies mainly to infrastructure investments and is of less relevance to behaviour change and hygiene promotion. Also the LCCA model needs further development, making linkages to financial strategies best suited to different cost items, and promoting roles for different actors, including government, user tariffs, financiers and the private sector. SDA made a significant contribution in systemising service levels and developing language which has been influential in the post-MDG and global monitoring dialogue.

Adaptive management has been a key success factor: The story of WASHCost is a rich one, with many twists and turns, and the project delivered a huge volume of documentation. Key to the project's success was a dedicated project management willing to adapt. The project faced evolving objectives and rapid changes in IRC itself. Despite several low points and pressures from many parties who had a different interpretation of the project, WASHCost's management

kept the project on course. More than that, it operated in a consultative and inclusive manner with collaborating agencies. It adapted the original concept and amended plans with the goal not only of producing high quality research results to change the global mind-set for costing in the rural and peri-urban sector, but also helping focus country's sector leadership to improve service delivery on the ground.

WASHCost has developed a nuanced model of country/ global learning or action research: Elements of this model include: selecting a strategic area that triggers change; establishing a strong country presence with a trusted and supportive relationship with local lead sector agencies; undertaking comparative research which both addresses local problems whilst providing a basis for cross-country comparisons and global learning; supporting a national learning alliance to share learning and bring these to the attention of national financiers; and global positioning and networking to place new insights into the global domain.

Several lessons have been learnt from implementing this model: These include: it takes time to develop; it needs sufficient resources to enable management to change course and adapt to change; it needs strong country offices with strong institutional visibility and branding; the staffing mix should contain high calibre analytic staff together, with in-country operators and influencers; the research phase in the project design should be balanced to allow enough time for the project to gather key and strategic information (but should avoid full-blown, academic research, leaving this to academic institutions); the majority of the effort should be planned for embedding, supporting learning alliances, triggering political will, advocacy on research findings and recommended solutions, and in setting out to influence national and global decision makers and investors.

Triggering political will: IRC should incorporate triggering political will as an integral part of its action research projects. IRC's membership in SWA provides one opportunity, but strategic relationships need to be developed to influence political leadership to adopt lessons from action research.

WASHCost has been the catalyst to transform the IRC: Through WASHCost the IRC has become a more credible global learning agency in the WASH sector. WASHCost helped the IRC to make the leap from a relatively unknown Dutch NGO filling small gaps in the WASH sector, to being perceived as a global learning agency capable of managing large, complex global projects that deliver high-quality results. WASHCost achieved this because of a relatively small group of talented and motivated individuals. IRC has the opportunity to build on this achievement to create the organisational drive, culture and systems to manage other large and complex projects. Finding the resources to enable the IRC to continue to contribute to global learning must be a top priority for IRC management.

Future global learning: WASHCost has created momentum to change behaviour on one of the fundamental issues holding the sector back from reaching international goals. Building on the global learning style that IRC has developed in WASHCost and Triple-S, the evaluation recommends that the IRC positions itself to address related global learning issues which logically follow from and build on this momentum. The two major issues which suggest themselves from the country analyses are: (i) <u>Finance</u>: country-embedded global research to assist countries to put in place strategies to generate the finance to meet life-cycle costs for different service levels and promote innovation in financing approaches; and (ii) <u>Local government</u>: an initiative to embed better costing, a focus on sustainability and more effective/ innovative financing options into local government settings.

1 Background and methodology

1.1 Background

In December 2007, the Bill & Melinda Gates Foundation (Gates Foundation) awarded a five-year (2008-2012) US\$ 14.5 million grant (extended to 64 months, January 2008 to April 2013) to the IRC International Water and Sanitation Centre (IRC) to undertake a project entitled "Quantifying the costs of delivering safe water, sanitation and hygiene services". The project is known as WASHCost.

WASHCost's objective is to improve access to accurate knowledge on disaggregated water, sanitation and hygiene (WASH) costs in rural and peri-urban areas (box 1). These market segments are of the greatest interest to donors and agencies working in external aid. Improving services in rural and peri-urban areas is critical for developing countries to reach the Millennium Development Goals (MDG). Reliable information on the costs of sustainable water and sanitation in these sub-sectors is difficult to obtain and are not reliable. Most budgets include the capital costs of infrastructure but overlook ongoing operations, maintenance, depreciation, and other costs associated with sustainability. The project's contention is that a good understanding of disaggregated life-cycle costs, in these neglected aspects of WASH development, will help improve planning, budgeting, and financial control; inform economic analysis of technologies and business models; and, in turn, improve efficiency, effectiveness, impact and service sustainability. WASHCost takes costing models developed in the urban utility environment and applies them to services for the poor.

Box 1 **WASHCost:** purpose and tasks Main purpose: to achieve measurable improvements in WASH service delivery by: Improving access to generate accurate knowledge on disaggregated costs; and Embedding improved decision-making processes in lead organisations in the WASH sector at П intermediate, national and international levels. Main tasks: to achieve the purpose, the following main tasks were proposed: Collect and collate information relating to the real disaggregated costs in the life cycle of WASH delivery services to poor people in rural and peri-urban areas. The collection would take place in around 100 sites per country/ state; Establish a range of statistical and modeling techniques using factors that influence these costs – the cost drivers, and enable a comparison among the four countries; Develop a benchmark criteria for the same areas, which is applicable globally – an international database; Establish a learning strategy including the development of CoPs at country level, and embed improved pro-poor decision-making processes in lead WASH organisations; Develop a free, easy to use web-based ICT interactive tool for sharing and the continuous upgrading of WASH unit cost information worldwide; creating a decision support system that may be embedded into governance systems; Map and monitor changes in planning and decision-making processes mainly at country level; П and

Set up a Challenge Fund to support initiatives that update, replicate and scale up the

development of good quality data and knowledge to other areas.

Box 1 gives the detailed purpose of the project and related tasks mentioned in the final proposal submitted to the Gates Foundation on 14 September 2007; and box 2 presents the expected project impacts over five and ten years.

Box 2 The WASHCost vision of success

Long term: Within ten years, good quality disaggregated cost information is readily accessible to and being used globally by stakeholders in the WASH sector to improve the outcomes of planning processes and, in particular, to achieve: (i) A 25% like-for-like improvement in cost efficiency; and ii) A situation where at least 25% of WASH implementation plans include or are explicitly linked to unit costs analysis and poverty reduction strategies.

Short term: Within five years, good quality WASHCost data, benchmark criteria and knowledge from four countries is readily accessible through an interactive tool, which includes a decision-support system, and is being used by national and international decision makers for the WASH sector in rural and peri-urban areas.

To achieve this vision, WASHCost developed a theory of change that specified four main outcomes presented in box 3.

Box 3 WASHCost outcomes

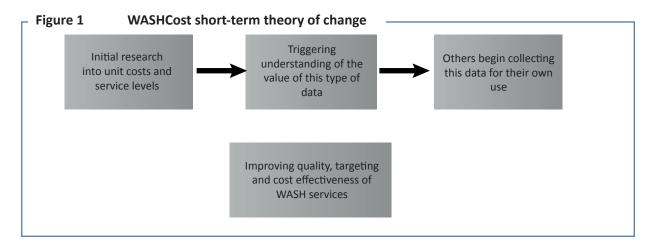
Outcome A: The terminology and concepts of life-cycle costs and methods of data collection and analysis are widely shared, understood and valued by project staff, country Learning Alliance (LA) members and international COP members.

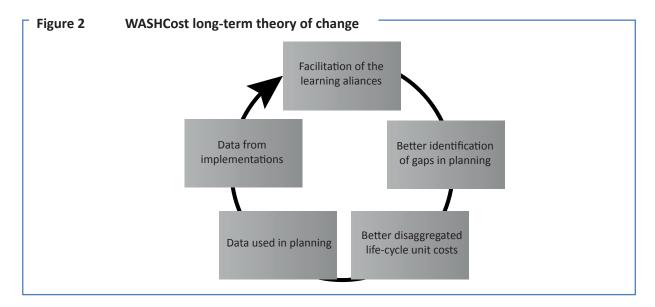
Outcome B: National learning alliances and their activities strengthen local ownership, adoption, upscaling, adaptation and embedding of the Life-Cycle Costs (LCC) approach within WASH governance processes at all levels.

Outcome C: International and national learning alliance and project activities result in sectorwide adoption and support for the LCC approach so that national and international organisations incorporate it into WASH policy and budgeting frameworks.

Outcome D: Effective project management leads to the achievement of project objectives and milestones on schedule and within budget.

The theory of change for the short term is illustrated in figure 1, and for the long term in figure 2.





Overall, the project set out to manage a continuous process of learning, validation of results and stakeholder engagement. The project chose to focus on four countries: Burkina Faso, Ghana, India (Andhra Pradesh) and Mozambique¹. The project adopted a three-phase approach:

Inception phase: Mobilisation, country selection, development of methodologies for data collection and training;

Research phase: Developing and testing a methodology for cost assessment through detailed research, data collection and analysis on costs in developing countries;

Influencing/ embedding phase: Raise awareness on the research findings, embed findings and mainstream life-cycle costing into budgeting and planning processes in WASH governance systems. Methods of embedding included: Communities of Practice (CoP), Learning Alliances (LA), Challenge Fund, advocacy materials, cost guidelines, benchmarks, tools, training materials, training and capacity building events. Embedding was envisaged both with local and national decision makers and, at a global level, with governments, INGOs, donors and private business.

From 2010, the IRC took on a large, closely-related project called "Sustainable Services at Scale" (Triple-S), also financed by the Gates Foundation. Coming after WASHCost, Triple-S benefitted from many of the lessons learnt from WASHCost and is well-positioned to continue the momentum and components of WASHCost. Box 4 provides further background information on Triple-S.

¹ Throughout this report the phrase "country" studies refers both to the three country units of study as well as the study in one state in India—Andhra Pradesh.

Box 4 The Triple-S project

The vision of the Sustainable Services at Scale (Triple-S) project is a world where all rural people can easily and reliably access water that is of good quality and sufficient quantity, from a source that is reliable and easily accessible. Triple-S contributes to this by catalysing a change process in the rural water sector.

At the heart of this change process is a shift in mission: away from (primarily) the provision of new infrastructure and towards the provision of a lasting service. Triple-S will achieve proof of concept of its approach to sector change in two countries (Ghana and Uganda), whilst using this proof to leverage the same change in other countries (starting with Burkina Faso, Mozambique and India) as well as among international actors (multi- and bi-lateral donors, INGOs, philanthropic organisations, etc.) in rural water.

At the country level, Triple-S is working with local partners in:

- □ **Diagnosing the problem** to see what is working and what is not in terms of policies and practices.
- □ **Developing, testing and implementing new solutions** at the district level.
- □ Scaling up successful models.
- □ **Strengthening sector learning** and knowledge management.

At the international level, activities include:

- □ **Capturing and sharing positive examples and learning** from organisations and governments that are making the shift to more sustainable approaches, including partners in Ghana and Uganda.
- □ **Developing and promoting tools and concepts** for sustainable service delivery.
- Working with donors, international financial institutions, NGOs and development partners to incorporate sustainability concerns into rural water sector programmes, and improve harmonisation and alignment.

Triple-S is actively building on the work of WASHCost. Internationally the project promotes life-cycle costing as one of the ten key building blocks in the shift towards sustainable delivery of water services. In Ghana and Uganda, the project is working with partners in local government to integrate the life-cycle costs approach into planning and budgeting. Evidence and lessons from this work will be used to scale up the approach.

1.2 End-of-Project evaluation

In late 2012, the IRC commissioned an independent appraisal of WASHCost to be undertaken in the first quarter of 2013. The End-of-Project Evaluation (EPE) is one component of a broader WASHCost *Critical Review* package. The emphasis of the package is to "tell the story" of how WASHCost progressed towards its goals, and to document changes resulting from the uptake of LCC in the four countries and in the international arena. The *Critical Review* is comprised of three components: a film series, a book, and an end-of-project evaluation.

The external EPE is a critical examination of WASHCost's progress towards its goals and provides external validation of opinions about WASHCost expressed in the other *Critical Review* products. The full Terms of Reference for the WASHCost EPE are attached as Annex 1. The IRC required the evaluation to focus on six key areas of enquiry (as presented in box 5).

Box 5 Key areas of enquiry for the WASHCost EPE

Uptake: the WASHCost short-term vision

□ Evidence of uptake and use of the LCC concepts and methods by sector actors.

Continuing model: the WASHCost long-term vision

The five-year project duration is insufficient to account for well-established changes in budget planning and related behaviour. However, based on existing "signals of change" WASHCost has established a so-called continuing model in the respective project countries, enabling a further uptake and integration of the LCCA. The external evaluator is expected to assess and review the establishment of the continuing model and its potential to guide and motivate further integration of the LCCA.

Learning and changing: adaptive management in WASHCost

- Revisit the WASHCost Mid-Term Assessment, its findings and recommendations, as well as other key reports (e.g., 2011 reporting exercise) to reflect on the project's capacity to respond to signals for change.
- □ What served to trigger adaptation in WASHCost—or a change in course direction—of the WASHCost project activities and outcomes? Why?
- □ What was the outcome of this adaptation?

