

# Annual Report

June 2011



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## 1. Executive Summary

### 1.1. Introduction

The SHARE Consortium represents the single biggest investment ever in research for sanitation and hygiene, and highlights DFID's commitment to addressing this global issue. With an investment of £10 million for 2010-2015, SHARE brings together leading academic and technical expertise with in-country presence and influence to generate research that will drive progress. SHARE research will inform and deliver real changes both in access to sanitation and hygiene and related progress on under-5 mortality. The SHARE consortium is led by the London School of Hygiene and Tropical Medicine (LSHTM) working in partnership with the International Centre for Diarrhoeal Disease Control, Bangladesh; the International Institute for Environment and Development; Slum/Shack Dwellers International; and, WaterAid.

SHARE came into being in January 2010. Its Inception Period, nominally six months, was extended by agreement with DFID and the Inception Report was finally agreed at the end of the first year. This, the first Annual Report of the Consortium, covers the 18 month period Jan 2010 – Jun 2011 inclusive.

One important change to the governance of the Consortium is that at the request of Shack Dwellers International, their international secretariat has been relieved of the administrative responsibilities of partnership, conceding to IIED the responsibility for administering SHARE research projects in which SDI participates. In effect this amounts to reversion to the collaborative arrangement which SDI has shared with IIED for the last 15 years, which has enabled them to carry out a successful programme of action research without overburdening the small secretariat.

In April 2011 areas of concern within the consortium were highlighted by SHARE partners and DFID. Key areas for improvement focused on contract preparation, clarity of roles and responsibilities, monitoring and evaluation, and the development of the country platforms. Several meetings were convened to discuss these issues and adjustments to the management roles have been agreed – see page 57.

### 1.2. Key Achievements to Date

In practical terms, SHARE research is already delivering the following headlines

- Over 30 research projects approved and underway across four research themes (equity, health, urban and markets) and four focus countries (Bangladesh, India, Malawi and Tanzania). They include assessing the potential of communal toilets in India, identifying the risk factors for the contamination of tube-wells in Bangladesh, the perceptions of on-site sanitation in Dar es Salaam, Tanzania, and a research meeting on menstrual hygiene management. See single paragraph summaries of all 24 projects approved through SHARE's research calls (plus one page summaries of 15).
- SHARE has begun the first ever randomised control trial of the effect of sanitation on diarrhoea with support of the state government of Orissa in India.
- SHARE has successfully leveraged over \$2 million in additional resources from donors including the Bill and Melinda Gates Foundation, 3ie, the Wellcome Trust and UNICEF/WHO.

- Critical convening or bringing together those who can use SHARE research to accelerate progress and improve the performance of existing investments through better decisions (e.g. DFID; UK and African Ministers; Royal Society of Medicine; WHO).
- Tropical enteropathy and undernutrition of children. One of the key questions of sanitation impact is how it contributes to child nutrition, which in turn has been shown to affect a range of health and economic outcomes. SHARE played a catalytic and advising role to support a randomized trial of sanitation on tropical enteropathy, which tests a new and innovative hypothesis that could transform the global understanding of sanitation's contribution to health and development. SHARE is also conducting the first systematic review of the effect of sanitation and hygiene on childhood nutritional status and the protocol has been accepted by the Cochrane Group.
- Food hygiene and child mortality: A recent ground-breaking intervention study of weaning food hygiene in Mali showed how simple measures could achieve large reductions in the numbers of faecal bacteria ingested by young children. Replication of the study aims to confirm or qualify these very positive findings, and also to examine how widely they are applicable.
- Hygiene promotion: SHARE has commissioned a tool kit destined for use by practitioners. Called 'Choose Soap' it offers a blueprint for activities that can be carried out in households, in schools, in communities and using mass media to encourage the practice of handwashing with soap at key times; this generic resource has now been adapted to the specific Indian setting in which it will be used in a prestigious handwashing effectiveness trial funded by the Wellcome Trust.
- Exploring the connections between sanitation equity and impact (also two SHARE briefing notes on: including disabled people in sanitation and hygiene services and menstrual hygiene management).
- Four pathfinder papers, one for each of the focus areas. Equity and Gender and Urban Sanitation were published in the SHARE Inception Report. Sanitation Markets, and Health will be completed by the end of 2011.
- Responding to technical queries from DFID and other relief and development agencies – a demand-driven form of RIU, and so highly cost-effective. These have ranged in scale from a simple exchange of e-mails to a mission to Bangladesh to advise on Formative Research for the SHEWA-B Project, or the preparation by multiple authors of an Evidence Paper on the WASH sector for DFID's Portfolio Review.
- As part of a planned programme of dissemination of new knowledge about the design of behaviour change interventions, a training workshop design was

developed and implemented for 70 aid agency personnel from the Asia-Pacific region in Brisbane, Australia; it was funded by AusAid through the Water Centre and well received.

### **1.3. Proposed Activities**

#### To end 2011

- Appoint full-time Monitoring & Evaluation Officer at LSHTM
- Establish some of the research groups based in the four core countries
- Allocate funding to the established research groups
- Complete and publish 4 pathfinder papers
- Present Evidence paper to DFID Investment Committee
- Start IIED/SDI sanitation project if approved is received from DFID
- Outcome Mapping plan to be drafted for presentation to the CAG
- Identify gaps in the research programme; plan strategic response
- New stage 2 (effectiveness) food hygiene study
- RIU – Present two sessions at AfricaSan; participate in WSSCC Mumbai forum
- 

#### Years 3-5

- Increasingly delegating research to national stakeholders.

## 2. Progress

### 2.1. Revised Logical Framework

PROJECT TITLE						
Sanitation & Hygiene Applied Research for Equity (SHARE) Research Programme Consortium						
GOAL	Indicator 1	Baseline + year	Milestone 1	Milestone 2	Target + year	
Accelerated progress towards universal sanitation and hygiene coverage in sub-Saharan Africa and South Asia	The annual number of people gaining access to improved sanitation in the four focus countries	(JMP 1990-2008)	End or 2011	End of 2013	End of 2014	
		14.4 million	(H) 15 million (M) 14.7million (L) 14.4 million	(H) 17 million (M) 15.5 million (L) 14.7 million	(H) 20 million (M) 17 million (L) 15.5 million	
		<b>Source</b>				
	UNICEF/WHO Joint Monitoring Programme and official country data					
	<b>Indicator 2</b>	<b>Baseline + year</b>	<b>Milestone 1</b>	<b>Milestone 2</b>	<b>Target + year</b>	
The child (<5) mortality rate in the four focus countries (# deaths/year)	(2008)	2011	2013	2014		
	2.24 million	-	-	(H) 2.14 million (M) 2.17 million (L) 2.21 million		
	<b>Source</b>					
<a href="http://www.childinfo.org">www.childinfo.org</a>						

PURPOSE	Indicators	Baseline + year	Milestone 1	Milestone 2	Target + year	Assumptions
National & global sector partners change the way they plan, implement or monitor in order to increase i) equitable access, ii) sustainability, and iii) cost-effectiveness of sanitation and hygiene	Evidence of SHARE catalysing change on the four barriers to progress in sanitation & hygiene: a) low priority, b) weak policy and programming, c) inadequate and poorly targeted resourcing, d) Poor monitoring for equity & sustainability. Boundary partners' progress markers met (#%)	2009 None	End of 2011 (H) 20% (M) 12% (L) 5% (Global level only in initial year)	End of 2013 (H) 50% (M) 20% (L) 12%	End of 2014 (H) 80% (M) 50% (L) 20%	Use of SHARE results leads to improved progress  SHARE produces useful, applicable scaleable lessons  Sectoral progress not undermined by disaster/instability /unfavourable environmental conditions in focus countries
	Concrete examples of change, influenced by SHARE (a) that can directly impact safe sanitation & hygiene for # million people (b) # of such 'success stories'.	a) None  b) None	a) (H) 1 million (M) 0.5 million (L) 0.25million  b) (H) 1 (M) 0 (L) 0	a) (H) 5 million (M) 2 million (L) 0.5 million  b) (H) 5 (M) 3 (L) 1	a)(H) 15 million (M) 7 million (L) 2 million  b) (H) 15 (M) 9 (L) 3	Improvements in institutional and individual capacity support better sectoral policy and plans  Political will continues to favour sanitation
	Leveraged funds: a) invested by other funders in SHARE's research (£# million) b) invested in sanitation & hygiene projects influenced by SHARE (£# million)	a) Nil  b) Nil	a) (H) £ 1 million (M) £0.5 million (L) £0.25 million b) (H) £ 2 million (M) £1 million (L) £0.5 million	a) (H) £ 3 million (M) £1 million (L) £0.5 million b) (H) £ 10 million (M) £ 5 million (L) £ 1 million	a) (H) £ 5 million (M) £ 3 million (L) £1 million b) (H) £ 30 million (M) £ 15 million (L) £ 5 million	
		<b>Source</b>				
	Focus country & partner agency reports; SHARE monitoring, case studies					
<b>INPUTS (£)</b>	<b>DFID (£)</b>	<b>Govt (£)</b>	<b>Other (£)</b>	<b>Total (£)</b>	<b>DFID SHARE (%)</b>	
	<b>10,000,000</b>					
<b>INPUTS (HR)</b>	<b>DFID (FTEs)</b>					

OUTPUT 1	Indicator 1	Baseline + year	Milestone 1	Milestone 2	Target + year	Assumptions
National & global sector-relevant knowledge synthesised and disseminated, to help to a) characterise problems; b) identify solutions; and c) demonstrate benefits	# of manuals, handbooks & other major resource materials created or rendered accessible	Nil in 2009	End of 2011 (H) 2 items (M) 1, (L) 0	End of 2013 (H) 6 items (M) 3, (L) 1	End of 2014 (H) 10 items (M) 5, (L) 3	Poor dissemination of knowledge constrains sector progress  Books, manuals etc. will reach target audience
		<b>Source</b> SHARE publications & annual reports.				
	<b>Indicators 2, 3, 4</b>	<b>Baseline + year</b>	<b>Milestone 1</b>	<b>Milestone 2</b>	<b>Target + year</b>	
	Development and use of national RIU strategies	Nil in 2009	# agreed by stakeholder fora by end 2011 (H) 4 (M) 2, (L) 1	Strategies being implemented in # of focus countries by end 2013 (H) 4, (M) 3, (L) 2	Legacy arrangements agreed by stakeholders 2014	
		<b>Source</b> Country RIU anchors' reports, DFID desk feedback				
	# no of knowledge sharing events including seminars, technical meetings and conferences organised or supported by SHARE	Nil in 2009	Total (H) 5 (M)3 (L) 1	Total (H) 20 (M) 15 (L) 10	Total by end 2014 (H) 30 (M) 20 (L) 15	
% female participants at those events	23% in 2009	(H) 30% (M) 25%, (L) 20%	(H) 40% (M) 30%, (L) 25%	In 2015 (H) 50% (M) 40%, (L) 30%		
		<b>Source</b> Country RIU anchors' , and M & E Officer's annual reports, DFID desk feedback				
IMPACT WEIGHTING	Indicator 5	Baseline + year	Milestone 1	Milestone 2	Target + year	
30%	# of requests for advice from SHARE generating response.	Nil in 2009	2011 requests/yr (H) 7, (M) 5, (L) 3	2013 requests/yr (H)10, (M)7, (L)5	2014 requests/yr (H)15,(M)10,(L)7	<b>RISK RATING</b>
		<b>Source</b> SHARE annual reports				
INPUTS (£)	DFID (£)	Govt (£)	Other (£)	Total (£)	DFID SHARE (%)	
	£1,700,000					
INPUTS (HR)	DFID (FTEs)					