Change or progress towards change: in light of the project's stated four outcomes

- □ What is the status of what has been achieved in the four countries and the international arena?
- □ What are examples of change resulting from the uptake of LCC in WASHCost countries and at international level?
- □ What has changed as a consequence of WASHCost activities? Where and why?
- ☐ How did WASHCost work to achieve those changes?

(Initial) risks and assumptions, project set-up

- How did WASHCost work: that is what did the design, implementation and management of a project this scope (budget, number of countries, project staff, international level outcomes, etc.) entail?
- □ How, if at all, did the project approach contribute to the achievement of the project's outcomes (e.g., Learning Alliances, Action Research, Local Hosting, etc.)?

Unexpected outcomes

Identify and reflect upon unexpected outcomes—negative or positive—that have come about in the four countries, or globally, through the work of WASHCost.

1.3 Assessment approach and methodology

IRC recruited an evaluation team (annex 2) with complementary skills and a blend of global and country experience to take on different roles in the evaluation.

The EPE was carried out in three phases.

1. Mobilisation and preparation

- Preparatory briefing meetings
- Desk review of background documentation on project
- Desk review of country sector literature
- Preparation of evaluation instruments

2. Data collection

- Interviews: WASHCost Management, Staff and IRC
- Country/ state assessments, including visits to each focus country
- Completion of country/ state scorecards
- Interviews with international agencies
- Short survey of sector stakeholders

3. Drafting report

- Analysis
- Drafting finding and recommendations
- Presentation of main findings to WASHCost management
- Drafting and finalising final report

Methodological Issues

Country assessments

These were developed from interviews with leading sector stakeholders, including the lead government ministries (e.g., responsible for water and sanitation but also local government, finance, statistical monitoring), regulators and parastatals, local consultants and sector specialists, local sector partners, sector financiers and locally established international and local NGOs. In each country assessment, the EPE consultant undertook a visit to the country and met with country WASHCost project staff and partners and in most country visits, undertook field trips to the actual study sites. On the basis of information gathered in the field, the team of consultants completed a scorecard on performance against the main EPE criteria. From the Mid-Term Assessment (MTA) a management unit called WASHCost Netherlands was created to manage global and project-wide activities. These activities were also ranked against the same scorecard. Scorecard ratings were: 5=Excellent; 4=Good; 3=Satisfactory; 2=Poor; and 1=Unsatisfactory.

International agencies

Interviews were undertaken with 28 key international stakeholders/ partners/ sector thought leaders/ operational agencies. A short email survey was sent to 220 agency lead staff or experts in the WASH sector (the response rate, 90/220, was high for an email survey). The list of survey recipients was taken from the Sanitation and Water for All (SWA) contact list (comprising civil society networks, development banks, donors, governments, multilaterals, research and learning institutions and sector partners), with 30 private sector and NGO agencies added from the IRC contact listing (to give a more balanced representation of sector agencies).

2 Findings

2.1 Project design

Bold project concept: highly anticipated results

The WASHCost project was perceived by all interviewed agencies as a remarkable opportunity for the sector ("a once in a generation chance") to do the fundamental investigation on costs, and to help improve the efficiency of investment decisions and sustainability of services. With



Development Bank



the Gates Foundation's financial support, WASHCost was a major opportunity to undertake the basic research necessary to understand the costs of WASH services in rural and peri-urban areas. Many felt that the opportunity of arriving at a clear understanding of unit costs—that has been so persuasive to make the case for investments in the education and health sectors—would greatly help make a better and clearer case for financing WASH.

This would also address the long-standing practice that in developing countries, donors support the capital costs of development, yet other costs are not properly considered and are often underestimated and inadequately financed. It is assumed that post-construction costs will be covered by local sources of finance, which is rarely the case, leading to high rates of nonfunctionality, and frequent replacement or major rehabilitation. The bias of development finance towards capital expenditure and the neglect of service management is one of the most fundamental challenges facing infrastructural development in developing countries.

During interviews some expressed scepticism that IRC was suited to the academic demands of this global study. Others felt that the IRC did not have the convening power to attract the attention of the major sector financiers. Many would have liked to see results sooner. A few wondered if a US\$ 14.5 million investment was in fact needed to obtain cost data; and several commented on the futility of collecting global unit cost data in such a diverse, context-specific environment, where costs are constantly evolving in line with price factors, such as inflation. But overall, sector leaders have been gratified that an organisation with the resources and vision of the Gates Foundation could allocate resources of this size to this fundamental sector problem, and that the IRC—an independent agency—was taking on a strategically important piece of work that could benefit all in the sector.

An unnecessarily complex project?

A few commentators observed that WASHCost's design was complex. WASHCost appeared to be a global research project, a country action research initiative, and an advocacy project on LCCA and service levels. Achieving all these dimensions may have been too ambitious. The initial design also specified some components that were not implemented. The challenge fund was not set up



NGO



because it was felt to add little value and took the focus away from the research. Providing generic 'decision-support tools' was also dropped in favour of producing a methodology so that each country could collect their own data and own LCCA/ SDA cost frames. WASHCost project management adapted the original overly ambitious design as the project progressed.

Global research versus action research

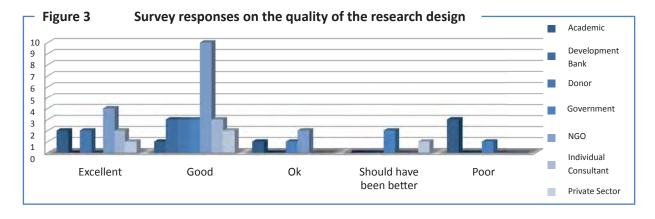
A tension from the outset was found between a project designed as a global research project; and an action research designed to influence action on the ground. The trajectory of the project shifted towards the latter—action research, more in IRC's area of comparative advantage. The sample survey (figure 3) below showed that some

"Was WASHCost a research project or a development initiative?"

Academic

"

academics continue to question the validity of the research design. One interviewee argued that attempting to do both put the project at risk of fulfilling neither sufficiently.



A global research project might have designed a research protocol, tested it out in one country and then rolled it out to other strategically-selected countries that reflected the range of issues to be studied. Instead, WASHCost started in four countries simultaneously and worked out a research approach iteratively. Some global stakeholders (academics) thought that this made the path to global products longer and more complicated; they also raised concerns about the consistency and robustness of indicators and data, as well as the usefulness of global outputs. But as figure 3 indicates, the great majority (81%) of those surveyed felt that the research design was of credible quality. The project has succeeded in executing a research project as a development initiative.

Country selection: could have been more strategic?

Country selection was amongst the most pivotal decisions made in the project design. Countries were selected on the basis of demand and willingness to work with WASHCost, rather than cost characteristics or a strategy "One thing WASHCost teaches us is that context matters."

Multi-lateral Agency

relating to understanding a global cost range. This led to a focus mainly on Africa, and from the outset, emphasised the action research and country impact aspects of the project design. Ghana, Mozambique and Burkina Faso were all selected because knowledge on cost was weak and they were countries in which WASHCost felt it could make a difference. Andhra Pradesh in India was selected because it had a government responsive to understanding WASH issues together with a credible research institution willing to host the project with strong links with the government. The State government saw the primary project objective of the research to "validate" their own already extensive (but still inadequate) cost data.

The country-level approach has been sensitively designed and carefully implemented, striving for local ownership of products and processes. The decision to develop the project with and

17

through country sector leadership has meant that WASHCost evolved into a much broader and more ambitious project (helping reformers reform) than simply gathering cost information. But, as the country story-lines demonstrate, WASHCost has evolved in very different ways that few could have been predicted at the project outset. Context matters: both with respect to making a difference and determining costs.

A dimension that was perhaps not sufficiently taken into account was the implication of country selection for the IRC. A five-year investment in building in-country relationships gives a development organisation a real opportunity to develop a foothold and make a substantial contribution to the long-term challenge of WASH service development. From a perspective of global positioning, a more strategic approach to country selection might have selected, say, six countries, including one each in East Africa and East Asia. This would have better laid the basis for the IRC to develop as a truly global learning agency. Similarly, IRC's longer-term impact might have been better consolidated and WASHCost results better followed up (as happened in the case of Ghana) if Triple-S had been implemented in WASHCost selected countries, and if IRC had ended up establishing a country office in each selected country.

Selection of country host: avoid research institutions

Another criterion for success was in the selection of the in-country host. In general, the evidence from countries is that—if the main purpose of the project was to make a development impact—hosting the project in a research agency (as in Burkina Faso, India and Ghana) gave credibility to the research, but limited the ability to engage in policy dialogue. A university context does not give the flexibility needed to manage an evolving project. Projects that seek to influence sector stakeholders need to be located in an operational environment.

Evidence does not always determine policy: politics matters!

The project design assumed that embedding a better understanding of cost with key decision makers would result in this knowledge being used for achieving efficient and sustainable service development. The 2006 UNDP Human Development report makes the point that political relations underpin the global crisis in water and sanitation and that political leadership is necessary to effect change. A dimension to the design of this

"Political leadership matters."

NGO

action project that might have been considered would have been mobilising political support around WASHCost's findings. The sector has vested interests and cost data is highly political. Effecting a real change will not only require strong evidence on costs and credible alternatives, but also substantial political and financial leverage to change behaviour and effect change.

Link between costing and financing not sufficiently addressed

Another weakness in the theory of change is that WASHCost did not address financing. Better cost data could only achieve sustainable services if there were better mobilisation of finance. Consideration of how best to mobilise finance to fill life-cycle costing gaps would consider tariffs, taxes, additional transfers, design modifications to reduce costs and benchmarking to incentivise efficiency gains. Stopping WASHCost at the point of understanding costs necessarily meant a more limited project impact.

"Costing and financing are two sides of the same coin."

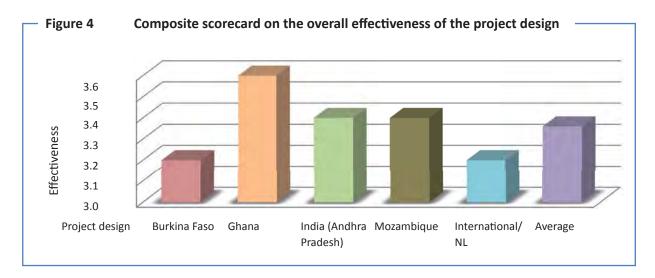
Consultant

Dynamics of acceptance by governments

Looking at the country results, an area that the theory of change might have examined in more detail, was the process of acceptance by governments. What are the drivers of budgetary change? How realistic is it that governments would adopt all the LCCA cost categories in their budgeting and financing processes? In what time frame is it reasonable to expect that governments might undertake the necessary changes?

Overall country scorecard for project design: SATISFACTORY

Taking all the above issues into account, the project design was innovative and the scorecard reflects an overall score of fully satisfactory (figure 4 in which 3=satisfactory and 4=good²).



2.2 Project management

Adaptive management

The WASHCost project concept has evolved through five stages:

"A strength of WASHCost management has been its adaptability."

Multilateral Agency

- Unit costs: Initial concept focused on a better understanding of unit costs (mainly associated with capital costs), developing a useful categorisation of cost components.
- 2. **Life-cycle costing:** Putting these cost components together, the project developed the concept of life-cycle costing, which includes all cost components, contributed by all parties, throughout the life time of a facility.
- 3. **Service levels:** The next evolution was the recognition that it is not technology that must be costed, but service levels on a service ladder.
- 4. **Tools and methods:** Bringing this back to a global audience, the project recognised that its real added value was not so much producing global cost figures, but producing a methodology for local cost assessments.
- 5. **Advocacy and outreach:** With the publication of the results and the development of some high quality presentations and staff who were excellent communicators, WASHCost shifted focus to global advocacy of key messages, training and application of rapid costing exercises in new environments.

² This scale is used in all the presented scorecard charts.

Changing the project concept is confusing, since products are different from those initially expected. Better communicating changes to sector stakeholders might have avoided some confusion.

But these shifts also bear important testimony to an adaptive management style, which sought to shift the project focus according to what was felt would make most difference and would make the best use of the opportunities and resources at IRC's disposal. WASHCost energetic management's consultative style was prepared to take risks and learn by doing. Close collaboration between IRC and the Gates Foundation helped in making the decisions that enabled the project to evolve, though the Gates Foundation's engagement declined in the latter years of the project.

Key project milestones achieved

Notwithstanding the changing goal posts, WASHCost management has a sound record with respect to meeting project milestones. Reporting has been of a high quality and there has been a frank and sustained dialogue between the funder and project executive committee, especially during the early years of the project. This meant that, where justified, milestones could be adapted on an annual basis.

Financial management

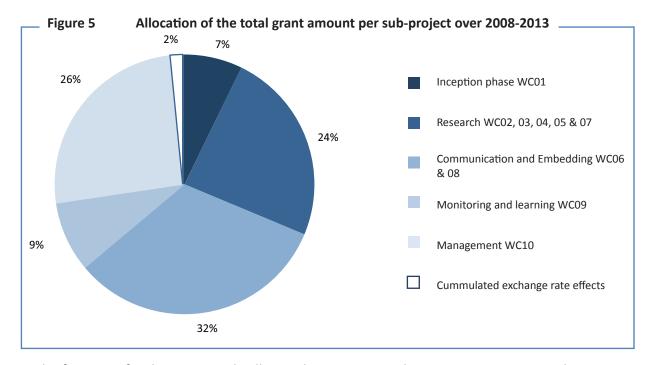
Financial management of the project appears to have been sound. The EPE team was not made aware nor noticed any serious areas of concern. The one negative point raised by some countries was the lack of transparency in budget management, as country staff appeared to have limited information about how their country-level allocation fitted in the overall budget.