OUTPUT 2	Indicators 1, 2	Baseline + year	Milestone 1	Milestone 2	Target + year	Assumptions				
New knowledge generated by relevant and rigorous sanitation research which a) characterises problems; b) identifies solutions; and c) demonstrates benefits	Publications in peer-reviewed journals arising from SHARE research	Nil in 2009	By end 2011 (H) 5, (M) 3, (L) 1	By end 2013 (H) 10, (M) 5, (L)3	By end 2014 (H)20,(M) 10, (L) 5	Publications are read by practitioners  Programmes embodying research findings are successful, sustainable and influential  SPLASH-funded Consortia are well-managed				
	Citations by other authors of those publications	0	0.5	(H) 1 (L) 0	(H)- Average 2 per article per annum (M) Average 1 per article /yr (L) Average 0.5 per article/yr					
	<b>Source</b>									
	Published literature; Science Citation Index; SHARE annual reports									
	<b>Indicator 3</b>	<b>Baseline + year</b>	<b>Milestone 1</b>	<b>Milestone 2</b>	<b>Target + year</b>					
	No. of programmes embodying research findings established and documented for replication and/or study visits	Nil in 2009	By end 2011 (H) 2 under way (M) 1, (L) 0	In 2013 (H) 2 under way (M) 1, (L) 0	By 2014 (H) 4 under way (M) 2, (L) 1					
<b>Source</b>										
SHARE annual reports										
IMPACT WEIGHTING	Indicator 4	Baseline + year	Milestone 1	Milestone 2	Target (date)					
35%	Successful completion of SPLASH component funded via SHARE	Nil allocated in 2009	By end 2011 (H) 5 projects started (M) 3, (L)1	By end 2013 (H) 5 project reports submitted (M) 3, (L)1	Policy-relevant appraisal of outputs produced by SHARE by end of 2014					
						<b>Source</b>				
						SPLASH secretariat				
						<b>RISK RATING</b>				
INPUTS (£)	DFID (£)	Govt (£)	Other (£)	Total (£)	DFID SHARE (%)					
	£3,812,655									
INPUTS (HR)	DFID (FTEs)									

OUTPUT 3	Indicators 1, 2, 3	Baseline + year	Milestone 1	Milestone 2	Target + year	Assumptions	
Key sector actors engaged around evidence for change	# of consultations initiated by SHARE on the basis of outcome mapping	Nil in 2009	By end 2011 (H) 4 consultations (M) 2, (L) 0	In 2013 (H) 4 consultations (M) 2, (L) 1	In 2014 (H) 4 consultations (M) 2, (L) 1	WASH policies and plans enable increased capacity to be applied to achieve results	
	# of country platforms established and active	Nil in 2009	Research groups formed (H) 4, (M) 2, (L) 0 initial stakeholder meetings (H) 4 (M) 2, (L) 0	Country plan of action agreed (H) 4 (M) 2 (L) 1	platforms active (H) 4 (M) 3 (L) 2	Stakeholders when trained do not leave posts/WASH sector	
	# of hits/downloads on SHARE website	Nil in 2009	Website active	downloads per month (H) 10 (M) 5 (L) 1	Hits/month (H) 1,000 (M) 750, (L) 300 Downloads/mth (H)100, (M) 50 (L)25	Increased individual capacity results in increased institutional capacity	
		<b>Source</b>					
		M & E tracking; SHARE annual reports; web page analysis					
		<b>Indicator 4</b>	<b>Baseline + year</b>	<b>Milestone 1</b>	<b>Milestone 2</b>	<b>Target + year</b>	
		# of external requests for SHARE technical support to implement implications of SHARE research	Nil in 2009			By end 2014 (H) 4, (M) 2, (L)1	
		<b>Source</b>					
		M & E tracking; SHARE annual reports					
IMPACT WEIGHTING	Indicators 5, 6	Baseline + year	Milestone 1	Milestone 2	Target (date)		
	# of cases of non-SHARE agencies participating in SHARE research	Nil in 2009	By end 2011 (H) 2, (M) 1, (L) 0	By end 2013 (H)5, (M) 2, (L) 1	By end 2014 (H)7, (M) 5, (L)2		

15%	Skills and competencies of # key individuals responsible for planning, managing, implementing and monitoring WASH programmes – especially women – developed and upgraded.	Nil in 2009	By end 2011 (H) 8 (M) 6 (L) 4	By end 2013 (H)20 (M)12 (L) 6	By end 2015 (H) 40 (M) 20 (L) 10 (> 50% women)	
		<b>Source</b>				<b>RISK RATING</b>
		SHARE annual reports; DFID desk feedback				
INPUTS (£)	DFID (£)	Govt (£)	Other (£)	Total (£)	DFID SHARE (%)	
	£1,678,404					
INPUTS (HR)	DFID (FTEs)					

OUTPUT 4	Indicator 1	Baseline + year	Milestone 1	Milestone 2	Target + year	Assumptions
Capacity strengthened to conduct relevant collaborative research and apply the results	%of proposals ready for consideration on first submission	< 25% in 2010	By end 2011 (H) 40% (M) 30%, (L) 20%	By end 2013 (H) 60% (M) 45%, (L) 30%	By end 2014 (H) 80% (M) 60%, (L) 40%	Partner organisations and other national stakeholders are willing to offer staff for training.  Trained researchers remain in the sector, and do not emigrate.  Exchanges and training courses are appropriate and productive.
		<b>Source</b>				
	Research Fund allocation panel minutes					
	<b>Indicator 2</b>	<b>Baseline + year</b>	<b>Milestone 1</b>	<b>Milestone 2</b>	<b>Target + year</b>	
# of PhD students trained	Nil in 2009	selected 2011 (H) 3, (M) 2, (L) 1	all selected 2013 (H) 5, (M) 3, (L)1	completed by 2014 (H) 5, (M) 3, (L) 2		
	<b>Source</b>					
	SHARE Annual Reports					
	<b>Indicator 3</b>	<b>Baseline + year</b>	<b>Milestone 1</b>	<b>Milestone 2</b>	<b>Target (date)</b>	
	# of exchange visits organised	Nil in 2009	By end 2011 (H) 2, (M) 1, (L)0	By end 2013 (H) 4, (M) 2, (L)1	By end 2014 (H) 4, (M) 2, (L)1	
<b>IMPACT WEIGHTING</b>	<b>Indicator 4</b>	<b>Baseline + year</b>	<b>Milestone 1</b>	<b>Milestone 2</b>	<b>Target (date)</b>	
10%	# of training courses organised (on research methods, management, etc.) annually	Nil in 2009	By end 2011 (H) 2, (M) 1, (L)0	By end 2013 (H) 4, (M) 2, (L)1	By end 2014 (H) 4, (M) 2, (L)1	
		<b>Source</b>				<b>RISK RATING</b>
SHARE Annual Reports						
<b>INPUTS (£)</b>	<b>DFID (£)</b>	<b>Govt (£)</b>	<b>Other (£)</b>	<b>Total (£)</b>	<b>DFID SHARE (%)</b>	
	£1,375,949					
<b>INPUTS (HR)</b>	<b>DFID (FTEs)</b>					

OUTPUT 5	Indicator 1	Baseline + year	Milestone 1	Milestone 2	Target + year	Assumptions	
Effective management of the consortium, including M & E of impact and value for money	Monitoring; % of indicators assessed and reported annually	Nil in 2009	By end 2011 (H) 50% (M) 30%, (L)10%	By end 2013 (H)80% (M)50%, (L)30%	By end 2014 (H) 100% (M) 75%, (L) 50%	Partner institutions continue to attract and retain talented, committed researchers	
	<b>Source</b>						
	Executive Group Minutes; M & E Officer's annual reports, SHARE Annual Reports; boundary partner interview notes						
	<b>Indicator 2</b>	<b>Baseline + year</b>	<b>Milestone 1</b>	<b>Milestone 2</b>	<b>Target + year</b>		
Value for money; wasteful expenditure on: - ineffective hygiene promotion, - unused latrines, and - superfluous evaluations avoided by following SHARE advice or implementing SHARE findings (£)	Nil in 2009	2011 –saved (H)- £ 100,000 (M)- £ 70,000 (L) - £ 45,000	2013- saved p.a. (H)- £1 million (M)- £ 500,000 (L)- £ 200,000	2014 – saved p.a. (H)- £ 5 million (M)- £ 1 million (L) - £ 500,000			
	<b>Source</b>						
	Success stories in Standing Brief; DFID desk feedback						
IMPACT WEIGHTING	Indicator 3	Baseline + year	Milestone 1	Milestone 2	Target + year		
10%	Monitoring country research groups (platforms) and evaluation of activities a) # local research management groups set up b) £value of research proposals submitted for funding and approved c) % research projects completed on time	Nil in 2009	By end 2011 a)(H) 4, (M)2, (L)1 b) (H) £100k, (M) £50k (L) £25k c) n/a first likely to end in 2012	By end 2013 a) (H) 4 (M)2, (L)1 b) (H) £500k, (M) £250k (L) £125k c) (H) 100% (M) 75% (L) 50%	By end 2014 a) (H) 4 (M)2, (L)1 b) (H) £1m, (M) £500k (L) £250k c) (H) 100% (M) 75% (L) 50%		
	<b>Source</b>						
	M&E Officer's annual reports, SHARE annual reports, minutes of individual country research management groups						
<b>INPUTS (£)</b>	<b>DFID (£)</b>	<b>Govt (£)</b>	<b>Other (£)</b>	<b>Total (£)</b>	<b>DFID SHARE (%)</b>		
	£1,462,992						
<b>INPUTS (HR)</b>	<b>DFID (FTEs)</b>						

## 2.2. Goal and Purpose

### Monitoring and Evaluation

#### **The annual number of people gaining access to improved sanitation in the four focus countries**

This indicator will be monitored using the annual JMP estimates for each of the SHARE focus countries. These estimates are based on national cluster surveys such as the Demographic and Health Surveys (DHS) and the UNICEF Multiple Indicator Cluster Surveys (MICS). JMP estimates are for the percent of households with improved sanitation. These are translated into annual changes in the number of people gaining access (based on changes in coverage and population). We are currently finalizing a model to translate annual population growth and coverage annual estimates of the number of people gaining access. Due to the time lag in preparation, JMP estimates may not be sensitive measures of SHARE's contribution to improved access. These estimates will be supplemented with estimates of improved coverage related to specific changes in coverage to which SHARE has contributed.

#### **The child (<5) mortality rate in the four focus countries (# deaths/year)**

Under 5 child mortality data are available from UNICEF's annual "Levels and trends in child mortality". This report is based on data from national cluster surveys such as the Demographic and Health Surveys. It provides global estimates as well as estimates for each of the SHARE target countries. The 2010 report includes 2009 estimated child mortality of 2.149 million deaths of children under 5 for the 4 SHARE countries. WHO and CHERG estimate that 284,000 of these deaths are from diarrhoeal disease. The report is published annually and includes a projection based on prior years' data. As a result, it provides a good benchmark for a baseline, however it does not provide a sensitive measure of changes contributed by SHARE research and policy support. In order to monitor SHARE's contribution to this indicator we are developing a predictive model that estimates the effect of changes in sector performance on child mortality. The model is based on the assumptions of several existing predictive models including LiST with modifications to capture the specific changes we expect to see in sector performance. The model will incorporate changes in: 1) coverage of improved sanitation, 2) coverage of more effective sanitation and hygiene, and 3) better targeting of sanitation to high risk populations. Annual and cumulative estimates will be developed.