The initial grant budget was fully spent. The budget requested decreased from US\$ 14,481,635 in 2008 to US\$ 14,250,141 in 2013; with this reduction mainly due to the impact of the currency fluctuations (as the euro appreciated against the US dollar throughout the period of project implementation).

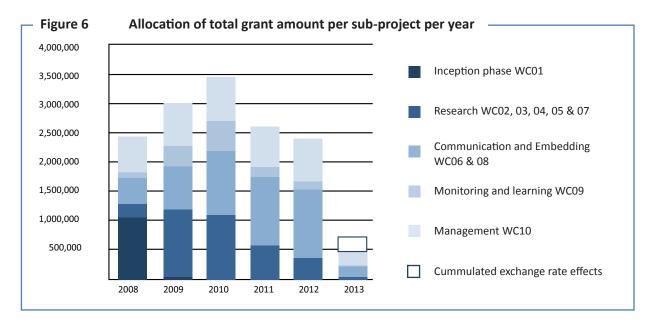
At proposal stage and for the purpose of cost management, the project's expenses were allocated to ten sub-projects corresponding to the different objectives of the grant, which can be used as cost categories for analysis of how the funds have been deployed. For such purpose, however, it is in fact easier to use a more reduced number of cost categories, including: Inception phase, Research, Communication and embedding, Monitoring and learning, and Management³. Some indirect costs remain unallocated.

Figure 5 shows that overall, the grant funds have mainly been allocated to Communication and embedding (32%), Management (26%) and Research (24%). The allocation of fund to the various activities and its evolution over the five years is coherent with the grant's objectives. Figure 6 shows that annual spending increased over the first three years, from US\$ 2,407,619 in 2008 and reaching a maximum of US\$ 3,410,643 in 2010. It then decreased again to US\$ 2,372,502 in 2012.

³ The sub-projects were grouped as follows: "Research" includes the analysis of existing data (WC02); methodologies and training (WC03); data collection (WC04); analysis and practical use (WC05); decision support tools (WC07); "communication and embedding" groups and embedding and replication (WC06); and learning and sharing (WC08). Inception phase (WC01), monitoring, learning and evaluation (WC09) and project management (WC10) were left as standalone categories.



In the first year, funds were mainly allocated on inception phase activities to set up the project, with some research and communication activities. In years two and three, research became the first outlay by far, and communication the second. However, from 2011 onwards, research expenditures were reduced and communication received the bulk of funding.



This followed the planned phasing of the project, with a slight delay as the project had accumulated a delay of between four and eight months with research activities.

Overall, 58% of the grant funds were allocated to country-level activities⁴. The four country projects received a comparable and constant share of the total grant through the years (13% for Ghana and Burkina Faso and 16% for Mozambique and Andhra Pradesh). About 42% was spent on headquarters expenses to support the overall project and conduct international activities, such as overall learning and communication.

^{4 &}quot;Area served", following the Gates Foundation's terminology in their Geographical Reporting. If "location" is used, then the total allocation of in-country expenses is 53% (as compared to a planned 47% in the Project Proposal).

Overall, the allocation of funds has been coherent with the project's objectives and life cycle, and with the initial proposal.

Stronger global leadership since MTA

One of the Mid-Term Assessment (MTA) conclusions that was implemented was to strengthen WASHCost's global leadership. The MTA recommended that the project director should be working full time on WASHCost, and focus on completing the research, synthesising and producing high quality global products, and promoting key findings. The latter part of the project has been characterised by stronger global leadership, a concerted effort to get quality research products out, and effective promotion of WASHCost findings globally.

"The WASHCost director should give full-time focus to producing high quality products and promoting key research findings."

MTA Recommendation

Balancing the phases: too much effort spent on data gathering?

A common theme in the country assessments is that the project spent too long gathering data, leaving too little time for applying the research results either in-country or globally in the project time frame. Project management in the earlier years of the project gave less direction to countries. One result of this was that the scale, scope and time taken on data collection and country research were not controlled. Too much data was gathered—much of it unlikely ever to be used. Much of the data that was gathered also had a short shelf life; so spending so much time and effort on this project phase may not have been fully justified. An alternative approach might have been more focused in the research and data phase of the project; and more time and resources allocated to embedding, advocacy and influencing, and increasing the project's five-year impact.

Much of the success of WASHCost global advocacy is based on promotion of concepts and headline messages. Interestingly, few questions have been asked about the scope of the studies. This gives further credence to the view that a sharper focus in the research and a shorter period in data collection would have given more time and resources for the tasks of using the data to achieve an impact.

Country management needs direct IRC management

A lesson from the country studies was that country engagement requires direct IRC management. Country-level management showed the limitations of management through local partners. This was acutely felt in Burkina Faso where more hands-on management might have avoided the failings of the local host agency. In Ghana the project worked through both a local NGO in Accra and a research institution in Kumasi, and led to unnecessary complexity. In India the project worked through a research institution whose personnel changes had an impact on local project management. All these options left the IRC vulnerable to changes in the local partner.

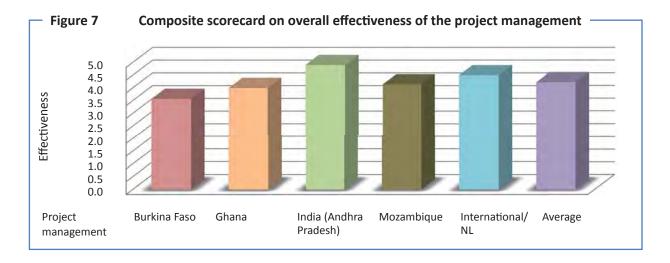
Global and country learning/facilitation needs high calibre staff

A lesson from WASHCost is that action research requires high calibre staff that are strong academic performers to lead research and learning, whilst at the same time have staff with strong commitment and operational skills to organise practical interventions. Most country programmes had examples where key staff could not rise to this challenge. The project was held back in the early months when local staff did not have adequate basic office administrative

skills. More focus on analytic capability, preparedness to recruit internationally if necessary, is essential to creating teams that can deliver the quality necessary in global learning initiatives.

Project management gains highest scores: GOOD

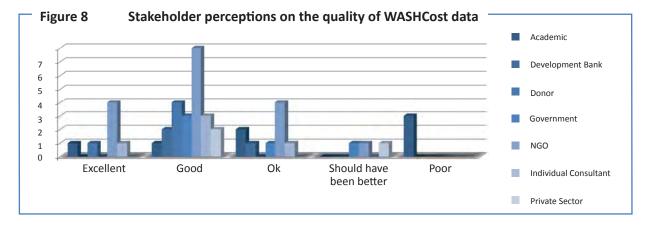
Notwithstanding the above comments, overall country scorecards gave project management the highest scores (figure 7) of all the scored project components, in particular in India and The Netherlands.



2.3 Data and research

Divided opinions on the quality of WASHCost data

Stakeholder opinions are divided on the quality of WASHCost's research data. Figure 8 shows that the stakeholder survey perceptions on the quality of WASHCost data are positive, but also show a small grouping of academics and governments feeling that data could have been better.



Interviews with academics and consultants, some of whom had attempted to use the data, expressed less confidence. Academics felt that the IRC research leaders did not, perhaps, have a sufficiently critical perspective or lacked sufficient experience in research design. As a result several indicators appeared rather crude, and the same academics raised questions on the data's reliability. WASHCost's early drafts of the methodology for measuring hygiene outcomes were particularly singled out for criticism. Hygiene behaviour cannot credibly be measured by recall and requires more sophisticated behaviour change measurement techniques. Timely engagement with world-leading sanitation and hygiene behaviour change researchers might have improved the project design on these issues.

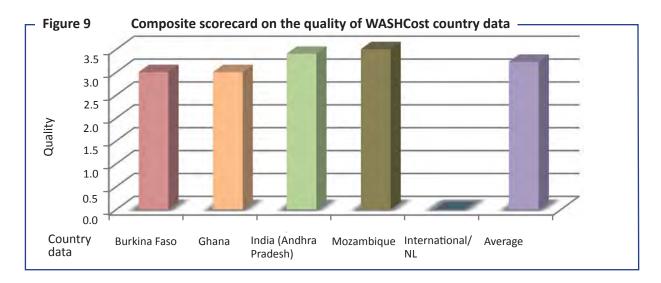
Another critical comment made was that data was not always validated. The International Advisory Group (IAG), which was expected to provide international expert guidance to the research, was disbanded early on. The MTA recommendation to re-establish a remodelled IAG was not taken up.

Equally, the country studies found that data quality was scored less than satisfactory in two of the countries (figure 9 below). National agencies wanted the data to represent the full national picture, whereas the research in all cases had to rely on smaller sample sizes. The full data sets from the country studies have only recently become available. WASHCost data sets are not going to be integrated into national or state sector management information systems in Burkina Faso, Ghana or India, though in all cases the project has played a positive role in influencing national data.

One way of interpreting these contradictory results is to note that the constituencies who gave the strongest endorsement of the quality of the research design (NGOs, consultants and donors) may not have been in a strong position to judge the calibre of the research design.

Data obtains a mixed scorecard: OVERALL SATISFATORY

The country scores for data collection (figure 9) show uneven ratings.



Was WASHCost sufficiently selective in the data it collected?

Given this, a question raised by several interviewees was: did the project need to spend as much time as it did collecting data. Huge household surveys were undertaken, in particular in India and Mozambique, though it is unclear the extent to which this data will have been used to make a difference on public policy. In India the household surveys have been extensively analysed and written up. Collecting too much data (and not knowing what the critical data items and methodologies that would be needed to test specific hypotheses) indicates some inexperience.

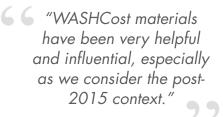
It is easier to say in hindsight, but greater selectivity and strategy in data collection might have led to a different selection of data to be gathered (for example more financial data) and given the project, more time and resources for follow-up activities. The MTA made a related point that greater engagement with cost specialists (engineers, quantity surveyors, cost accountants, consultants with expert knowledge of sector costs) and community focus groups⁵ might have

⁵ Community focus groups were extensively used in India.

been a more efficient way of getting quick estimates of basic costs, than the laborious and difficult path of large-scale household surveys.

High quality and well-appreciated research outputs

At the time of the MTA, the research findings from the country studies had yet to be analysed and published and there was some uncertainty that WASHCost would meet the high expectations it had created. The project had also pursued many different ideas of global products and there was little clarity on what WASHCost would actually produce.



Donor

Two and a half years later, WASHCost research output has blossomed. In 2012/13, WASHCost published 89 research publications, out of which 29 were published during the first four months, and 46 during the last 4 months in 2012. Out of these, 7 publications are peer-reviewed journal articles. During the same period, the WASHCost team published 284 web articles. The peer review process appears to have worked well: all WASHCost publications were internally peer reviewed, and additionally two external peer reviewers needed to sign off on each publication.

A comment made by interviewees was that navigating through the large number of WASHCost publications is rather difficult. Developing a short guide or hierarchy of publications might be useful.

Interviewees felt that not all the research output was of equal quality, but that WASHCost had excelled in producing short, visually attractive, easy-to-read briefing documents with headline messages. Some of the country studies (for example Mozambique) noted the absence of a country flagship document summarising the country studies. This would have been a more solid product than the slim briefing reviews.

From research outputs to tools

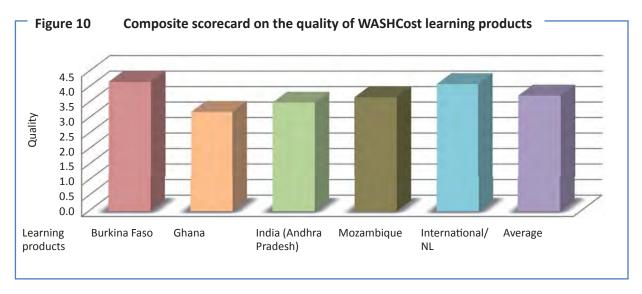
The initial commitment to produce generic decision-support tools was replaced with a focus on in-country decision support. In 2011-12, the project returned to develop a generic decision-support tool, the WASHCost Calculator, for which it was awarded an additional grant (budget limitations were a result of currency exchange fluctuations). The idea behind the WASHCost Calculator—an app for a smart phone—is that WASH sector practitioners can use their own life-cycle cost information to check on the financial sustainability of the services they provide. The idea behind the WASHCost Calculator is that users, without expert knowledge about the life-cycle costs, should easily be able to get a quick estimate of the implications of current costs on service delivery. It is too early to evaluate its impact, but the WASHCost Calculator has generated interest from a wide range of users and is indicative of the innovative thinking on how to turn WASHCost into practical tools that make a difference.

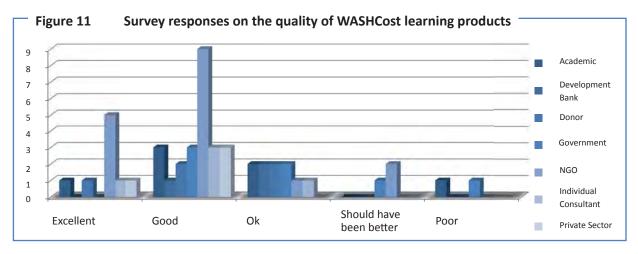
From defensiveness to broad consultation

Several interviewees made the point that, with the blossoming of research outputs, WASHCost appears to have been stronger on outreach and working in a consultative manner. Partner interviews during the MTA found certain "defensiveness" in the manner in which IRC managed its external dialogue. The EPE found quite a different tone. Several agencies now collaborating with WASHCost lead researchers expressed their appreciation of their consultative and inclusive approach to collaboration.

Research outputs achieve a consistently high score: SATISFACTORY

Figure 10 shows that research outputs have been appreciated in focus countries. The products from Burkina and the international publications score the highest. Figure 11 shows that 69% of respondents to the survey felt that the quality of learning products was excellent or good.





2.4 National learning alliances and embedding

Mixed experience with national learning alliances and embedding

WASHCost had mixed results from learning alliances. In Ghana, the National Level Learning Alliance Platform, which provides a platform for sector dialogue (and is regularly attended by the Government and most national lead sector agencies in the country) was initiated by WASHCost and continues to provide a platform for sector dialogue. In India, the wording of "learning alliances" was not accepted by the lead state agency and so an "advisory committee" (with many agencies in attendance) was created to guide the project and was instrumental in getting WASHCost staff onto appropriate government committees; but this has not continued beyond the life of the project. In Mozambique, there was a long established sector sharing platform, the GAS (Water and Sanitation Group) at which WASHCost shared information at an early stage but did not use it to share results, preferring to focus on its good relationship with the lead sector agency *Direcção Nacional de* Águas (DNA) rather than try to influence other

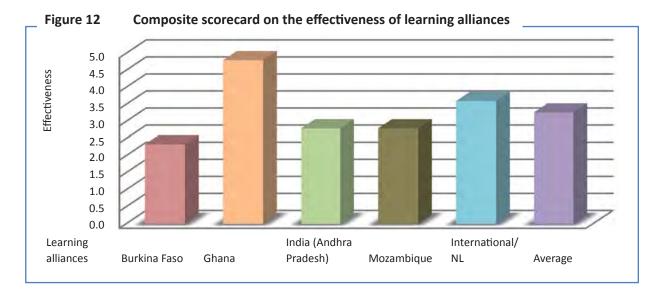
sector agencies. In Burkina Faso, the first attempt at establishing a learning alliance failed: it paralleled existing platforms and was poorly managed by the host agency. A further learning alliance engagement was initiated under IRC management in the last weeks of the project.

Success factors for learning alliances were not in place in all settings

The successful experience in establishing a learning alliance in Ghana suggests that success factors in establishing national learning alliances include: political will from lead government agencies; interest amongst key individuals in lead national agencies; creating momentum amongst several partner agencies; developing a culture of shared learning; having sufficient ongoing sector research initiatives to create a steady supply of new knowledge to share; and having a country IRC office (or staff) in place. Many of these conditions were not present in other countries, for example, in Burkina Faso and India.

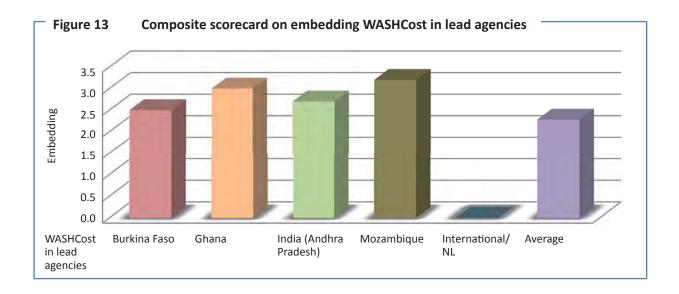
Learning alliances and embedding achieve uneven scores: SATISFACTORY

Figure 12 reflects this uneven experience with learning alliances, showing Ghana's exceptionally strong performance. WASHCost's much improved performance in global alliance building since the MTA is discussed in a separate section below.



Results were similarly mixed with WASHCost's experience of embedding. Figure 13 shows the relatively low level scores achieved, with Mozambique and Ghana showing higher effective embedding.

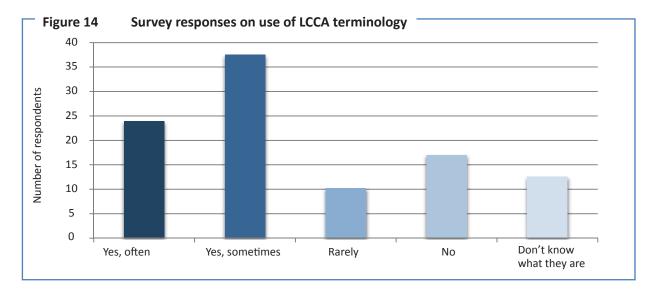
Mozambique illustrates that good fortune is a factor in embedding. The embedding process was boosted when the key government liaison point for the project (who had enthusiastically embraced what WASHCost was seeking to achieve) became promoted to take on planning responsibilities for the lead agency. In Ghana, lead staff in the Community Water & Sanitation Agency and the Ministry of Water, Resources, Works and Housing fully grasped the importance of LCCA. But in both cases weak capacity has limited their ability to use WASHCost insights to shape policy changes, and affect changes in budgets or financing. In Burkina Faso and Andhra Pradesh, WASHCost did not manage to embed the project within lead agencies, though in India there was acknowledgement of lessons learnt from WASHCost studies (including on a national level—no mean feat in India) and good interaction between project and government staff.



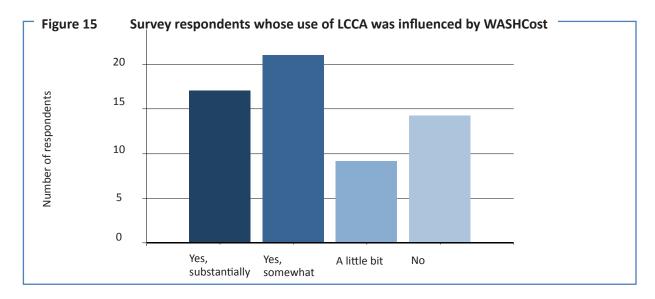
2.5 International uptake

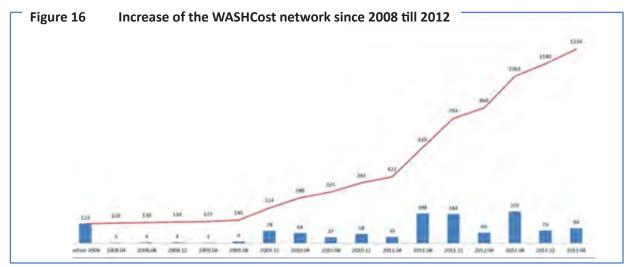
Uptake of LCCA and SDA in the pro-poor WASH services sector

Perhaps WASHCost's most recognised achievement has been to bring LCCA terminology and concepts to WASH practitioners who work on services to rural and peri-urban areas in developing countries, internationally and in the focus countries. Figure 14 shows that 55% of sector leaders in the SWA contact database (few of whom had direct engagement with WASHCost) had used or were familiar with LCCA concepts and terminology. Fifty three per cent of those respondents who used/ planned to use LCCA concepts, said they had been influenced by WASHCost, (figure 15).

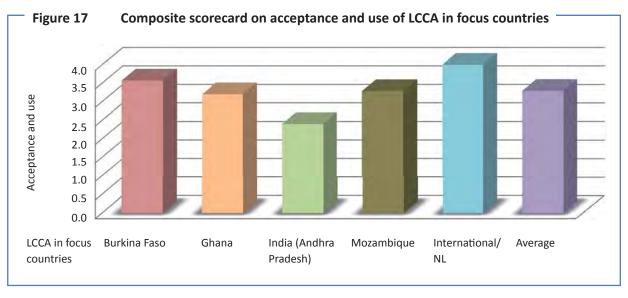


The expansion of the WASHCost contact database is also indicative of the uptake of LCCA cost concepts. Figure 16 shows a steep increase in interest (to 1,234 persons) interested in remaining connected to WASHCost. This escalated when WASHCost research results became available and training activities commenced.

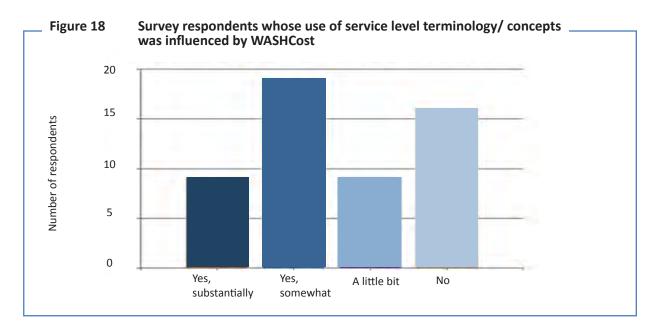




The adoption of LCCA terminology and concepts at country level was measured by looking at actual application (including, was the LCCA and SDA used in budgets, financing, policy statements, and had it been adapted to local circumstances). The lower results (figure 17) suggest that whilst there is strong familiarity with the concepts amongst lead sector agencies in focus countries, less progress had been made in putting the concepts into practice.



WASHCost also has had an influence on increased adoption of the SDA approach service levels. Of the 53 respondents who said they were familiar with service level concepts, 53% said that WASHCost had influenced their approach to service levels (figure 18). In interviews WASHCost's main impact was felt to be in promoting LCCA to the rural and peri-urban sector, rather than the concept of SDA. Whilst WASHCost has not been the first to systemise service levels, IRC's development of a model linked to costs has been well-received and has been very useful in the post-MDG dialogue, and in considering future global monitoring improvements.



Does LCCA fit behaviour change?

An area in which there was less positive feedback on the uptake of LCCA is that of its significance to the hygiene sub-sector. WASHCost broke new ground in asking important questions regarding the costs of sustainable hygiene improvement. But interviewees questioned whether LCCA is an appropriate costing model for hygiene outcomes and behaviour change. The LCCA model has the greatest fit with water supply, where the important insight led to the realisation that there are costs other than capital development that need to be taken into account at project design and budgeting stage. In the case of hygiene behaviour change, the capital investment is minimal. Sustainable behaviour change requires a triggering stage and then on-going financing to reinforce and hardwire new behaviours into society. So whilst asking important questions about hygiene costs, the LCCA model appears to not focus on the key issues in behaviour change, and the initial attempts to apply the model in country studies are unconvincing.

Future markets for LCCA uptake

Many rural and peri-urban areas are serviced through decentralised authorities. In focus countries, more work is needed to embed LCCA at the level of municipalities, utilities and especially districts and community authorities who have responsibility for planning service delivery. There is little evidence that WASHCost managed to reach out beyond the sector, such as Ministries of Finance and National Planning authorities and other sectors engaged in aspects of WASH.

Is LCCA sufficient to drive a theory of change?

The experience of creating a better understanding of LCCA and SDA made it apparent that uptake and embedding these approaches in key national decision-making processes will not, on its own, improve service management on the ground. Missing elements are: (i) an overall financing strategy to complement the cost elements; (ii) since rural and peri-urban WASH management are mainly a local concern, ultimately LCCA needs to be adopted by local decision makers (in local governments, municipalities and amongst community managers); and (iii) implanting these radical changes to transform the status quo will need political will. These three elements will need to be incorporated into follow-up activities.

Significant advance in global alliance building in a fragmented environment

From the outset, WASHCost planned to develop a global CoP, mirroring the in-country National Learning Alliances. Early attempts to establish a CoP was met with little interest by sector agencies, specifically in regards to the mutual sharing of data.

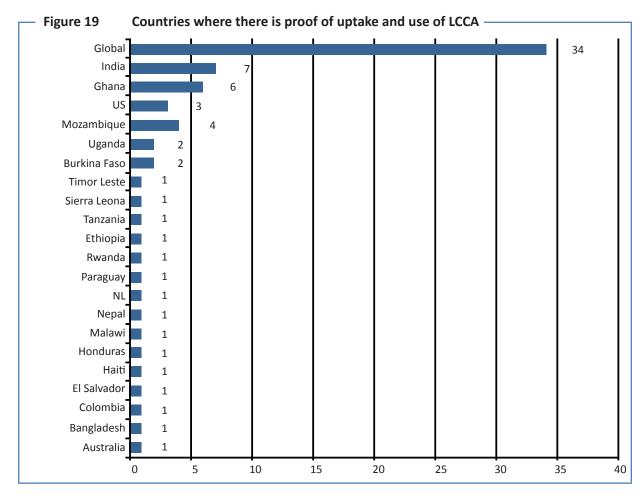
WASHCost used a strategy (known as AIIM: Alignment, Interest and Influence Matrix) to track global uptake of LCCA and WASHCost learning. In November 2008, a first AIIM exercise took place; from which point onwards WASHCost began tracking global uptake of WASHCost concepts. At the time of the MTA, WASHCost had made little progress at building global alliances and the MTA recommended for WASHCost to intensify global alliance building since it was a crucial project outcome.