#### **SHARE's Outcome Mapping Monitoring and Evaluation Progress**

During the previous year SHARE has moved to put in place key elements of the Outcome Mapping (OM) framework set out in the inception report. This system exists at both national and global level. The key steps to be completed by the end of 2011 include: 1) identifying boundary partners at the global and national levels, 2) developing and finalizing progress markers, 3) setting baselines and 4) establishing data collection methods and systems.

At the global and national level, there is an overlap in boundary partners. Our first step was to identify global boundary partners and progress markers at the global level. Since many of these are also boundary partners at the national level, this provides a way of ensuring integration at the two levels. We have identified the following key boundary partners at the global level:

- DfID
- Water and Sanitation Programme (WSP)
- UNICEF

- Joint Monitoring Programme (JMP)
- WaterAid
- Bilateral donors (including USAID, KFW, Dutch, AFD, JICA)

We have also developed draft progress markers for each of these partners. Some of these are global, some in SHARE focus countries, and others potential in other countries. These draft progress markers are shown in the table below. While these provide a start, they require further refinement. We will present these progress markers at the next CAG meeting to further develop them based on feedback.

The national Research into Use (RIU) platforms are central to SHARE monitoring and Outcome Mapping. The strategy identified in the inception report is that the RIU platforms would be established with key sector partners and that these platforms would identify critical knowledge gaps and priorities. These priorities will be used to finalize national boundary partners and progress markers. The global boundary partners and progress markers provide a starting point, but it is expected that national targets can be more refined in scope.

In addition to identify preliminary boundary partners and progress markers we have started the process of creating the national RIU groups. Terms of Reference have been drafted and preliminary RIU members have been identified in each country. Members include representatives from national government, DfID, WSP, national research institutions, UNICEF, and SHARE members. The platforms will also engage other partners including bilateral donors and potential supporters of expanded funding for the target research questions. The RIU groups will advise on the selection of target research gaps and the development of research efforts to fill them. Each group will be responsible for advising on the allocation of a national SHARE research fund. Meetings of the national groups are scheduled to occur between August and October of 2011. However preliminary conversations are underway with members in each country.

Several SHARE projects represent substantial investments and require the identification of additional boundary partners and the development of new progress markers. One example is the anticipated project on city-wide sanitation by IIED and SDI. Some of the intended outcomes of the project (in its separate logframe) fit with the above boundary partners and progress markers. However additional ones will also be identified. Examples include UN Habitat, national SDI federations and others. A separate Outcome Mapping process will be established for this project, the outcomes for which will be folded into the national and global OM strategies for SHARE.

An Outcome Mapping plan will be drafted for presentation to the CAG and finalization prior to the end of 2011.

<b>SHARE Global Boundary Partners and Draft Progress Markers</b>	
<b>Boundary Partner</b>	<b>Progress Marker</b>
<b>DfID</b>	<p><b>Expect to see</b></p> <ul style="list-style-type: none"> <li>• Country offices request SHARE support for strengthening investment and business cases</li> <li>• Sector advisors request SHARE research and synthesis on cross-cutting issues</li> </ul> <p><b>Like to see</b></p>

	<ul style="list-style-type: none"> <li>Country offices alter sanitation and hygiene strategies based on SHARE research (intervention types or targets)</li> <li>Water, health and education sectors incorporate SHARE research into investment prioritization</li> </ul> <p><b>Love to see</b></p> <ul style="list-style-type: none"> <li>Country health and education sectors support increased investments in sanitation and hygiene</li> <li>Increased investment in high need areas based on SHARE research</li> <li>Changed policy and programme strategies based on SHARE research</li> <li>Country offices support other actors incorporating SHARE research into investment strategies or interventions</li> <li>Strengthen and support monitoring that increases targeting of marginal and high risk populations</li> </ul>
<b>Bilateral Donors (including USAID, KFW, Dutch, AFD, JICA)</b>	<p><b>Expect to see</b></p> <ul style="list-style-type: none"> <li>Recommends and requests SHARE research on key issues</li> <li>Country offices identify and recommend priority research areas</li> <li></li> </ul> <p><b>Like to see</b></p> <ul style="list-style-type: none"> <li>Support SHARE research to strengthen their own investments</li> </ul> <p><b>Love to see</b></p> <ul style="list-style-type: none"> <li>Change targeting approaches and investment areas based on SHARE research</li> <li>Change intervention and policy approaches based on SHARE research</li> </ul>
<b>WaterAid</b>	<p><b>Expect to see</b></p> <ul style="list-style-type: none"> <li>Request SHARE research and synthesis results</li> </ul> <p><b>Like to see</b></p> <ul style="list-style-type: none"> <li>Requests and incorporates SHARE research results into program development and improvement</li> <li>Develops and supports collaborative research efforts to strengthen programs and monitoring</li> <li>Disseminates SHARE research to strengthen sector performance</li> </ul> <p><b>Love to see</b></p> <ul style="list-style-type: none"> <li>Incorporates SHARE funding into program and policy proposals to enhance performance</li> </ul>
<b>JMP</b>	<p><b>Expect to see</b></p> <ul style="list-style-type: none"> <li>Recommends and requests SHARE research on key issues</li> </ul> <p><b>Like to see</b></p> <ul style="list-style-type: none"> <li>Incorporates SHARE research and synthesis into policy efforts</li> <li>Supports and disseminates SHARE research</li> <li>Collaborate on the development of new research efforts</li> <li>Funds collaborative research with SHARE</li> </ul> <p><b>Love to see</b></p> <ul style="list-style-type: none"> <li>Change global monitoring approaches to improve safe sanitation and hygiene coverage for poor and marginalized, based on SHARE</li> </ul>



	research and synthesis
<b>UNICEF</b>	<p><b>Expect to see</b></p> <ul style="list-style-type: none"> <li>• Recommends and requests SHARE research on key issues</li> <li>• Country offices identify and recommend priority research areas</li> </ul> <p><b>Like to see</b></p> <ul style="list-style-type: none"> <li>• Collaborate on the development of new research efforts</li> <li>•</li> </ul> <p><b>Love to see</b></p> <ul style="list-style-type: none"> <li>• Support and fund new collaborative research with SHARE</li> <li>• Actively disseminate SHARE research results to change program and policy approaches</li> </ul>
<b>WSP</b>	<p><b>Expect to see</b></p> <ul style="list-style-type: none"> <li>• Recommends and requests SHARE research on key issues</li> <li>• Country offices identify and recommend priority research areas</li> </ul> <p><b>Like to see</b></p> <ul style="list-style-type: none"> <li>• Supports and disseminates SHARE research</li> <li>• Collaborate on the development of new research efforts</li> </ul> <p><b>Love to see</b></p> <ul style="list-style-type: none"> <li>• Support and fund new collaborative research with SHARE</li> </ul>

### **SHARE – Leveraging resources and influence**

The SHARE objective that ‘national and global sector partners change the way they plan, implement or monitor in order to increase access’ will be reached directly and indirectly. SHARE actively seeks to leverage greater impacts through working strategically to influence change. This work (described in the Communications Strategy) is critical to SHARE meeting its ambitious targets and transforming research in the sector beyond the life-time of the SHARE programme.

SHARE brings substantial human, institutional and financial resources to sanitation and hygiene research but they are small in comparison to the magnitude of the problem or the range of research needs. As such, SHARE actively seeks to influence and mobilise resources for wider research, in addition to carrying it out. SHARE does this through convening key research funders and researchers, supporting the development of methods and designs that enable others to do more research, and targeting SHARE research funding for pilots that can attract larger donors.

The following are four examples of where SHARE has successfully leveraged resources and influence through tactical interventions:

#### **1. A randomised controlled trial on sanitation and diarrhoea – Orissa, India**

SHARE used an initial allocation from its main research fund for the early development of the Orissa trial. This initial investment enabled the research team to access funding from the Gates Foundation and 3ie that resulted in a total research investment that was more than 20 times initial SHARE investment. Beyond the financial resources, this partnership with the Gates Foundation and 3ie has led to a wide range of collaborations. With the Gates Foundation, SHARE has subsequently collaborated on various activities and is co-convening a workshop in Bangladesh around the trial in Orissa for a range of sector partners. Similarly with 3ie, SHARE has collaborated on other activities, and the

3ie Director, Howard White, will participate in the SHARE organised AfricaSan session on health impacts.

Total value of financial leveraging: approx. £1.5 million

## **2. A strategic research partnership with the WHO/UNICEF Joint Monitoring Programme**

Following a series of bilateral and joint meetings with both WHO and UNICEF, SHARE has been requested by the WHO/UNICEF Joint Monitoring Programme (JMP) to submit research proposals. The research questions are informed by the analysis of the JMP data conducted by WHO/UNICEF, and this research is designed to help strengthen global and national monitoring of progress on the MDG target for sanitation. The questions range from risks associated with shared toilets and unhygienic latrines to improving understanding of new exposures such as disposal of child faeces.

Total value of financial leveraging: approx. £200,000 (*contract pending*)

## **3. DFID's Water and Sanitation Portfolio Review**

SHARE is also providing an input to DFID's current Water and Sanitation Portfolio Review. This is an 'Evidence Review on the Health Impacts of Water, Sanitation, and Hygiene (WASH)'. This will present the evidence on the benefits and cost effectiveness of interventions on water, sanitation and hygiene and assess the impact and value for money of water, sanitation and hygiene interventions.

## **4. A randomised controlled trial for hygiene promotion – Karnataka, India**

As one of the SHARE 'quick start projects', SHARE funded the development of an evidence-based hygiene promotion resource pilot. This pilot - developed by LSHTM researchers working with a creative agency – was designed to serve as an experimental intervention that could be trialled in the field. Using the pilot resource, LSHTM researchers were successful in winning funding from the Wellcome Trust for a cluster-randomised controlled trial to evaluate a hygiene-promotion intervention among rural Indian households.

Total value of financial leveraging: approx. £275,000

## **5. A randomised controlled trial on sanitation and under-nutrition – Zimbabwe**

Working in collaboration with colleagues from Johns Hopkins University (US) and the Tsvitambo Research Institute (Zimbabwe), SHARE played a critical and acknowledged role in supporting the eventual funding of a large multi-armed randomised controlled trial into the effect of sanitation and nutrition interventions on tropical enteropathy. SHARE organised a meeting bringing together a number of donors – including DFID and the Gates Foundation – and providing technical inputs for the development and presentation of this research. This study tests a new and innovative hypothesis that could transform the global understanding of sanitation's contribution to health and development. SHARE has continued to provide technical support for the implementation of the trial and, in turn, colleagues from Johns Hopkins are providing technical support to the SHARE-funded systematic review on sanitation and childhood under-nutrition.

Total value of financial leveraging: approx. £6 million

The success of these early efforts confirms the importance of these investments as a part of SHARE's broader strategy. We will continue to identify strategic opportunities like this moving forward.



## 2.3. Output 1 - National and global sector-relevant knowledge synthesised and disseminated

- *Best Practice on Menstrual Hygiene Management*, a manual
- Guidance tools for using microfinance for sanitation
- Guidelines on risk factor determination attributed to sanitation in contamination of tubewells
- Practical recommendation on soil adjacent to latrines for Soil Transmitted Helminths
- Hygiene Framework 2011 – WaterAid
- Sanitation Framework 2011 – WaterAid

[http://www.wateraid.org/documents/plugin\\_documents/sanitation\\_framework\\_1.pdf](http://www.wateraid.org/documents/plugin_documents/sanitation_framework_1.pdf)

### SHARE – Research into Use through 'Critical Convening'

SHARE is designed to deliver rigorous and relevant evidence for improved sector performance. This will be achieved through changing the way that national and global sector partners plan, implement or monitor in order to increase: equitable access; sustainability; and cost-effectiveness of sanitation and hygiene investments'. One key aspect of the SHARE strategy is 'critical convening' or bringing together those who can use SHARE research to accelerate progress and improve the performance of existing investments through better decisions.

The research into use (RIU) strategy – described in the Communications Strategy - explains how research users (or 'boundary partners') will be engaged throughout the research process to maximise the likelihood of research uptake. In line with the principles set out in the strategy – of the right actor, the right level, the right time and the right approach – SHARE has worked proactively with a wide range of global, regional and national actors to make sure research does not stay 'on the shelf'.

Working in partnership to expand reach and influence, SHARE has already demonstrated significant success in 'critical convening' at the global, regional and national levels.

Examples of this include:

#### 1. Realising a randomised controlled trial on tropical enteropathy

Following discussions with various teams at DFID, SHARE undertook to organise a roundtable meeting at DFID Palace Street on the recently published tropical enteropathy hypothesis (Lancet, 2009) and to mobilise the resourcing for a randomised controlled trial to assess the effect of sanitation alongside nutrition interventions on this condition. The meeting brought together Team Leaders from Health, Water & Sanitation, and Nutrition as well as the Chief Scientist, Chris Whitty, as well as representatives from the Gates Foundation Enterics Team. The Principal Investigator for the proposed trial attended to present the research protocol along with senior experts from LSHTM. Following the meeting, both DFID and Gates allocated substantial funding for this important work. Subsequent to this, senior SHARE researchers have continued to support this work through the provision of technical and method-based advice.

#### 2. Joint launch of SHARE Programme and PLoS Medicine Series on Sanitation and Water

In November 2010 SHARE was launched at an event held at the London School of Hygiene and Tropical Medicine. At the same time the PLoS Medicine Series on Sanitation and Water – which included authors from across the consortium. A number of high-level speakers – including the DFID Minister, Stephen O'Brien, the President of the Royal Society of

Medicine, and the UNICEF Chief for Sanitation and Water, the WHO Director for Environment – attended. The event generated significant interest and led to a number of subsequent initiatives – such as a research partnership with WHO/UNICEF – as well as attracting coverage from media.

### **3. UK WASH Forum Meeting**

SHARE – in partnership with the Overseas Development Institute – organised a UK WASH Forum in London. This meeting brought together senior academics, technical experts, and policy-makers to present and discuss the state of the art knowledge on sanitation and water. SHARE speakers – from LSHTM, IIED, and WaterAid – all presented SHARE work; and the SHARE Research Director spoke alongside the DFID Minister, Alan Duncan, who delivered the keynote speech.

### **4. African Ministerial Conference on Sanitation (AfricaSan 2011)**

SHARE has been asked by the African ministerial body for sanitation and water (AMCOW) to convene two of the key sessions at the AfricaSan conference to be held in July 2011. The two sessions will deal with 'health impacts of sanitation and hygiene' and 'implementing behaviour change for sanitation at scale'. The health session – jointly organised with WHO – will present the current state of evidence on the health impacts of sanitation and hygiene, and highlight current innovative work, including that of SHARE, and the key implications for policy in Africa. The behaviour change session – jointly organised with UNICEF and the World Bank – will showcase 'what is working' in sanitation and hygiene behaviour change programmes in Africa and identify priorities for scaling this up. The conference will be attended by over 40 African ministers responsible for sanitation and it is anticipated that more than 20 ministers will attend each session together with senior civil servants, and representatives from the leading national and international agencies.

### **5. 'Using impact evaluation for better decisions' in South Asia**

In partnership with the Gates Foundation and the Jameel Latif Poverty Action Lab, SHARE is convening a regional workshop in Dhaka to build capacity of key sector actors (government, international agencies and civil society) to design and use impact evaluation for better policy and programme decision-making. The SHARE randomised controlled trial in Orissa, India, will be used as a case study for the design of relevant and rigorous impact evaluation that responds to major policy challenges. The meeting will be attended by representatives from the governments of India and Bangladesh, from leading national civil society organisations operating in this field, and from a range of international agencies, including UNICEF, the World Bank, the Global Sanitation Fund and World Vision.

## **Indicator 3 – Best Practice on Menstrual Hygiene Management**

[http://www.wateraid.org/documents/plugin\\_documents/menstrual\\_hygiene\\_management\\_briefing\\_note.pdf](http://www.wateraid.org/documents/plugin_documents/menstrual_hygiene_management_briefing_note.pdf)

## **Indicator 3 – Including disabled people in sanitation and hygiene services**

[http://www.wateraid.org/documents/briefing\\_note\\_disability\\_workshop\\_final.pdf](http://www.wateraid.org/documents/briefing_note_disability_workshop_final.pdf)

## Indicator 3 – Equity and Impact

### Exploring the Connections between Sanitation Equity and Impact

Sanitation is a basic development need that affects health, economic well-being and dignity. The lack of improved sanitation is often considered an element in defining poverty. While this link is broadly recognized, progress in sanitation has been uneven at best in improving sanitation conditions for the world's poor. Even our current global targets for sanitation, embodied in the Millennium Development Goals, do not explicitly focus on improving outcomes for the poorest and most marginalised individuals.

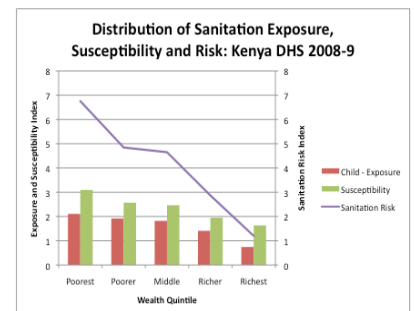
Equity is a key pillar of SHARE's research, which is explored through a number of projects ranging from studies of effective sanitation strategies for reaching the urban poor and strategies for meeting the needs on marginalized individuals such as the differently-abled and adolescent girls. In collaboration with other sector actors, SHARE has also begun an initiative to explore disparities in sanitation related risks using nationally available Demographic and Health Surveys (DHS) from sub-Saharan Africa and South Asia.

The objectives of this research into use activity include:

- Characterize disparities in sanitation exposure, susceptibility and risk
- Identify geographic disparities and their relationship with socio-economic factors
- Estimate the health costs associated with disparities
- Make information available in order to promote better targeting and improved value for money in national and global investment

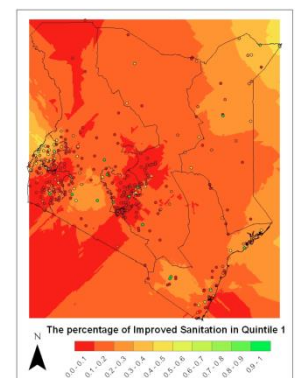
### Sanitation-related risks

Sanitation disparities go beyond access to improved sanitation. In terms of exposure, factors can include household access, sharing with others, and the concentration of nearby households without improved sanitation. In addition, there are often disparities in susceptibility to the consequences of faecal exposures including diarrhoeal mortality. These include poor nutritional status and inadequate access to care. Although the exact relationship between these factors is unknown, SHARE's research explores the co-distribution of the disparities and their potential combined effect on risk and disease burden.



### Mapping

Mapping has been used in several sectors to identify areas of greatest need, and also to identify different control strategies that might be needed in different areas. The greatest successes of this approach have been in malaria control. SHARE's research explores the use of sanitation mapping to identify 'hot spots' related to specific exposure and susceptibility factors.



### Improving impact and cost-effectiveness

In addition to meeting a basic right and development need, improving sanitation for the poor provides more impact and value for money than broad population wide improvements. Current metrics of sanitation improvement do not capture these added of reaching poorer and more marginalized populations. Improved data and attention can help improve sector performance in reaching the poor. It is also hoped the SHARE's efforts will build on those of other partners such UNICEF and WHO draw attention and fuel further research.

**External presentations and technical advisory/reviews performed by SHARE consortium members**

**Technical inputs/review:**

<b>Representative</b>	<b>Input</b>	<b>Date</b>
Oliver Cumming	technical reviewer for the GLAAS 2010 Report	
Sandy Cairncross and Oliver Cumming	technical inputs to the GLAAS country questionnaire on hygiene for the GLAAS 2012 Report	
Oliver Cumming	represented SHARE at the first consultation on post-2015 WASH indicators hosted by WHO/BMZ	
Oliver Cumming	technical reviewer for the World Bank 'Costs of poor Sanitation' study	
Oliver Cumming	reviewed various WSP publications	
Sue Cavill	reviewed - and attended the Advisory Group Meeting for - the DFID-funded systematic review: What impact does the provision of separate toilets for girls at school have on their primary and secondary school enrolment, attendance and completion? (Birdthistle et al, 2011)	
Sue Cavill	Review Tearfund/PATH proposal on 'Scaling up Action to Reduce Diarrhoeal Diseases: An Analysis of African Policymakers Perceptions'	
Sue Cavill	participated in an African San planning meeting	Wed 19/01/2011
Jeroen Ensink	input into, and reviewed, the DFID Malaria Paper with regard to environmental control	
Martin Mulenga	represented SHARE on the SPLASH Select Committee in Bern, Switzerland	3 <sup>rd</sup> November 2011
Martin Mulenga	reviewed 3 sanitation papers for the April 2011 Issue of the Environment and Urbanisation Journal	
Martin Mulenga	provided urban sanitation technical advice to Dr Liz Mallen the Impact Protection Program Leader and Business Development Manager at Dow Corning Limited	
Gordon McGranhan	participated in the WHO-Unicef Joint Monitoring Programme's Technical Task Force on Sanitation and Methods in NY	July 27 and 28 2010
Gordon McGranhan	planned participation in the Technical Task Force Meeting on Urban Monitoring in Kenya	6-9th June 2011
Sandy Cairncross	participated in a methods/planning meeting at Johns Hopkins for the TE RCT	March 2011
Sandy Cairncross	participated in UN-Water GLAAS Technical Consultation Meeting , Geneva	7-8 December 2010
Sandy Cairncross	met and briefed the Executive Director for Tata Sons (one of the largest companies in India) on the opportunities for developing sanitation markets in India	

Rick Rheingans	support and review of protocol for trial to measure the impact of improved menstrual hygiene management in school girls (submitted by P. Howard to MRC/DfID/Wellcome global health trials fund)	
Rick Rheingans	Presentation to Ministry of Education and Ministry of Public Health and Sanitation in Kenya on sustaining effective school WASH and menstrual hygiene management; 30 October 2010 and 18 May 2011.	
Rick Rheingans	Consultation with JMP on the measurement of economic status in sanitation related equity analysis	

### **Presentations:**

Representative	Event	Date
Oliver Cumming	presented at the launch of the Unilever Sustainability Strategy and participated in high level/televised panel (that included Unilever CEO, Jonathan Dimpleby and Jonathan Porritt)	
Oliver Cumming	presented at IrishAid's Global Health Forum on World Water	
Sandy Cairncross, Martin Mulenga and Oliver Cumming	all presented at Sixth Annual Water, Sanitation and Hygiene (WASH) Forum	7th April 2011
Oliver Cumming	speaking to 300 medical students Imperial (title 'why toilets are more important than doctors')	
Sue Cavill	presented at the WASH in Schools Meeting in Europe, the Hague	24 <sup>th</sup> -25 <sup>th</sup> May 2011
Sue Cavill	presented SHARE to WSSCC	28 <sup>th</sup> March 2011
Sue Cavill and Guy Collender	Water Supply and Sanitation Collaborative Council (WSSCC), Mumbai, India	09-14 October 2011