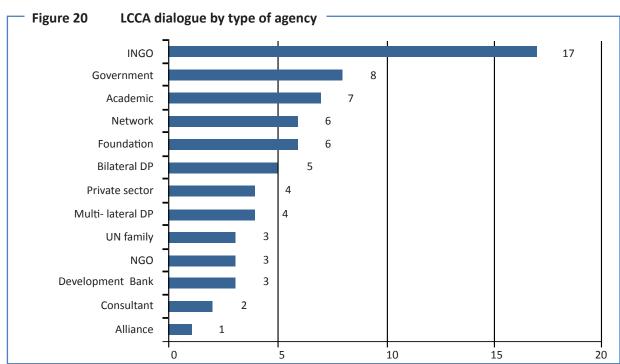
The 2010-2012 period has seen increasing collaboration amongst WASH agencies: both in the post-2015 dialogue and at a time when the SWA alliance is seeking to improve inter-agency collaboration and mutual accountability.

WASHCost's flurry of research publications came at an opportune time for the project to return to improving global alliances. Two events, which provided a turning point in WASHCost's international dialogue were: a "global tour" undertaken to promote WASHCost's findings; and a Stockholm World Water Week seminar in 2012 on the post-2015 targets during which WASHCost made important contributions.

WASHCost has since made excellent progress in international learning exchanges and has exceeded its outreach targets. There are now at least 70 organisations/ governments in at least 20 countries, including 34 global organisations, with whom WASHCost has established dialogue (figure 19 shows the countries where there is proven LCCA uptake, and figure 20 shows the distribution by type of organisation).

WASHCost reports that 56 of these agencies are using the LCCA terminology and analysis in their own documents and policies; 25 have changed internal practices that reflect service delivery and life-cycle costs approaches; and 22 are actively funding programmes and activities with a life-cycle costs approach methodology (figure 20). This includes continued collaboration in focus countries, especially India and Ghana. It is interesting to note the predominance of INGOs in this dialogue.





Cracking the hard nuts

Whilst INGOs have been the most appreciative of WASHCost's work, the project has been less successful in engaging with a number of significant, influential "competitors" in the global WASH learning market. Agencies with whom much dialogue has resulted in less collaboration than hoped for include: UNICEF Headquarters, the African Development Bank, the Global Sanitation Fund of the Water and Sanitation Collaborative Council and the Water and Sanitation Program of the World Bank. Global learning alliances have a chequered history in the WASH sector and are constrained by fragmentation, competition for resources, and power relations amongst international WASH sector institutions. The sector donors who control resources to all these agencies have not, as yet, fully aligned their approaches nor put in place norms for collaboration and sharing of data and approaches amongst the competing agencies that they support.

The growing uptake of the WASHCost methodology

Building on the lessons learnt from the country studies, WASHCost has had a short, but highly successful phase of promoting adoption of a lighter version of the methodology in several other countries. The governments of Honduras, Sierra Leone and Uganda are engaged in implementing variations ("light-touch" versions) of the WASHCost methodology. WaterAid is finalising a six-country study using the LCCA. BRAC, the world's largest NGO, has used the LCCA approach in piloting a case study in Bangladesh and requested for the approach to be scaled up in several other districts. IRC, in partnership with SNV Nepal, is actively pursuing a nation-wide programme on sustainable service delivery. At the request of the Ministry of Water Resources and Environment in Sierra Leone, the Kwame Nkrumah University of Science and Technology (KNUST) is leading the WASHCost Sierra Leone project which encompasses research and capacity building exercises for key government staff during 2013/14. In Honduras, a costing study was undertaken on components of the life cycle of water and sanitation services. The Inter-American Development Bank contracted IRC to help them develop a generic approach towards monitoring sustainability of WASH services; aspects of the WASHCost methodology are now being applied in Paraguay (service delivery indicators), Honduras (sustainability monitoring) and El Salvador (costing exercise). A study on the impact of post-construction support in Colombia had also been published.

These positive developments raise several observations. Much of the uptake of the WASHCost methodology has been by NGOs. IRC's comparative advantage (it is neither a UN agency nor a government financier) appears to be in influencing NGOs, rather than governments. Recognising and working to IRC's real competitive advantage is critical for success. IRC might consider developing a strategic relationship with a main sector financier, such as with the Directorate-General for International Cooperation (DGIS), to help open doors to further influence developing government approaches. The advantage of influencing NGOs is that they can adopt new ideas quickly, whereas the process of changing government budgets and introducing new financing policies is, necessarily, a very slow process. IRC might consider fine-tuning their influencing strategy to use NGOs as "vehicles for change" in influencing other stakeholders, and to further examine where and how NGOs are successful in influencing developing country policy changes. The concept of a WASHCost-light version is appealing, but a further review of its impact compared with the research-heavy version might be of interest.

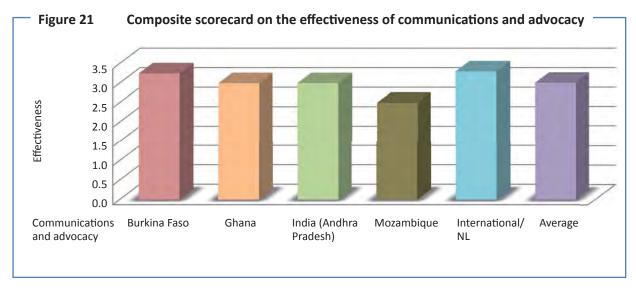
WASHCost has also been referenced in the dialogue on improving global monitoring. The Organisation for Economic Co-operation and Development and the World Health Organization for example both report that they found WASHCost data very helpful in their own work. Improvements in the WHO/UNICEF's Global Analysis and Assessment of Sanitation and Drinking-Water questionnaire have drawn from WASHCost concepts. WASHCost has also been associated with the development of Trackfin, the initiative to track WASH sector financing. WASHCost was also a significant source of insights at the recent IRC symposium on Monitoring WASH Service Delivery. Country analytical tools—such as Country Sector Overviews and their derivatives; Sector Development Analyses, Monitoring Country Progress in Water Supply and Sanitation and WASH Bottle-Neck Analysis Tools; and the UNICEF Bottleneck Tool—have incorporated LCCA and SDA into their analytic models, though direct attribution to WASHCost is difficult to verify.

WASHCost's impact on sustainability

WASHCost promotion of sustainability, post-construction and capital maintenance have had a timely influence in the global dialogue on service sustainability. Advised by the IRC (drawing from the experience of WASHCost and Triple-S), DGIS is requiring Dutch WASH aid recipients to sign a sustainability clause. This is based on the premise that the implementing organisation will conduct a life-cycle costs analysis, identifying where post-construction finance will come from for at least a ten-year period. The Department for International Development (DFID) and the U.S. Agency for International Development have also recently referenced WASHCost and LCCA approaches. DFID has published a call for proposals that specifically references WASHCost and the life-cycle costs approach. Emphasis on payments for operation and maintenance are also a critical component in the Water-for-People-initiated concept of "Everyone Forever". Whilst specific attribution is difficult to make, WASHCost has certainly played a considerable role in raising the issue of service sustainability; it is expected that this dialogue will be reflected in the post-MDG targets. Political will is critical to turn the dialogue into practice.

Outreach in communications, advocacy and networking

Surprisingly, communications has in some respects been poorly managed in an agency that comes out of a history of advocacy. The country studies show mixed results on the efficacy of WASHCost communications (figure 21), and the overall score is only satisfactory. WASHCost has produced a large volume of documentation, but it is not easy to navigate through it. WASHCost has been very successful in communicating key messages, but not always through its communication function. The early appointment of communications officers in country programmes had little impact because it took a couple of years for results to emerge. Tackling WASHCost's high-level targets also required nuanced and analytical communications, rather than copy produced by communication officers. WASHCost's best communicators have been its lead researchers, who, in the latter years of the programme, have been on the front line communicating findings and concepts. WASHCost branding has been highly effective. Almost too much so, in that it promoted a project, not a methodology nor an institution.



Training outreach

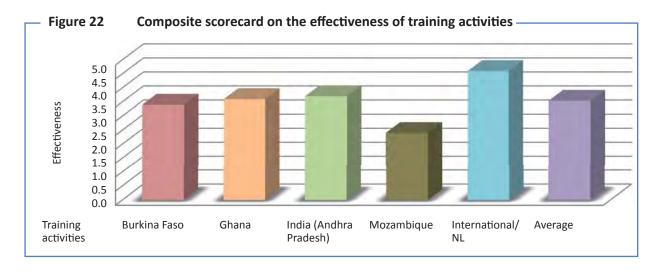
Global training was not part of the original proposal, but has been a highly successful addition to WASHCost's outreach tools. On the basis of its research outputs, WASHCost developed a comprehensive LCCA training package and an online course. Both have been well received. By February 2013 more than 1,000 people from

"WASHCost training was a revelation. Concepts, briefing papers, processes, tips and tricks: all useful"

NGO Trainee

91 countries have been exposed to LCCA training. The LCCA training package was used as a basis to develop the Akvopedia finance portal. Launched in April 2013, within two weeks the portal had more than 10,000 page views. The package has also been integrated into Centro de Formação Profissional de Águas e Saneamento Water Supply training course in Mozambique. In collaboration with UNICEF and the Government of India, IRC is conducting training programmes for senior staff on post construction maintenance. Feedback from trainees attending courses has been very positive (see the high scores in the scorecard in figure 22). The main demand has been from NGOs and the private sector.

Delays in research findings constrained some of the planned country-level training. In Ghana and India the training was effectively carried out. In the case of Mozambique this amounted to a few workshops targeted at government and local government officials.



2.6 Impacts

Good progress against all four planned outcomes

An assessment of progress against the four project outcomes has been made in previous sections and only the conclusions are summarised here.

Outcome A (LCCA terminology/ concepts shared): LCCA and SDA concept uptake has been highly effective globally and in focus countries.

Outcome B (National learning alliances/ embedding): The project record of working with established national learning alliances or creating learning alliances and embedding WASHCost concepts in national decision makers has been uneven.

Outcome C (Global adoption): After a slow start, global uptake has been encouraging and, notwithstanding some limitations in the research, WASHCost has significantly influenced global level understanding of costing and service levels.

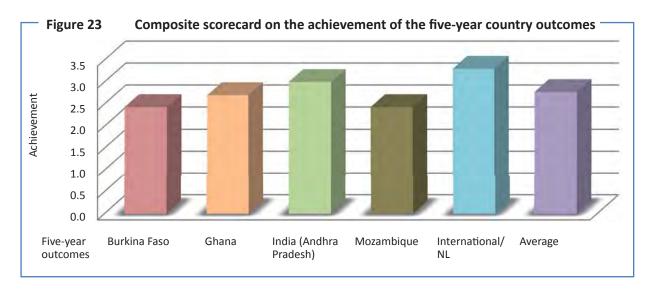
Outcome D (Project management): The project has been well managed; it has adapted well to internal changes and to country-level responses; completed the project within budget with one no-cost time extension; used its resources judiciously; and met project milestones.

Full original project vision unlikely to be achieved

The specific goals in the project's original vision for success are unlikely to be fully achieved. No evidence has been found to suggest that the project will reach its long-term goal of "a 25% like-for-like improvement in cost efficiency; and a situation where at least 25% of WASH implementation plans include or are explicitly linked to unit costs analysis and poverty reduction strategies". The short-term goal of having "an interactive tool/ decision support system" in place in the four focus countries to provide good quality cost data and to benchmark progress has also not been reached. Once the project got going, and the project focus changed, it became apparent that these original targets were probably unachievable. This was recognised early and targets and products were amended. While the original goal was not accomplished, the project has provided tools and approaches with a variety of specific impacts.

In-country five-year impact lower than expected

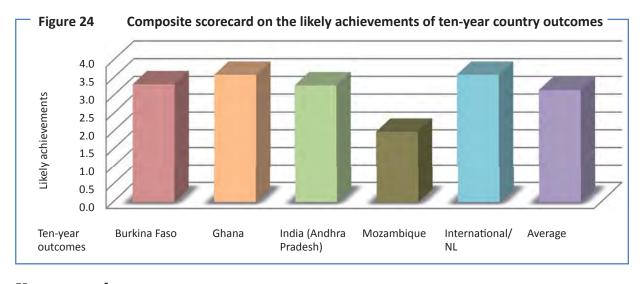
In-country assessments found the five-year impacts to be satisfactory (figure 23). Despite adoption of concepts and research studies which gave governments important insights into sector costs, no country has yet translated this knowledge into policy shifts, or changed approaches to budgeting, investment or financing, or introduce different methods of data collection and management. The potential for behaviour change is strong, but the five-year time frame is too short to expect significant changes on the ground from an ambitious and at first sight rather technical study; especially since over half the project time was spent undertaking research. As a result of recent global outreach, the uptake by INGOs and the impact on their practices and budgeting approaches appear to have been more substantial.



Prospects for the continuing model are encouraging

Many changes have been set in motion at country level that have the potential to make significant changes in the longer term. Interestingly all country scorecards showed a higher score for likely ten-year impacts than end of project impacts (figure 24). This is based on the judgement by the evaluator assessing impacts on policy and finance that might be realised in a longer time frame.

WASHCost's strong impact on INGOs may provide another source of long-term impact. In some ways it could be argued that WASHCost approaches and tools are more geared towards NGO impact. NGOs could act as the "vehicles of change" to influence sector practice over the long term. The project's prospects of leveraging change directly are limited because the project is not itself a political change agent.



Unexpected outcomes

For a project that grew iteratively, many things were unexpected.

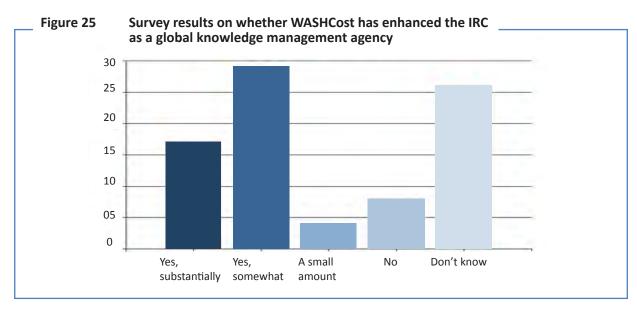
Three surprising conclusions are:

 That the research findings have not been the critical driver for change. The main outcome of the research was to confirm what was already known. Strong marketing of the terminology and concept of the LCCA and SDA has created opportunities for change.

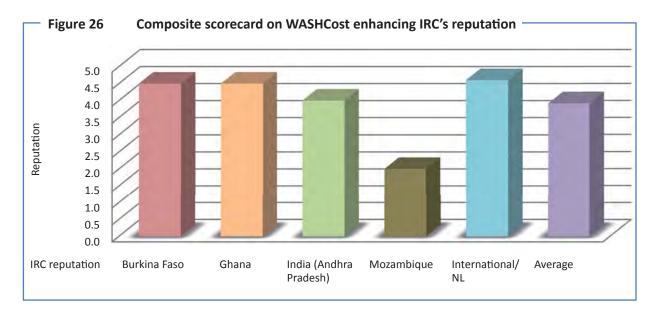
- 2. The original project model implicitly assumed that by focusing on four countries, the greatest project impact would be in-country. In fact, the in-country impact has by and large (with some important exceptions) been less than hoped for. The speed with which WASHCost has catalysed global interest has been a surprising development.
- 3. The positive engagement with the post-2015 dialogue was an unplanned outcome.

Impact on the IRC

An additional question was added to the terms of reference on accepting the evaluation team's inception report. This was: had WASHCost changed perceptions of the IRC as a development agency? The EPE found that the twin and mutually reinforcing strategy of stimulating learning at global and country levels was an excellent model for IRC future global learning strategy. The survey found that WASHCost made a positive impact on perceptions of IRC as a global learning agency. The resources and international exposure from WASHCost helped the IRC to make the leap from a Dutch NGO filling small gaps in the WASH sector to a global learning agency capable of managing large, complex global projects and delivering high quality results. Figure 25 shows that globally 56% of respondents felt that WASHCost had enhanced perceptions of the IRC as a global knowledge management agency.



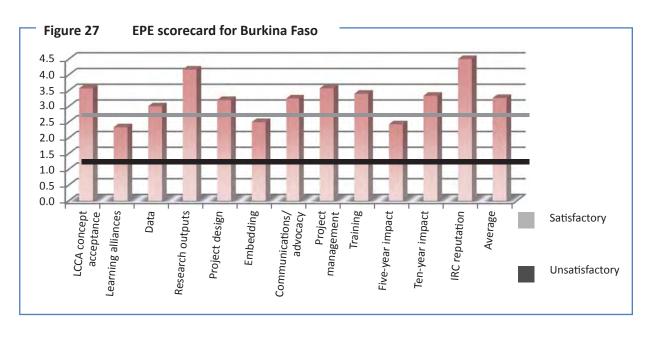
Country scorecards (figure 26) found a similarly positive reaction, especially in Burkina Faso, Ghana and in India (Andhra Pradesh). The grants from the Gates Foundation have clearly given the IRC the opportunity to transform its operations and considerably expand its influence. One observation made during the in-depth interviews was that an unintended consequence of a time-limited fixed grant was to create a "fiscal cliff" for the organisation to manage at project end. Fortunately the subsequent large Triple-S grant has provided a means of absorbing WASHCost staff, but without additional resources when Triple-S ends, the IRC may yet face a significant challenge of restructuring operations. Other organisations, such as Cities Alliance, experienced similar situations when large grants ended: rapid downsizing can be very destructive to NGOs. Another interesting comment was that "IRC's strength is also its weakness". This comment referred to the IRC's strong emphasis on development processes. In the context of WASHCost, the comment alluded that WASHCost had, in most country contexts, made significant achievements in stimulating a broad stakeholder dialogue, building learning mechanisms and creating consensus, yet these sound processes were not necessarily translated into results on the ground. IRC management may consider how to implement a stronger results focus.



3 Country and international performance sketches

3.1 Burkina Faso thumbnail

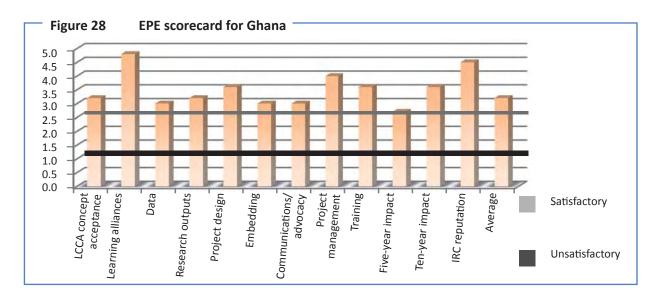
A weak performance by the local host CREPA (whose contract terminated mid project) resulted in limited data collection, no embedding in national institutions and no development of national learning alliances. The data provided the basis for some significant and useful research results, but has not been sufficiently comprehensive to form the basis of a national sector database. The delay caused by the change of host also meant that little time (though quite an amount of budget) was spent on the embedding/ influencing phase of the project. The strength of the project in Burkina Faso has been the production of some strong research papers in the last year, which whilst not resulting in substantial five-year impacts, has positively challenged some national assumptions and norms in service delivery and costing. The subsequent establishment of an IRC office in Burkina and Triple-S activities have greatly improved the dissemination of WASHCost's research results. Engagement with initiatives such as the WA-WASH and Sanifaso could provide good opportunities to make use of WASHCost data and service ladders. The project has created the basis to have more impact in a ten-year time frame, but this will require additional follow-up. Overall the EPE scorecard grades the Burkina Faso component as satisfactory (figure 27). Its highest scores are in: research outputs and enhancements of IRC's reputation.



3.2 Ghana thumbnail

The Ghana EPE has been a well-managed and productive initiative, well-regarded by lead government and sector agencies. In the words of a senior government official, WASHCost was "an eye-opener" on how to conceive of costs and post-construction financing needs; on the high breakdown rates in the country; and on the necessity for Ghana to improve its sector information systems. Whilst the concerns raised have not yet been fully transmitted to regional and local levels, nor translated into new national policies and financing strategies, the LCCA and SDA concepts have been accepted by leading agencies and are being taken up in several significant donor-funded projects (e.g., World Bank, CIDA, UNICEF, USAID) in the sector. So while the project has not fully achieved the anticipated five-year impact, the prospects of achieving the project's ten-year impacts are encouraging. Triple-S is strategically placed to utilise many of WASHCost findings, but additional resources and momentum will be needed to realise this potential.

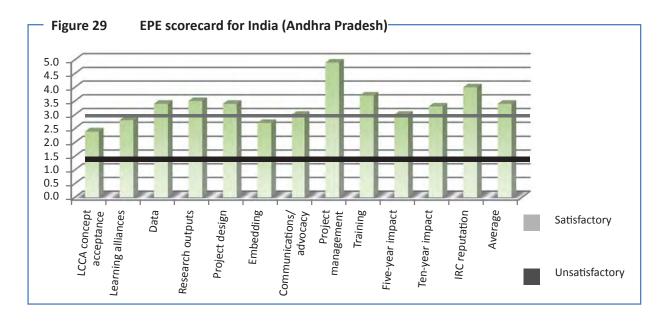
Whilst some staffing decisions were not optimal, strong support from IRC staff helped solve problems, manage the potential risk of having twin project hubs in-country, and kept the project on track. The research undertaken by the project's lead partner—the Kwame Nkrumah University of Science and Technology (KNUST)—is regarded as credible and produced useful results on rural water supply and sanitation (hygiene and behaviour change studies have been less productive). Creating the WASHCost database in KNUST has given impetus to the local research and training, and contributed to the design of a country-wide monitoring system—the District Monitoring and Evaluation System, also referred to as DiMES. The project produced 35 publications and has conducted highly appreciated training courses. One of its lasting achievements has been to create a strong learning alliance that continues to promote interagency exchange of experience in the sector. Overall the EPE scorecard grades the Ghana component as satisfactory (figure 28), achieving the highest scores in: learning alliances, project management, enhancing IRC's reputation and prospects for a ten-year impact.



3.3 India (Andhra Pradesh) thumbnail

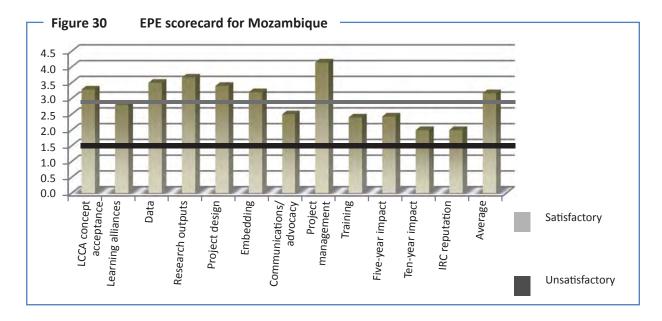
The context of Andhra Pradesh—a large Indian State making significant sector investments and with a well-developed existing database on rural WASH—made for a rather different WASHCost story-line to the African countries. WASHCost India was a well-managed project (overcoming some early changes in personnel) with a strong research team located in a well-regarded research institute—Centre for Economic and Social Studies. The project undertook a huge data collection exercise and produced some credible research results in a well-regarded range of publications. But the project's impact has been limited because there was little political buy-in and little up-front "demand" for the project. WASHCost India made limited progress in embedding the project concept at State or national levels, and the project learning alliance did not survive beyond the end of the project. Whilst methodologies have not been embedded in existing approaches, the principle of using LCCA to better carry out WASH planning has been appreciated by senior government officials and captured in the new Framework for Detailed Project Reports of the Government of India.

Government officials and NGOs have picked up two key messages from WASHCost India: (1) current government allocations for operation and maintenance are inadequate and must be re-examined; and (2) ground realities of service delivery are different from official statistics. The huge amount of data collected has been used essentially to raise discrepancies in the existing database rather than replace or supplement the existing database. The project legacy includes a large number of persons trained or sensitised to the concepts of service delivery and LCCA. There is also growing interest in using the WASHCost approaches in other sectors (e.g., watersheds, irrigation) by State Government officials who have had long association with WASHCost India team members. Overall the EPE scorecard grades the India component as satisfactory (figure 29). The areas of best performance were: project management, research outputs and enhancing IRC's reputation and ten-year impact.



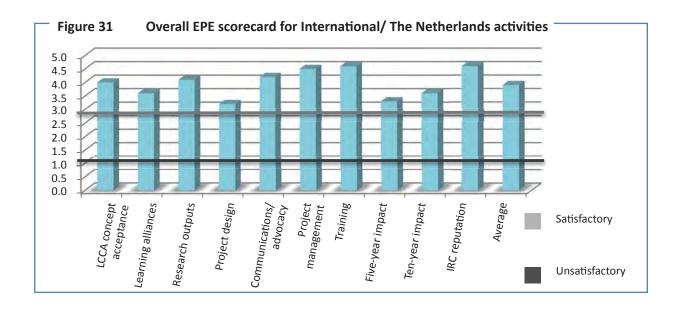
3.4 Mozambique thumbnail

WASHCost Mozambique was a well-managed project successfully housed in a private agency. It was the last project to start and in a country with poor data, gave substantial focus to the research phase, with the result that less time was available for follow-up activities. The research has been successful in marketing the concept of LCCA and produced some persuasive short publications. The project has been well-embedded in DNA, the lead government sector agency. But turning these good project outputs into actions has been limited by the Government's weak capacity, weak project communications and poor follow-up with the established national learning alliances (such as the donor technical dialogue in the GAS). WASHCost has supported the development of the national sector database, but much remains to be done for this to become operational. The gains made in awareness building of LCCA and service levels have not been translated into results on the ground. Lack of ability to follow up project initiatives probably means that the prospects of a significant ten-year impact are also limited. The IRC kept a low profile and so the project has made limited gains in enhancing its reputation. Overall the EPE scorecard grades the Mozambique component as satisfactory (figure 30). The areas of best performance were: project management, data and research outputs.



3.5 Overall international/ The Netherlands thumbnail

Overall the EPE found that the international and The Netherlands-managed activities scored higher than many of the country-managed activities. This is understandable in an organisation with its lead staff in The Netherlands and new to decentralised management. WASHCost management adapted an ambitious research project to an action research project. The international team produced some strong summary materials and some excellent training materials. They have used these to good effect in the last years of the project as is reflected in the overall international/ The Netherlands scorecard in figure 31. Useful outputs were well marketed and the project used its lead staff well.



4 Conclusions, lessons and recommendations

WASHCost's importance: WASHCost, in setting out to unpack all the costs that lead to sustainable WASH outcomes, has focused on a very strategic and much neglected area of sector discourse.