### **Participation in sector meetings:**

Representative	Meeting	Date
Sue Cavill	CLTS (Community Led Total Sanitation) Action and Learning Group meetings	
Sue Cavill	ODI Responding to the urban water challenge	1 <sup>st</sup> March 2011
Sue Cavill	IDS seminar Community-led Total Sanitation (CLTS) in Kenya Rural and urban experiences	4 <sup>th</sup> March 2011
Sue Cavill and Richard Carter	'After 2015: new challenges in development – urbanisation'	18 March 2011
Sue Cavill	Liquid Dynamics II: Some for All? Pathways and Politics in Water and Sanitation since New Delhi, 1990	22 - 23 March 2011
Sue Cavill, Richard Carter and Ollie Cumming	WSUP, Unilever and their partner IDEO presentation of the Uniloo at DFID	4th April 2011



Guy Collender and Sue Cavill	'Innovative Financing for Sanitation: Focusing on results. Workshop sponsored by the Gates Foundation in associated with SHARE research consortium	20-21st April 2011
Sue Cavill	Informal Interagency Watsan Meeting, Brussels	11th and 12th of May 2011
Martin Mulenga, Sue Cavill and Sophie Tremolet	Sancop (Sanitation Community of Practice)	May 2011 Leeds University
Rick Rheingans	presented on school WASH at the School for Advanced International Studies at Johns Hopkins	
Rick Rheingans	presented at the WSH Evaluation Workshop funded by Bill and Melinda Gates Foundation in Berkeley, CA	
Rick Rheingans	Presentation to the DfID sponsored meeting on Advanced Market Commitments in sanitation	June 17, 2010

### Meetings with DFID Policy and Research Teams

Date	Representative	Purpose
Wed 10/02/2010	Sandy Cairncross, Rick Rheingans, Oliver Cumming and Eileen Chappell	<u>Agenda:</u> 1. Overview of proposal – SHARE consortium (Sandy) 2. Desired outcomes – rigorous and relevant research (Rick) 3. Comms objectives/approach – knowledge into use (Ollie) 4. Working with DfID - influencing DfID policy and practice; and, working with DfID to influence broader sector policy/practice (Ollie) 5. Focus countries - national KIU strategies + DfID country engagement (Ollie/Rick) 6. Randomised Control Trial in Orissa, India (Rick/Ollie)
2010	Oliver Cumming, Sandy Cairncross, Jean Humphrey	convened an internal DFID meeting around tropical enteropathy attended by Team Leaders from the Health, Nutrition and Water teams as well as the Chief Scientist. This led to DFID funding a large trial on this important issue
23/02/2010	Richard Rheingans and Matthew Freeman	WASH in schools in Kenya
Thu 29/04/2010	Ollie Cumming and Rick Rheingans	Meeting with the Girl Hub
Wed 10/11/2010	Policy Team	SHARE meeting
Wed 10/11/2010	Sandy Cairncross, Sue Cavill and Oliver Cumming	Meeting with SHARE on the Log Frame

Wed 19/01/2011	Rick Rheingans	Briefing with Sally Gear on the evidence for school WASH
Thu 16/12/2010	Rick Rheingans and Matt Freeman	Presentation on school WASH RCT in Kenya
Wed 16/02/2011	Eileen Chappell, Guy Collender, Sue Cavill	Log Frame training sessions
Thu 17/03/2011	Guy Collender	Meeting Yvan Biot and David Woolnough
Wed 16/02/2011	Oliver Cumming	SHARE meeting
12/05/2011	Rick Rheingans, Oliver Cumming and Eileen Chappell	M&E SHARE meeting
Thu 12/05/2011	Ollie Cumming and Rick Rheingans	Meeting on Equity
Fri 13/05/2011	Sue Cavill and Rick Rheingans	Meeting with Professor Guy Howard and Ashufta Alam (DFID India) on MHM
Thu 12/05/2011	Rick Rheingans	Meeting with Iain Jones, DFID Health Economist on the WASH Portfolio Review
Thu 12/05/2011	Rick Rheingans	Meeting with Sanjay Wijesekera, Water and Sanitation Team Leader
Thu 12/05/2011	Rick Rheingans	Meeting with Sally Gear Education Adviser on MHM in Schools

### DFID-related Awareness Raising

- R4D webpage:  
<http://www.dfid.gov.uk/r4d/SearchResearchDatabase.asp?ProjectID=60737>
- DFID External Website “Hygiene, sanitation and water: Forgotten foundations of health” (15 November 2010) <http://www.dfid.gov.uk/Media-Room/News-Stories/2010/Hygiene-sanitation-and-water-Forgotten-foundations-of-health/>
- **Minister of State, Department for International Development Adjournment Debate Speech in House of Commons Wednesday 15th December 2010**  
<http://www.alanduncan.org.uk/articles/alan-delivers-house-of-commons-speech-on-water-and-sanitation>
  - “We will keep building evidence regarding both the cost-effectiveness of our interventions and what really works at scale. The British Government are funding the largest research programme in the world on sanitation and hygiene in the developing countries-the SHARE consortium-bringing together leading researchers and practitioners”
- DFID Insight intranet Article ‘Minister of State Talks Toilets at High-Level Forum’ April 2011
- DFID Insight intranet Article World Toilet Day/SHARE launch November 2010

- DFID Insight intranet Article For Global Handwashing Day (2010), SHARE produced an article for DFID Insight highlighting to DFID staff the unparalleled cost-effectiveness of hygiene promotion as a health intervention
- SHARE provided advice and re-programming support to DFID and UNICEF around the mid-term evaluation of the DFID-funded SHEWA-B programme in Bangladesh.
- SHARE has provided technical advice to DFID on various policy areas. These include maternal health, malaria, education and nutrition, and advanced market commitments for sanitation.

## Media Coverage

- WaterAid (2011) Sanitation Framework
- The Guardian's Poverty Matters blog (article by SHARE's Sophie Tremolet) <http://www.guardian.co.uk/global-development/poverty-matters/2011/mar/22/world-water-day-sanitation-hygiene>
- Huffington Post (SHARE researchers co-authored *PLoS Water* and Sanitation Series referenced in second paragraph) [http://www.huffingtonpost.com/baron-peter-piot-md/cholera-is-just-the-tip-o\\_b\\_785565.html](http://www.huffingtonpost.com/baron-peter-piot-md/cholera-is-just-the-tip-o_b_785565.html)
- Waterlines Vol. 30 No. 2 SHARE featured in the webwatch <http://www.practicalactionpublishing.org/Waterlines>
- Sue Cavill Interviewed for Times Article on Public Health Engineering at Leeds University
- In the business of hygiene, Public Service Review (article by Guy Collender about SHARE and the market for hygiene and sanitation) [http://www.publicservice.co.uk/article.asp?publication=International%20Development&id=506&content\\_name=Water,%20Sanitation%20and%20Hygiene&article=16173](http://www.publicservice.co.uk/article.asp?publication=International%20Development&id=506&content_name=Water,%20Sanitation%20and%20Hygiene&article=16173)

## SHARE convened events

- **Stockholm Water Week** (2010) – SHARE convened an event with Sandy Cairncross, Rick Rheingans, Lourdes Baptista speaking plus a panel that included OECD, EIB, and DFID.
- **SHARE launch event** (November 2010) attended by the DFID Minister, Stephen O'Brien, the President of the Royal Society of Medicine, Prof. Parveen Kumar, as well as senior representatives from the WHO, UNICEF and WaterAid.
- **Co-convened the Sixth Annual Water, Sanitation and Hygiene (WASH) Forum**, 7th April 2011 Managing for results: from evidence to impact in water, sanitation and hygiene
- **Workshop sponsored by the Gates Foundation in associated with SHARE** research consortium. 'Innovative Financing for Sanitation: Focusing on results. DFID 20-21st April 2011

## Upcoming SHARE convened events:

- **Workshop in Dhaka** (Jul 6/7) on 'impact evaluation and evidence-based decision-making' for key Bangladeshi and Indian WASH player - convened in partnership with Gates
- **AfricaSan (July 2011)** - convening two formal and one informal session(s): 'Understanding Health Impacts'; 'Behaviour Change in sanitation and hygiene'; 'Epidemiology for Engineers'. Convened following request from AMCOW (inter-

governmental body – African Ministers Council on Water) and participants will include African ministers for water/sanitation/health

- **UNC Roundtable** (October, 2011)- 'making evidence work for policy' at UNC Water Conference - convened in partnership with the UNC Global Water Institute
- **Stockholm Water Week** (September 2011)- two sessions: with EUWI 'micro-finance in WASH'; with IIED/SDI/WaterAid 'urban solutions'
- **RWSN Symposium/WaterAid Global Technical Workshop, Uganda (November 2011)** – SHARE side event on rural sanitation and hygiene

### **SHARE – sponsored MSc research**

- Violence against Women and Sanitation research (LSHTM)
- Menstrual Hygiene Management research (Cranfield University)

<b>SHARE expert questioned</b>	<b>Response</b>
Professor Sandy Cairncross	Do not spray, as vibrios are highly susceptible to desiccation and infect people via the oral route
Professor Sandy Cairncross	PAHO manual on disposal of bodies after disasters recommended; most people catch infectious diseases from the living, not the dead
Professor Sandy Cairncross	Household size issues best ignored. Reply copied to Rick Rheingans as he is working on other distribution issues
Professor Sandy Cairncross approached, Sally Baker responded	Not much evidence regarding sunlight, but recommended ICRC report about treating inmates and dusting area with insecticide powder
Professor Sandy Cairncross	Believable that polio could be air or droplet borne. Immunisation remains best method to prevent it.
Professor Sandy Cairncross	Unwise to use diarrhoeal disease incidence as an indicator for M&E in water and sanitation. Recommended DFID Guidance Manual on Water and Sanitation Projects
Professor Sandy Cairncross	Enteric pathogens are less virulent in water as they are likely to be dispersed, diminishing the chance of anyone ingesting an infectious dose

## **2.4. Output 2 – New knowledge generated by relevant and rigorous sanitation research**

### **SHARE - Randomized Controlled Trial of Sanitation in Rural India (MR03)**

#### **The trial**

In the light of the poor evidence, the London School of Hygiene & Tropical Medicine (LSHTM) have partnered with WaterAid to undertake a cluster-randomized control trial in Puri District, Orissa State. It seeks to provide policy makers and stakeholders with a reliable estimate of the effect of sanitation, not only among those who install toilets but also on their neighbours. It will also provide a basis to assess cost-effectiveness. The trial will monitor use, maintenance and acceptability of improved sanitation factors that may affect health impact, uptake and long-term sustainability. The study is also designed to investigate anthropometric and non-health outcomes such as school absenteeism. The trial will also be embedded in a number of related activities aimed at corroborating the trial results and producing further epidemiological insights.

#### **SHARE's role**

LSHTM collaborated with WaterAid to carry out a large randomized, controlled field trial of the effectiveness of improved sanitation to prevent diarrhoeal disease and helminth (parasitic worm) infection, particularly among children under 5 years.

SHARE funding for preparatory activities has led to 20 times more funding from 3ie and the Bill and Melinda Gates Foundation.

#### **Background and Rationale**

LSHTM researchers recently completed a systematic review of the health impact of sanitation, which was published on the Cochrane database shortly after the startup of SHARE. The assumption of sanitation being effective in preventing a wide range of conditions is based predominantly on plausibility and a number of observational studies, often of poor quality. The systematic review revealed a complete lack of rigorous trials and helped to demonstrate the need for this one. The study examines a range of health measures including diarrhoea, nutritional status, and parasitic worm infections. It also examines impacts on household economics and women's well-being. It found evidence that sanitation can reduce diarrhoea and may also prevent trachoma, cholera and intestinal worm infections. However, because the interventions in all but two studies included improvements in water supplies, hygiene promotion or other measures, it was not possible to ascribe the reduction in risk solely to improvements in excreta disposal. To date, there has not been a single randomised controlled trial of improved sanitation to reduce intestinal infections, and the only one of diarrhoeal disease was a study of cholera.