Remarkable project in difficult terrain: Costs in the WASH sector are affected by many different factors and there has been a historic reluctance to examine these comprehensively. WASHCost has been a remarkable project: a bold conception that has made a substantial contribution to transforming the global debate on WASH in rural and peri-urban areas. Powerful conclusions have been reached on the costs of water, sanitation and hygiene, which can help to improve the design and impact of sector financing.

Not everything has been achieved in the original expectation of five and ten-year outcomes:

The project has made excellent progress especially in articulating the LCCA, spelling out its implications, and linking this to a SDA. Extensive field-based research presented new insights, confirmed facts already known (but not substantiated), and marketed costing issues at a scale that has not been done before in the rural and peri-urban sectors. But this good work has not yet been translated into large-scale impact on the ground in terms of new policies being implemented, changed budget processes, new investments, new financing strategies, and in triggering institutional change.

Critical elements missing from the theory of change: Achieving this less than anticipated impact was not for lack of trying. WASHCost made a substantial effort, learnt a great deal about how to manage a global learning project and developed a nuanced approach to helping reformers reform and create country-owned change on the ground. Missing elements in WASHCost's theory of change are: (i) evidence alone will not create large-scale change: political will is a vital ingredient and mobilising political support should be integral to action research activities like WASHCost; (ii) the theory lacks a detailed analysis of the "dynamics of acceptance", in particular by governments; (iii) the good work on better understanding costing will not translate into impacts until this critical information is used to design and implement innovative financing strategies to cover all identified costs (stopping the project at costs has been a significant limiting factor on project impacts); and (iv) since rural and peri-urban WASH management are mainly a local concern, ultimately LCCA needs to be adopted by local decision makers (in local governments, municipalities and amongst community managers).

Yet WASHCost has achieved most impressive results: WASHCost can count amongst its achievements: helping to shape the post-MDG debate, drawing attention to life-cycle costs; galvanising attention on sustainability; influencing the approaches of several major donors, and some planned investments in focus countries; making significant contributions to the policy dialogue on costs in the four focus countries, in particular in Ghana; developing a methodology for assessing costs which is now being applied in at least eight other countries (Bangladesh, Colombia, El Salvador, Honduras, Nepal, Paraguay, Sierra Leone and Uganda); developing an on-line training facility which has already trained 1000 people from 91 countries in LCCA and SDA; establishing a WASHCost network of over 1100 people interested in costing in the WASH sector; establishing a dialogue with over 70 organisations/ governments in at least 20 countries and including 34 global organisations; and so far producing an extraordinary array of 176 high quality publications. A tool to better navigate this large body of publications would be helpful.

Using WASHCost's impact on NGOs: The EPE shows that WASHCost achieved an especially positive impact on INGOs and NGOs. A conscious strategy of adopting NGOs as a "vehicle for change" might be an additional strategy to encourage adoption of LCCA and SDA and in future IRC learning activities.

The project achieved widespread adoption of LCCA and SDA: Through persuasive argument, credible research, good quality publications and hard work, WASHCost achieved a high level of LCCA and SDA adoption. LCCA is a powerful concept especially when linked to a SDA, but it applies mainly to infrastructure investments and is of less relevance to behaviour change and hygiene promotion. Also the LCCA model needs further development, making linkages to financial strategies best suited to different cost items and promoting roles for different actors, including government, user tariffs, financiers and the private sector. SDA made a significant contribution in systemising service levels and developing language, which has been influential in the post-MDG and global monitoring dialogue.

Adaptive management has been a key success factor: The story of WASHCost is a rich one, with many twists and turns, and the project delivered a huge volume of documentation. Key to the project's success was a dedicated project management willing to adapt. The project faced evolving objectives and rapid changes in IRC itself. Despite several low points and pressures from many parties who had a different interpretation of the project, WASHCost's management kept the project on course. More than that, it operated in a consultative and inclusive manner with collaborating agencies. It adapted the original concept and amended plans with the goal not only of producing high quality research results to change the global mind-set for costing in the rural and peri-urban sector, but also helping focus country's sector leadership to improved service delivery on the ground.

The strong engagement of the Gates Foundation declined: A success factor in the early years of the project was the strong dialogue which the Gates Foundation continued with WASHCost management. This gave WASHCost management the space and confidence to adapt as lessons were learnt. The Gates Foundation's shift in priorities meant that engagement in the project declined in the last 18 months.

WASHCost has developed a nuanced model of country/ global learning or action research: Elements of this model include: selecting a strategic area that triggers change; establishing a strong country presence with a trusted and supportive relationship with local lead sector agencies; undertaking comparative research which both addresses local problems, whilst

providing a basis for cross-country comparisons and global learning; supporting a national learning alliance to share learning and bring these to the attention of national financiers; and global positioning and networking to place new insights into the global domain.

Several lessons have been learnt from implementing this model: These include: it takes time to develop; it needs sufficient resources to enable management to change course and adapt to change; it needs strong country offices with strong institutional visibility and branding; the staffing mix should contain high calibre analytic staff together, with in-country operators and influencers; the research phase in the project design should be balanced to allow enough time for the project to gather key and strategic information (but should avoid full-blown, academic research, leaving this to academic institutions); the majority of the effort should be planned for embedding, supporting learning alliances, triggering political will, advocacy on research findings and recommended solutions, and in setting out to influence national and global decision makers and investors.

Triggering political will: IRC should incorporate triggering political will as an integral part of its action research projects. IRC's membership in SWA provides one opportunity, but strategic relationships need to be developed to influence political leadership to adopt lessons from action research.

WASHCost has been the catalyst to transform the IRC: Through WASHCost the IRC has become a more credible global learning agency in the WASH sector. WASHCost helped the IRC to make the leap from a relatively unknown Dutch NGO filling small gaps in the WASH sector, to being a global learning agency capable of managing large, complex global projects and delivering high-quality results. WASHCost achieved this because of a relatively small group of talented and highly motivated individuals. IRC has the opportunity to build on this achievement, and to create the organisational drive, culture, procedures and systems capable of managing other large and complex projects.

Future global learning: WASHCost has created momentum to change behaviour on one of the fundamental issues holding the sector back from reaching international goals. Building on the global learning style that IRC has developed in WASHCost and Triple-S, the evaluation recommends that the IRC positions itself to further tackle related global learning issues, which logically follow from and build on momentum already achieved. The two major issues which suggest themselves from the country analyses (and have come up earlier in discussions at several levels) are: (i) <u>Finance</u>: country-embedded global research to assist countries to put in place strategies to generate the finance to meet life-cycle costs for different service levels and promote innovation in financing approaches; and (ii) <u>Local government</u>: an initiative to embed better costing, a focus on sustainability and more effective financing options into local government settings in innovative ways. Finding the resources to enable the IRC to continue to contribute to global learning must be a top priority for IRC management.

Annex 1 Terms of Reference for an End-of-Project evaluation of the WASHCost Project, 2008–2013

1 Introduction

WASHCost is a five-year action research programme, running from January 2008 to April 2013. The WASHCost team developed a methodology—the life-cycle costs approach⁶—and has gathered information related to the true costs of providing water, sanitation and hygiene (WASH) services for an entire life cycle of a service—from implementation all the way to post-construction.

WASHCost is about understanding what it costs to provide sustainable WASH services. The premise of the WASHCost theory of change is that the *use of cost information* will improve the quality and sustainability of services to users. More specifically, *sector actors using cost information* to provide sustainable services are at the heart of what WASHCost defines as its theory of change.

Box 6 The WASHCost Vision of Success

Long term: Within ten years, good quality disaggregated cost information is readily accessible to and being used globally by stakeholders in the WASH sector to improve the outcomes of planning processes and, in particular, to achieve: 1) a 25% like-for-like improvement in cost efficiency; and 2) a situation where at least 25% of WASH implementation plans include or are explicitly linked to unit costs analysis and poverty reduction strategies.

Short term: Within five years, good quality WASHCost data, benchmark criteria and knowledge from four countries, is readily accessible through an interactive tool which includes a decision-support system, and is being used by national and international decision makers for the WASH sector in rural and peri-urban areas.

The four outcomes linked to this theory of change include:

Outcome A: The terminology and concepts of life-cycle costs (LCC), methods of data collection and analysis are widely shared, understood and valued by project staff, country learning alliance (LA) members and international COP members.

Outcome B: National learning alliances and their activities strengthen local ownership, adoption, up-scaling, adaptation and embedding of the life-cycle costs approach (LCCA) within WASH governance processes, at all levels.

Outcome C: International and national learning alliance and project activities result in sector-wide adoption and support for the life-cycle costs approach so that national and international organisations incorporate it into WASH policy and budgeting frameworks.

Outcome D: Effective project management leads to the achievement of project objectives and milestones on schedule, and within budget.

The WASHCost theory of change and its four outcomes have served to inform and shape the action research agenda of WASHCost over the past five years.

⁶ Life-cycle costs (LCC) represent the aggregate costs of ensuring delivery of adequate, equitable and sustainable WASH services to a population in a specified area. A life-cycle costs approach (LCCA) seeks to raise awareness of the importance of life-cycle costs in achieving adequate, equitable and sustainable WASH services, to make reliable cost information readily available and to mainstream the use of LCC in WASH governance processes at every level.

IRC International Water and Sanitation Centre (IRC) is leading the WASHCost project and has worked with several partners in action research processes to collect and jointly make sense of data about WASH services in rural and peri-urban areas of Burkina Faso, Ghana, India, and Mozambique.

This document details the purpose of the End-of-Project Evaluation (EPE) and provides the Terms of Reference to guide interested parties in tendering for the assignment.

2 An End-of-Project Evaluation

Through the EPE, the project seeks to have an external party's appraisal of the project's achievements in country and globally.

The EPE is one component of a broader WASHCost *Critical Review* package. The emphasis of the package is to tell the 'story' of how WASHCost attained its achievements and document changes resulting from the uptake of LCC in the four countries and in the international arena. These achievements include not only outputs and outcomes stemming from WASHCost's intended goals and milestones, but also the range of unplanned, yet significant, outcomes of the project's efforts. The *Critical Review* is comprised of three components: a film series, a book, and an end-of-project evaluation.

The film series and the book are under development by the project team. The end of project evaluation is to be conducted by an external, independent party(ies) on the basis of the Terms of Reference below.

The purpose of the End-of-Project Evaluation is to obtain an independent appraisal of the project's stated achievements as highlighted in the Critical Review and other project communication products.

The role of the external evaluator(s) is to review and validate these stated achievements and to review and comment on the continuation model for the LCC towards WASHCost's long-term vision.

3 Terms of Reference for the End-of-Project Evaluation

IRC is the contracting client for this evaluation study of the work that took place in four countries, and globally towards achieving the short- and long-term vision of the project.

WASHCost has inspired and motivated a range of organisations and institutes to adopt and integrate the LCCA, triggering changes in budget planning and allocation. The external evaluator is expected to provide an independent reflection on these outcomes

The evaluation is to take place during the first quarter of 2013, with a draft report provided before 31 March 2013. A full timeframe for the End-of-Project Evaluation is included in Annex 1.

As stated above, the external evaluation will examine WASHCost's achievements towards its stated goals and validate the 'claims' about WASHCost's achievements in other Critical Review products.

The terms of reference for the EPE are:

1. **Formulation of an evaluation methodology** comprised of an appropriate mix of methods to obtain robust qualitative and quantitative data to examine, reflect and draw conclusions about the following areas of enquiry:

Uptake: the WASHCost short-term vision

□ Evidence of uptake and use of the LCC concepts and methods by sector actors.

Continuing model: the WASHCost long-term vision

The five-year project duration is insufficient to account for well-established changes in budget planning and related behaviour. However, based on existing 'signals of change' WASHCost has established a so-called *continuing model* in the respective project countries, enabling a further uptake and integration of the LCCA. The external evaluator is expected to assess and review the establishment of the continuing model and its potential to guide and motivate further integration of the LCCA.

Learning and changing: adaptive management in WASHCost

- Revisit the WASHCost Mid-Term Assessment, its findings and recommendations, as well as other key reports (e.g., 2011 reporting exercise) to reflect on the project's capacity to respond to signals for change.
- □ What served to trigger adaptation in WASHCost, or a change in course direction, of project activities and outcomes? Why?
- What was the outcome of this adaptation?

Change or progress towards change: in light of the project's stated Four Outcomes

- What is the status of what has been achieved in the four countries and the International arena?
- What examples of change resulting from the uptake of LCC WASHCost countries and at international level.
- □ What has changed as a consequence of WASHCost activities? Where and why?
- How did WASHCost work to achieve those changes?

(Initial) risks and assumptions, project set-up

- How did WASHCost work: that is what did the design, implementation and management of a project this scope (budget, number of countries, project staff, international level outcomes, etc.) entail?
- How, if at all, did the project approach contribute to the achievement of the project's outcomes (e.g., Learning Alliances, Action Research, Local Hosting, etc.)?

Unexpected outcomes

- Identify and reflect upon unexpected outcomes—negative or positive—that have come about in the four countries, or globally through the work of WASHCost.
- 2. **Submission of final Evaluation Proposal**: includes final agreed evaluation framework for data collection, analysis and cycles of review with the project team. Also includes agreed final timeline for the evaluation study activities and draft/ final report submission.
- 3. **Submission of a draft Report**: according to the agreed timeframe and deadlines for comment and review by the Client (IRC).
- 4. Revision (based upon round of feedback from WASHCost) and submission of a final Report according to the agreed timeframe and deadlines.