## **SPLASH (ER01)**

Below is a summary of the meeting agenda for the SPLASH workshop.

**Title of meeting:** **Sanitation Research Programme Kick Off Workshop, Kigali.  
At Hotel Gorilla City Centre, Rue de Bigogwe, Kigali, Rwanda**

**Date of meeting:** Monday 18<sup>th</sup> and Tuesday 19<sup>th</sup> July 2011

**Chair of meeting:** Anne Blenkinsopp WEDC

**Invited attendees:** 2 or 3 participants from each of the SPLASH Sanitation projects  
Funders of the SPLASH sanitation research programme

### Monday 18<sup>th</sup> July 2011 – **What are we doing?**

Welcome – confirm arrangements and the purpose of our workshop  
Introductions by participants, name, organization, role in sanitation research programme.  
Approve agenda

Introduction to SPLASH overall – Anne Blenkinsopp

Useful SPLASH Findings to share which have informed this programme:

Good research management practice – working with stakeholders – case of learning alliances?

Good research management practice – north/south partnerships – Frank Odhiambo

Good research management practice – impacts and outcomes – Julie Fisher

Presentations – share examples.

#### **Presentations from the 5 Research Consortia**

### Tuesday 19<sup>th</sup> July – **Working well together**

Welcome and outline of the day

Questions or reflections from Monday

Communication – introduction to the SPLASH intranet and website

Reporting, dates, formats, administrative requirements

Technical Reporting content – Rebecca and Mugo - discussion

Dissemination – event planning over the next 3 years

Questions to SPLASH?

Moving forwards, agreed actions and next steps

## 2.5. Output 3 – Key sector actors engaged around evidence for change

### Indicator 2 - No. of country platforms established and active

#### Terms of Reference for SHARE Research Group July 2011

##### 1. Background

SHARE is a consortium of five organisations that have come together to generate rigorous and relevant research for use in the field of sanitation and hygiene. SHARE is a five year initiative (2010-2015) funded by the UK Department for International Development. The SHARE consortium is led by the London School of Hygiene and Tropical Medicine and includes the following partners: the International Centre for Diarrhoeal Disease Control, Bangladesh; the International Institute for Environment and Development; Slum/Shack Dwellers International; and, WaterAid.

India is one of the four focus countries and SHARE is committed to working through its national partners to deliver evidence that is relevant to sector challenges there. As well, as prioritising research under SHARE's competitive Research Calls<sup>i</sup> that is situated in or relevant to the Indian context, SHARE has decided to ring fence substantial resources for both research and research into use in India. The allocation of these resources will be decided by a national Research Group, chaired by WaterAid India and supported by a member of the SHARE Management Group at the London School of Hygiene and Tropical Medicine.

In August 2010, SHARE conducted a country consultation visit meeting with a range of actors (government, civil society, international agencies and academia) and produced a report along with a short summary note of the research into use opportunities<sup>ii</sup>. Following meetings of the SHARE Management and Executive Group and discussions with DFID, a decision was taken in May 2011 to allocate £250,000 for research in India that will be guided by the SHARE Research Group. In addition, resources will be made available to support the establishment of the Research Group and also for associated 'research into use' activities at the national level.

*In order to take this forward a meeting is being organised by WaterAid India and LSHTM to be held in Delhi on July 5.*

##### 2. Objectives for the SHARE Research Group

- To jointly identify major research question(s) related to improving progress on sanitation and hygiene in India
- To provide strategic oversight for the implementation of research
- To provide support for ongoing research into use activities

##### 3. Members and partners

The SHARE Research Group will comprise a group of 'members' made up of representatives of WaterAid India and the National Slum Dwellers Federation (the SDI affiliate for India) as well as representatives from key sector agencies (the Department for Drinking Water and Sanitation, WSP, Unicef, and USAID).

In addition, the SHARE Research Group will engage ‘partners’ who currently invest in research in this area to prevent duplication of efforts and strengthen coordination on research activities. Representatives from the Bill and Melinda Gates Foundation, 3ie and JPAL will be invited as ‘partners’.

The respective roles and responsibilities for the ‘members’ and the ‘partners’ will be finalised at the first meeting of the SHARE Research Group.

### Tasks

- Participation in SHARE Research Group meetings
- Review of research documentation
- Support with research into use 32activities

### Expected outputs

- Periodic Research Group Meetings
- 1 or more critical research questions identified
- Terms of Reference and research team approved
- Mid-term review of research progress
- Research into use products and meetings

### DAY 1

<b>9.00-9.15</b>	Introductions
<b>9.15-10.45</b>	Evaluation: What, Why and When – <i>Presenter: Mushfiq</i> <ul style="list-style-type: none"> <li>• What is Evaluation</li> <li>• Different types of Evaluation</li> <li>• Theory of change</li> <li>• Finding the Interesting Questions</li> <li>•</li> </ul>
<b>10.45-11.00</b>	Coffee break
<b>11.00-12.00</b>	Different types of evaluation and methodologies – <i>Presenter: Sharon</i> <ul style="list-style-type: none"> <li>-Pre-post</li> <li>-Simple difference</li> <li>-Difference-in-Difference</li> <li>-Regression</li> <li>-Randomization</li> </ul>
<b>12.00-12.45</b>	Presentation of 2 water and sanitation projects (emphasis on research questions, outcomes and theory of change) <ul style="list-style-type: none"> <li>• Bangladesh ICDDR project (Raymond) (20 minutes)</li> <li>• Orissa Sanitation project (Tom Clasen, LSHTM) (20 minutes)</li> </ul>
<b>12.45-1.45</b>	Lunch
<b>1.45-2.45</b>	Project Group Work 1: Choose a group project for discussion; Model the theory of change and outline main questions and outcomes to be measured
<b>2.45-3.00</b>	Presentation on Hygiene interventions for safe preparation of weaning food (ICDDR)



<b>3.00-4.00</b>	Evaluation design: What and how to randomize? - <i>Presenter: Raymond</i>
<b>4.00-5.15</b>	Presentation of different health and sanitation project designs - <ul style="list-style-type: none"> <li>• Orissa stoves (Shobhini) and Bangladesh stoves (Mushfiq) (25 minutes)</li> <li>• Orissa Sanitation project (Tom) (20 minutes)</li> <li>• Delhi Sanitation Audits (Diva) (10 minutes)</li> </ul>

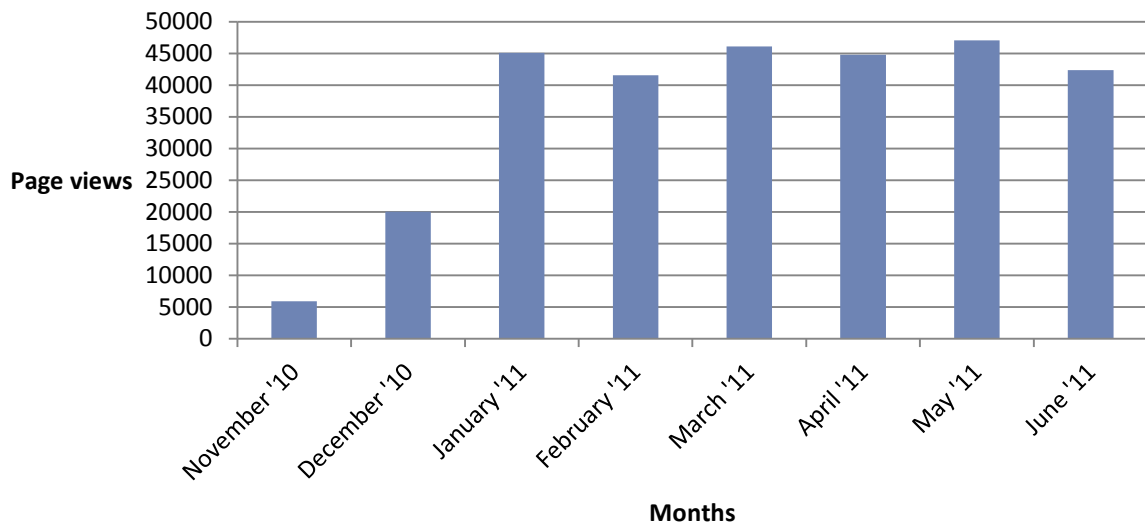
**DAY 2**

<b>9.00-9.45</b>	Challenges to randomization: spillovers, compliance, attrition – <i>Presenter: Sharon</i>
<b>9.45-10.00</b>	Importance of process evaluation and documentation (Sophie Boisson, LSHTM)
<b>10.00-10.15</b>	Coffee break
<b>10.15-11.45</b>	Project Group Work 2: Draft evaluation design for their chosen group projects
<b>11.45-1.00</b>	Short group presentations on chosen project evaluation (research questions, evaluation design etc)
<b>1.00-2.00</b>	Lunch
<b>2.00 – 5.00</b>	Internal discussion on IE design for Bangladesh project

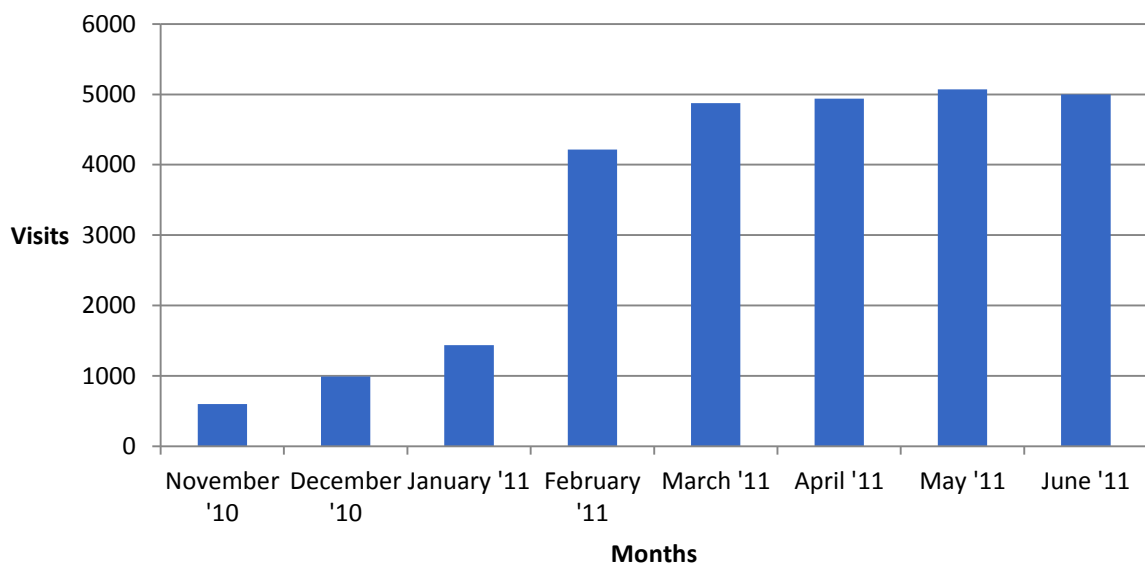
### Indicator 3 – Website

SHARE's website ( [www.shareresearch.org](http://www.shareresearch.org) ) is a growing resource and success, attracting around 5,000 visitors per month (with each visitor viewing about nine pages per visit). The number of monthly visits has nearly increased ten-fold since it was launched in November 2010. The site is an effective way of engaging with key sector actors via written, audio and visual material. The creation of the site and regular updating of its pages equates to the successful completion of Milestone 1 for Indicator 3, Output 3.