Annex 2 WASHCost EPE consultant team

Name	Discipline	Main area of focus
Piers Cross	WASH Policy Adviser	Overall coordination and team leadership, global analysis, Ghana country assessment and support to country assessments in Mozambique, reviewing India and Burkina Faso reports, lead drafting of main report.
Jose Frade	Engineering/ WASH Specialist	Country analysis and assessment in Mozambique and Burkina Faso, support to comparative country analysis, and reviewing draft main report.
A.J. James	Economist/WASH Specialist	Country analysis in India (Andhra Pradesh), support to comparative country analysis, and reviewing draft final report.
Sophie Trémolet	WASH Financial Specialist	Conceptual oversight, development of methodology, financial management, support in drafting findings, and reviewing main report.

Annex 3 List of international interviews

Name	Designation and Agency	Country
Alex Bakalian	World Bank	USA
Jamie Bartram	Professor at University of North Carolina	USA
Louis Boorstin	Consultant – Former Deputy Director in the Bill & Melinda Gates Foundation	USA
Clarissa Brocklehurst	Consultant – Former Chief of WASH in UNICEF	Canada
Eric Buhl-Nielsen	Consultant – WASH Financial Analyst	UK
Rachel Cardone	Consultant – Former Project Officer in the Bill & Melinda Gates Foundation	USA
Deirdre Casella	Programme Officer at IRC International Water and Sanitation Centre	Netherlands
Barbara Evans	Senior Lecturer at University of Leeds	UK
Dominick de Waal	Senior Water and Sanitation Specialist, Africa at Water and Sanitation Program	Kenya
Catarina Fonseca	WASHCost Project Director at IRC International Water and Sanitation Centre	Netherlands
Richard Franceys	Professor at Cranfield University and former WASHCost IAG member	UK
Guy Hutton	Consultant – WASH Economist	UK
Stephanie Lazar	Consultant working on WASHCost at Bill & Melinda Gates Foundation	USA
Patrick Moriarty	Triple-S Project Director at IRC International Water and Sanitation Centre	Ireland
Peter McIntyre	Communications Team Member at IRC International Water and Sanitation Centre	UK
Jonathan Parkinson	Sanitation Specialist at International Water Association	UK
Alana Potter	WASH Governance Specialist at IRC International Water and Sanitation Centre	Netherlands
Eddy Perez	Senior Sanitation Specialist at Water and Sanitation Program	USA
Rochelle Rainey	WASH Specialist at US Agency for International Development	USA
Sara Rogge	Project Officer at Bill & Melinda Gates Foundation	USA
Jan-Willem Rosenboom	Triple-S Project Officer at Bill & Melinda Gates Foundation	USA
Heather Skilling	WASH Specialist US Agency for International Development	USA
Tom Slaymaker	Policy Analyst at WaterAid	UK
Leonard Tedd	Department for International Development	UK
Dick van Ginhoven	Senior Water and Sanitation Specialist at The Netherlands Ministry of Foreign Affairs	Netherlands
Jeske Verhoeven	Programme Officer at IRC International Water and Sanitation Centre	Netherlands
Rutger Verkerk	WASHCost Project Coordinator at IRC International Water and Sanitation Centre	Netherlands
Chris Williams	Executive Director at Water Supply and Sanitation Collaborative Council	Switzerland

Annex 4 Selected WASHCost publications

No	Date of publication	Country	Title	Language	Location
1	Jan-13	Burkina Faso	Evaluer le coût d'un service pé- renne d'eau potable au Burkina Faso: méthodes et outils	FR	http://www.washcost.info/ page/2663
2	Mar-12	Burkina Faso	Le coût des systèmes d'approvision- nement en eau potable au Burkina Faso: une application de l'approche des coûts à long terme	FR	http://www.washcost.info/ page/1983
3	Mar-13	Burkina Faso	Évaluation des interventions d>hygiène: coûts appliquée au Burkina Faso	FR	http://www.washcost.info/ page/2755
4	Apr-12	Burkina Faso	De l'accès aux systèmes de distri- bution d'eau potable à l'accès aux services d'eau potable: méthode et outils	FR	http://www.washcost.info/ page/2080
5	Dec-11	Burkina Faso	Le coût des latrines au Burkina Faso: une application de l'approche des coûts à long terme	FR	http://www.washcost.info/ page/1701
6	Aug-11	Ghana	Life-cycle costs in Ghana: back- ground and methodology	EN	http://www.washcost.info/ page/1440
7	Aug-11	Ghana	Life-cycle costs in Ghana: post-con- struction costs of water point-sys- tems	EN	http://www.washcost.info/ page/1441
8	Aug-11	Ghana	Life-cycle costs in Ghana: costs of rural and small town sanitation services	EN	http://www.washcost.info/ page/1442
9	Aug-11	Ghana	Life-cycle costs in Ghana:: access to water services in rural areas and small towns	EN	http://www.washcost.info/ page/1443
10	Aug-12	Ghana	Life-cycle costs in Ghana: access to sanitation services	EN	http://www.washcost.info/ page/2316
11	Aug-12	Ghana	Life-cycle costs in Ghana: func- tionality of rural water systems in Ghana	EN	http://www.washcost.info/ page/2319
12	Aug-12	Ghana	Life-cycle costs in Ghana: poverty and access to rural water services	EN	http://www.washcost.info/me- dia/files/briefing_note_7_pov- erty_and_access_to_rural_wa- ter_services
13	Aug-12	Ghana	Life-cycle costs in Ghana: uses and sources of water in rural areas	EN	http://www.washcost.info/me-dia/files/briefing_note_8_uses_and_sources_of_water_in_ru-ral_areas
14	Oct-12	Ghana	Life-cycle costs in Ghana: cost drivers of capital investment of small towns water schemes	EN	http://www.washcost.info/ page/2679

15	Dec-12	Ghana	Life-cycle costs in Ghana: cost study of twelve small towns in the central region, Ghana	EN	http://www.washcost.info/ page/2706
16	Dec-12	Ghana	Life-cycle costs in Ghana: case study of Oyibi multi-village water schemes	EN	http://www.washcost.info/ page/2708
17	Dec-12	Ghana	Life-cycle costs in Ghana: ideal direct support costs for WASH services	EN	http://www.washcost.info/ page/2700
18	Jan-12	India/ AP	Urban water supply and sanitation in Andhra Pradesh	EN	http://www.washcost.info/ page/1950
19	Feb-12	India/ AP	Looking beyond capital costs - life cycle costing for sustainable service delivery - a study from Andhra Pradesh, India	EN	http://www.washcost.info/ page/1951
20	Feb-12	India/ AP	Costs and service per technology in rural water supply: how efficient are multi village schemes	EN	http://www.washcost.info/ page/2043
21	Feb-12	India/ AP	Qualitative challenges in improving performance of water points insights from community based performance assessment of water points in Andhra Pradesh	EN	http://www.washcost.info/ page/2044
22	Sep-12	India/ AP	WASH security in India: can the new policy guidelines deliver? Critical assessment and operationalization of 2010 guidelines	EN	http://www.washcost.info/ page/1638/(offset)/20
23	Sep-12	India/ AP	Costs and service levels of water and sanitation: a study of peri-ur- ban locations in Andhra Pradesh	EN	http://www.washcost.info/ page/2357
24	Forthcoming (Oct-13)	India/ AP	Sustainable water and sanitation services: the life-cycle approach to planning and management	EN	http://www.routledge.com/ books/details/9780415828185/
25	Dec-12	India/ AP	What ails rural sanitation and hygiene? Economic and institutional aspects of sustainable services in AP, India	EN	http://www.washcost.info/ page/2638
26	Dec-12	India/ AP	Nirmal Gram Puraskar and sanitation service levels: curse of slippage	EN	http://www.washcost.info/ page/2639
27	Nov-12	Mozambique	Mecanismos e instrumentos de pla- nificação o orcamentação no sector de águas em Moçambique	PR	http://www.washcost.info/ media/files/m03_mecanis- mos_e_instrumentos_de_plani- ficacao_e_oramentacao_no_sec- tor_de_aguas_em_mocambique
28	Dec-12	Mozambique	10 Mensagens chave sobre custos e níveis de serviços de ASH em Moçambique	PR	http://www.washcost.info/me-dia/files/washcost_10_key_mes-sages_24_page_moz_pt_final

29	Dec-12	Mozambique	10 Key messages about WASH costs and service levels in Mozambique	EN	http://www.washcost.info/me-dia/files/washcost_10_key_mes-sages_mozambique_english
30	Jan-13	International/ NL	Learn to plan, budget and monitor for sustainable WASH services	EN	http://www.washcost.info/ page/2664
31	Jan-13	International/ NL	Applying a life-cycle costs approach to water: costs and service levels in rural and small town areas in Andhra Pradesh (India), Burkina Faso, Ghana and Mozambique	EN	http://www.washcost.info/ page/2665
32	Jun-10	International/ NL	Decentralisation and the use of cost data in WASHCost project countries	EN	http://www.washcost.info/ page/842
33	Jun-13	International/ NL	Hygiene promotion: How effective is it? How much does it cost?	EN	http://www.washcost.info/ page/2909_
34	Mar-13	International/ NL	Financing capital maintenance of rural water supply systems: current practices and future options	EN	http://www.washcost.info/ page/2713
35	Aug-10	International/ NL	Services are forever: the importance of capital maintenance (CapManEx) in ensuring sustainable WASH services	EN	http://www.washcost.info/ page/866
36	Sep-11	International/ NL	The cost of capital: costs of financ- ing capital expenditure for water and sanitation	EN	http://www.washcost.info/ page/1490
37	Oct-12	International/ NL	Providing a basic level of water and sanitation services that last: COST BENCHMARKS	EN	http://www.washcost.info/ page/2386
38	Oct-12	International/ NL	The cost of sustaining sanitation services for 20 years can be 5-20 times the cost of building a latrine	EN	http://www.washcost.info/ page/2439
39	Nov-11	International/ NL	Life-cycle costs approach: costing sustainable services	EN	http://www.washcost.info/ page/1557
40	Dec-11	International/ NL	Applying the life-cycle costs approach to sanitation: costs and service levels in Andhra Pradesh (India), Burkina Faso, Ghana and Mozambique	EN	http://www.washcost.info/ page/1626
41	Dec-12	International/ NL	Funding recurrent costs for improved rural water services	EN	http://www.washcost.info/ page/2584
42	Forthcoming (end 2013)	International/ NL	IRC book on WASHCost	EN	In production

Annex 5 Country scorecard indicators

	Performance Area	Indicator 1	Indicator 2	Indicator 3	Indicator 4	Indicator 5	Indicator 6	Indicator 7	Total
1	LCC termi- nology/ concept adopted	Used by lead gov- ernment agency in budgeting	Used by lead agency in financing strategy	LCC language commonly used and under- stood	LCC used at sub-na- tional level	LCC used by national/ state planning agency or MoF	Evidence of spread of LCC to others not directly involved in project	Evidence of LCC adaption	7
2	Learning alliances	Lead agen- cy fully engaged in project	Project alliance mecha- nism be- tween host and lead agency continuing	Other agency resources leveraged to follow up project					3
3	Data	Data regarded as reliable	Sam- ple size sufficient to have national/ state appli- cation	Data hand- ed over to relevant agency	Evidence that data is being used	Plans in place to enhance/ extend data			5
4	Research outputs	Research design re- garded as credible	Produced significant results in water	Produced significant results in sanitation	Produced significant results in hygiene	Flagship document produced	Many high quality publi- cations produced		6
5	Project design	Project objectives achieved	Selection of host and lead agency was effective	Project adequately resourced	Good balance in resource allocation between data collection, analysis, dissem- ination, training, embedding	Country learnt from cross-coun- try project exchange			4
6	Embedding	Person- nel with project experience in key deci- sion-mak- ing position	Key personnel trained by project in key deci- sion-mak- ing positions	Skills in place to continue data col- lection	National/ state statis- tical agen- cy adopts project concepts/ methodol- ogy				4

7	Commu- nications/ advocacy	Commu- nications strategy in place	Commu- nications strategy imple- mented	Evidence of commu- nications/ advocacy impact	Communication tools embedded in lead agency (website, etc.)				4
8	Project man- agement	Project de- livered on schedule	Project de- livered on or below budget	High calibre of staff as perceived by stake- holders	High quality reporting produced on time	Country re- ceived strong management support from NL	Evidence of country manage- ment making sound local decisions	Good financial manage- ment (pro- curement, disburse- ment, and reporting)	7
9	Five-year project out- comes	Evi- dence of improved costing being used to improve sector per- formance	Policy changes as a result of new costing in- formation	Follow-up invest-ments changed course as a result of project	Financing approach- es changed as a result of project	Impacts on sector data collection	Evidence of LCC being met in sector projects	Other project im- pacts (e.g., sector gov- ernance, communi- cations)	7
10	Ten-year project out- comes	Continuing interest to fund project components by others	Any plans to follow-up project (e.g., ex- tend data collection), new appli- cation	Evidence of long- term im- pacts from project					3
11	IRC	Do stake- holders perceive WASH-Cost as an IRC project?	Has the project enhanced perception of IRC as high calibre knowledge management agency?						2
	TOTAL								52

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