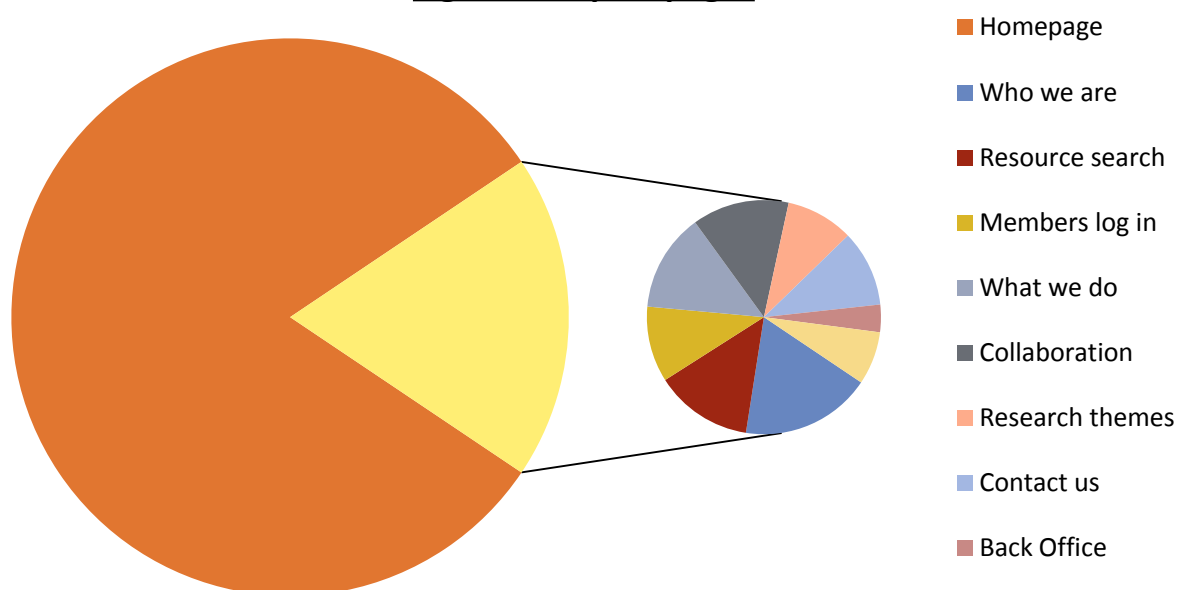
**Figure 1: Monthly page views**



**Figure 2: Monthly visits**



**Figure 3: Top 10 pages**



**Table 1: Top 10 pages**

Page rank	Number of page views	Page
1	276,561	Homepage
2	949	Who we are
3	945	Resource search
4	889	Members log in
5	736	What we do
6	711	Collaboration
7	506	Research themes
8	505	Contact us
9	422	Back office
10	379	Research locations

The site's resources include a News and Events page highlighting SHARE's involvement in major WASH conferences and the activities of its researchers, summaries of ongoing SHARE-funded research projects, and interviews with staff from partners as part of the Sanitation Matters podcast series (which has been downloaded 1,652 times). SHARE's multimedia and social media presence includes YouTube, Twitter, Facebook and Flickr pages. A newsletter featuring updates from partners and the wider WASH sector is produced every month.

High-profile online media coverage has included a post by SHARE's Sophie Tremolet for The Guardian's Global Development blog about sanitation funding on World Water Day ( <http://www.guardian.co.uk/global-development/poverty-matters/2011/mar/22/world-water-day-sanitation-hygiene> ), an article co-authored by Professor Peter Piot, Director of LSHTM,

about cholera and sanitation for the Huffington Post ( [http://www.huffingtonpost.com/baron-peter-piot-md/cholera-is-just-the-tip-o\\_b\\_785565.html](http://www.huffingtonpost.com/baron-peter-piot-md/cholera-is-just-the-tip-o_b_785565.html) ), and an Insight article on the DFID intranet about World Toilet Day referred to SHARE's goals and the keynote address given by Parliamentary Under Secretary of State for International Development Stephen O'Brien MP at the launch of SHARE.

## **Indicator 4 - A cluster-randomized controlled factorial trial on the effect of sanitation and hygiene on tropical enteropathy and undernutrition of children**

### **Background**

Child undernutrition remains a large problem in developing countries, implicated in the death of 3 million children under 5 per year. Even when undernutrition does not kill it undermines opportunities – if children survive they face physical stunting and reduced mental capacity.

Dietary interventions have been extensively investigated, but the best of these solve only one-third of the problem. Prevalent diarrhoea, dysentery and intestinal parasites have also been implicated in undernutrition. Water, sanitation and hygiene measures all have significant impact on diarrhoea. This in turn improves nutritional status.

Tropical enteropathy has also recently been identified as a water and sanitation related contributor to undernutrition that requires further investigation.

### **The Trial**

This study, to be conducted in two rural districts of central Zimbabwe, will test the hypothesis that a major cause of child undernutrition is Tropical Enteropathy (TE), a subclinical condition of the small bowel characterized by reduced surface area and increased permeability. The former reduces nutrient absorption and the latter facilitates microbial translocation causing growth-suppressing immune stress. TE is caused by unconstrained enteric T-cell stimulation likely resulting when high concentrations of fecal bacteria are ingested, overwhelm the gastric barrier, and colonize the upper small bowel.

One of the key questions of sanitation impact is how it contributes to child nutrition. It is hypothesised that TE can be prevented or reduced in young children by providing household toilets and promoting handwashing after fecal contact. It is suggested that the primary pathway from poor sanitation/hygiene to undernutrition is TE, not diarrhoea. That is, the effect of sanitation/hygiene will be stronger on TE and growth than on diarrhea.

If this is true, previous analyses may have substantially underestimated the effect of sanitation/hygiene on growth because the effect was modelled entirely through diarrhoea, and sanitation/hygiene interventions may have been undervalued because they have been appraised primarily for their impact on diarrhoea.

### **SHARE's role**

Following discussions with various teams at DFID, SHARE undertook to organise a roundtable meeting at DFID Palace Street on the tropical enteropathy hypothesis and to discuss the resourcing of a proposed randomised controlled trial to assess the effect of sanitation on this condition. The meeting brought together Team Leaders from Health, Water & Sanitation, and Nutrition. The Principal Investigator for the proposed trial (Dr Jean Humphrey) attended to present the hypothesis and also the research protocol. A representative from the Gates Foundation Enterics Team also participated. Following, the meeting DFID decided to finance

the costs of a large part of the trial and the Gates Foundation is considering an application for further funding which a member of the LSHTM Team is reviewing.

The study will use a cluster-randomized 2 x 2 factorial prospective design to test the hypothesis that child growth will be increased by either improving sanitation/hygiene or improving diet, but will be optimized when both are improved together. Researchers from SHARE also provided technical advice for the development of the trial intervention.

### **Outcome**

This study is of global significance and could transform the global understanding of sanitation's contribution to health and development. Hypotheses may accelerate provision of toilets to the 2.6 billion people without them, and ultimately yield significant improvements in child growth, health, development, and survival.

### **Indicator 5 - Non-SHARE agencies participating in SHARE research**

#### MR04: Roundtable on Menstrual Hygiene

Water, Engineering and Development Centre (WEDC)  
Water Supply and Sanitation Collaborative Council (WSSCC)  
Liverpool John Moores University  
UNICEF  
Columbia University

#### WaterAid:: Roundtable meeting on Monitoring Access to Sanitation in Slums

Also included:

Water Supply and Sanitation Collaborative Council (WSSCC)  
Department for International Development (DFID)  
Water and Sanitation Program (WSP)  
World Health Organisation (WHO)

#### CM03: Roundtable meeting to discuss the data available for monitoring access to sanitation in slums

To be conducted with  
Joint Monitoring Programme of Unicef and WHO

#### Zvitambo

Johns Hopkins University

#### Collaboration on the mapping of sanitation risks and disparities

University of Florida's Emerging Pathogens Institute

#### MR01 & CM02: Choose Soap

Good Pilot –designing hand washing intervention materials

#### Proposal development on the role of school sanitation and hygiene in national programs for control of soil transmitted helminthes

Eastern and Southern African Institute for Parasite Control, (KEMRI)

#### Proposal development and research on inclusive sanitation

Also partnership with  
UCL's Leonard Cheshire Centre for Disability

Also collaborations with:

Dr Marni Sommer, Assistant Professor of Sociomedical Sciences, Columbia University – Mailman School of Public Health on Menstrual Hygiene Management research

SKAT/Rural Water Supply Network (RWSN) to develop a proposal for a training course on Documenting for Policy, Programmes and Publication in the WASH sector.

Ministry of Health and Social Welfare, Tanzania to carry out a study to review current human resource capacity and costs of scaling up for sanitation and hygiene in Tanzania

Oxfam (and others in the WASH Cluster) on a Humanitarian Innovation & Technologies Proposal on sanitation to be submitted to DFID

## **2.6. Output 4 – Capacity strengthened to conduct relevant collaborative research and apply the results**

We have currently funded 18 proposals under the main fund, including the 3 quick starts. Two of the quick start projects have finished and it is hoped to have the outputs in by the end of 2011. The sanitation trial has started with the first rounds of disease data collection.

Of the remaining 15 proposals, three have been completed and the outputs have been provided. All of the remaining projects at least three should be completed by the end of 2012.

The joint IIED/SDI proposal is in the final stages of approval and, if successful, will have started before the end of 2011.

It is hoped to have at least one peer-reviewed paper accepted by the end of the year. No new research call is expected for 2011

### **Capacity building**

Three grants were provided for the development of research proposals, two resulted in full proposals being submitted in Call B (S. Islam, ICDDR,B and the joint IIED/SDI proposal). The third was for a proposal on disability and sanitation, and this is expected to be submitted for the next round of calls

We have four proposals for training courses. Two have been funded and two will have had final approval by the end of June. We therefore expect to have reached/trained at least 100 sanitation and hygiene practitioners by the end of the year.

### **PhD**

By end 2011 we will have registered five students. By the end of the year they will also have completed their induction, met with their supervisors and have started on their first course. During the initial period they will start refining their study proposals and will prepare for their upgrading, which is scheduled to take place in the summer of 2012.

The PhD proposals are shown as items CB05, CB06, CB07, CB09 and CB10 in the following project inventory.

### **Other proposal submissions**

To enable proposals to be submitted to the Capacity Building and Communications budgets a short protocol was developed.

## Submission of Proposals for Non-Research Funds

### Capacity Building

1. Currently capacity building funds are available for the following:

Exchange Visits	5,000
MSc student research	1,500
Short Courses	25,000
Research/Management Training	10,000

2. Criteria for SHARE eligibility:

All SHARE partners and those affiliated to SHARE can apply for funding for capacity building activities. Students planning to undertake their research projects in one of the four pillars of SHARE can apply for funding on the condition that they have a supervisor with a close association to SHARE.

3. Brief proposals of not more than 5 A4 pages, (normal 12 pt font, single spaced) including a budget should be sent to: Jeroen Ensink [jeroen.ensink@lshtm.ac.uk](mailto:jeroen.ensink@lshtm.ac.uk)

Proposals will be reviewed by a representative of ICDDR-B (Dr. S. Islam), WaterAid (Dr. S. Cavill) and the capacity building manager (Dr. J. Ensink). Criteria for review include i) Ability to contribute towards SHARE's goals and deliverables, ii) value for money, iii) quality of the proposal, iv) involvement of SHARE partners and/or sanitation and hygiene practitioners.

The review board approves proposal following consensus. In case consensus cannot be found proposals will be submitted to the executive group for a final decision

### Communications

- Proposals under the communications budget should be able to demonstrate alignment with the Communications and/or the national Research into Use strategies.
- Brief proposals of not more than one A4 page should be sent with a separate budget to: Ollie Cumming [oliver.cumming@lshtm.ac.uk](mailto:oliver.cumming@lshtm.ac.uk)

Submissions in either category may be presented at any time.

## 2.7. Project inventory

Department	Project Code	Title	Project Manager	Sub-contracted Body	Budget		Commentary
Capacity Building	CB01	IIED & SDI Action Research Project on Sanitation of Southern African Countries	Jeroen Ensink	IIED	11,650.00	A	Completed
Capacity Building	CB02	Development of the Full Proposal entitled: Minimum Safe Distance of Groundwater Source from Near by Pit Latrine at Different Hydro-Geological Conditions of Bangladesh	Jeroen Ensink	ICDDR,B	10,000.00	A	Completed
Capacity Building	CB03	Developing Research Activities at the Global Water Initiative Field Sites in West Africa	Jeroen Ensink	IIED	22,985.00	B	Deferred
Capacity Building	CB04	To Develop a Research Proposal on Sanitation and Hygiene Issues for Persons with Disabilities	Jeroen Ensink	WaterAid	9,910.00	B	Completed
Capacity Building	CB05	Faecal Sludge Management: the case of Kumasi, Ghana	Jeroen Ensink		90,000		PHD students due to start September 2011.
Capacity Building	CB06	Comparative Analysis of Sanitation Disparities and Implications on Gender and Health in Kisumu, Kenya	Jeroen Ensink		90,000		PHD students due to start September 2011.
Capacity Building	CB07	Health Impacts Associated with the Sanitation Ladder	Jeroen Ensink		90,000		PHD students due to start September 2011.
Capacity Building	CB09	Exploring the participation of private operators in emptying household ecological sanitation latrines and operating communal ecological sanitation latrines in urban areas. Are there incentives for the latrine owners and the private operators?	Jeroen Ensink		90,000		PHD students due to start September 2011.
Capacity Building	CB10	Study of the links between sanitation, hygiene and childhood malnutrition	Jeroen Ensink		90,000		PHD students due to start September 2011.
Communications	CM01	SHARE Website 2010 - 2015 Design and Maintenance	Oliver Cumming		Est 40,210		Ongoing
Communications	CM02	Choose Soap (Additional)	Oliver Cumming		38,500	Q	Linked with MR01
Communications	CM03	Roundtable Meeting to Discuss the Data Available for Monitoring Access to Sanitation in Slums	Oliver Cumming	WaterAid	7,850	A	Project scheduled to start during Jul-Sep.
Communications	CM04	Sanitation Conditions, Problems, Practices and Perceptions in Unplanned Areas of Dar es Salaam	Jeroen Ensink/ Oliver Cumming	UCDavis B Scott	15,878	A	Due to start summer 2011
Communications	CM05	Demand for Pit Emptying Services in Unplanned Areas of Dar es Salaam	Jeroen Ensink/ Oliver Cumming	UCDavis B Scott	15,162	A	Due to start summer 2011
Communications	CM06	Demand for Sanitation Upgrading Among the Urban Poor in Dar es Salaam	Jeroen Ensink/ Oliver Cumming	UCDavis B Scott	15,658	A	Due to start summer 2011
Communications	CM07	Menstrual Hygiene Management - What Works? Synthesising existing knowledge to develop guidelines and an online forum for practitioners.	Jeroen Ensink/ Oliver Cumming	WaterAid	15,000	B	WIP



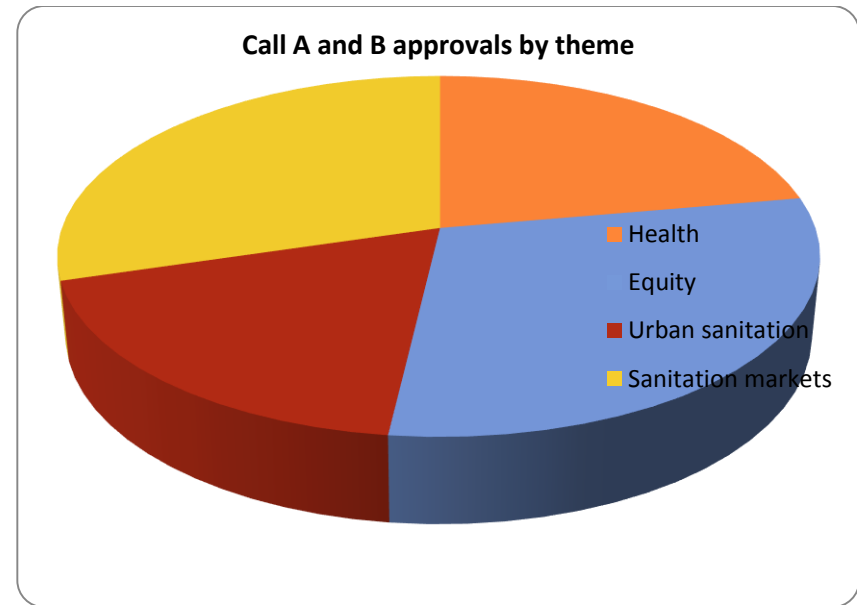
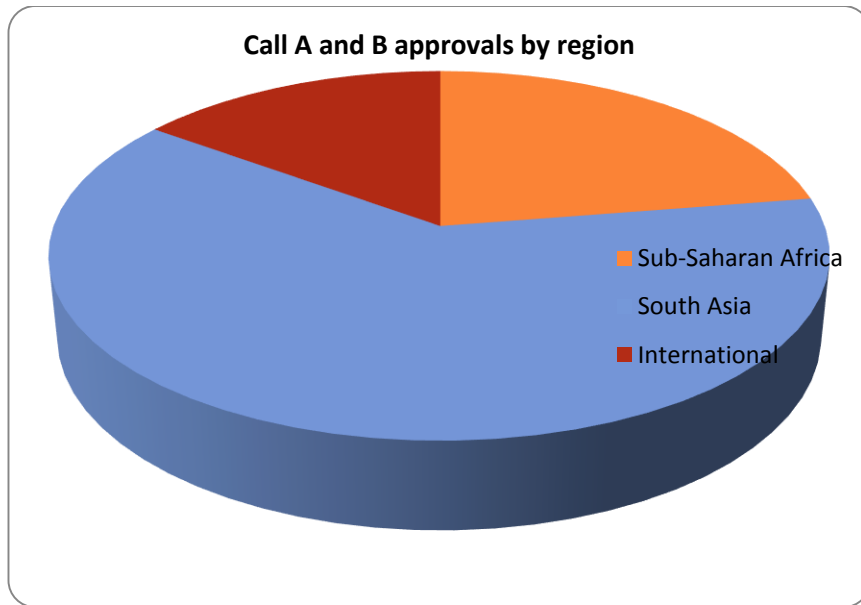
Communications	CM07A	SHARE Partners Workshops - Inception & Closing	Oliver Cumming		11,500		Ongoing
Communications	CM08	World Water Week - 2010 - 2014	Oliver Cumming		24,000		Ongoing
Communications	CM09	WASH Nutritional Review	Sandy Cairncross		50,000		
Communications	CM10	DFID WASH Evidence Review	Oliver Cumming		7,500		
Communications	CM11	Visit to the UK by Dr Peter Morgan & Ms Annie Shangwa	Oliver Cumming	WaterAid	5,250		WIP. Work commences July 5th.
Communications	CM12	Workshop on equitable access to water and sanitation (Geneva, 4-5 July 2011).	Sandy Cairncross	IIED	TBA		Expenses
Communications	CM13	Background Document and Preliminary Agenda of the workshop on equitable access to water and sanitation (Geneva, 4-5 July 2011)	Sandy Cairncross		TBA		Expenses
Communications	CM14	The evidence for poor water, sanitation and hygiene (WASH) as risk factors for maternal mortality in developing countries	Oliver Cumming		500		Scheduled for August 2011.
Communications	CM15	Production of SHARE Pathfinder Paper for Health	Sandy Cairncross		13,875		Scheduled for August - September 2011.
Communications	CM16	Impact Evaluation Workshop - Dhaka	Oliver Cumming		TBA		
External Research	ER01	SPLASH		SDC	500,000		In progress - proposals awarded
Main Research	MR01	Choose Soap		Various	66,894	Q	Completed
Main Research	MR02	ICDDR,B Amendment - Impact of Food Hygiene in Reducing the Contamination of Weaning Food and Water in a Diarrhea-endemic Area in Bangladesh		ICDDR,B	60,368	Q	Completed
Main Research	MR03	Sanitation RCT, Orissa		Various	327,160	Q	Phase One Completed
Main Research	MR04	A Roundtable Meeting: To Develop a Proposal for Researching the Impacts of Menstrual Hygiene Management on Health and Education Outcomes for Adolescent Girls in South Asia	Jeroen Ensink	WaterAid	8,460	A	Completed
Main Research	MR05	The Development and Production of an Intervention to Promote Hand Washing with Soap	Jeroen Ensink	Various	31,760	A	Started
Main Research	MR06	Gender and Sanitation: the Experiences of Shack Dwellers Federation of Namibia	Jeroen Ensink	IIED	15,000	A	
Main Research	MR07	Improving the Performance of Communal Latrines in Achieving Safe Faeces Disposal in Urban Poverty Pockets	Jeroen Ensink	Various	10,508	A	Deferred
Main Research	MR08	Understanding and Strengthening the Role of Communal Sanitation Provision in Urban Poverty Pockets in India	Jeroen Ensink	UCDavis	13,140	A	Due to start autumn 2011

Main Research	MR09	An Investigation of the Strengths and Weaknesses of Ecological Sanitation in Malawi: Opportunities to Improve the System	Jeroen Ensink	WaterAid	32,561	A	On-going, nearing completion.
Main Research	MR10	Outcome & Impact Monitoring for Scaling Up the Mtumba Sanitation and Hygiene Participatory Approach	Jeroen Ensink	WaterAid	31,932	A	
Main Research	MR11	Exploring the Potential for Microfinance in Sanitation	Jeroen Ensink	Independent	9,950	A	Completed
Main Research	MR12	Risk Factor Determination Attributed to Sanitation in Contamination of Tubewells	Jeroen Ensink	ICDDR,B	29,994	B	
Main Research	MR13	Assessing the Soil Adjacent to Latrines as Focus for Soil-transmitted Helminth Transmission	Jeroen Ensink		13,539	B	
Main Research	MR14	An Investigation into District Level Sanitation Monitoring Interventions as Tools for Empowerment, Advocacy & Evidence Based Decision Making	Jeroen Ensink	IIED	50,090	B	
Main Research	MR14A	IIED-SDI Proposal Development for Building City-wide Sanitation Strategies from the Bottom Up - An Action Research Project Across Four Countries	Jeroen Ensink	IIED	15,136	B	
Main Research	MR15	Study to Review Current Human Resource Capacity and Costs of Scale Up for Sanitation and Hygiene in Tanzania	Jeroen Ensink	WaterAid	46,500	B	
Main Research	MR16	Faecal Contamination of Commuters' Hands in Public Places in Dhaka City, Bangladesh	Sirajul Islam	ICDDR,B	29,876	B	
Main Research	MR17	Analysis of Disparities in Sanitation Coverage	Jeroen Ensink	Ufl	TBA	B	Pending
Main Research	MR18	Microfinance for Sanitation	Jeroen Ensink	Tremolet consulting	30,000	B	

## 2.8. Summary paragraphs for all 24 SHARE research call projects

This document provides more detail on the research projects approved and underway across the four research themes (gender and equity, health, urban and sanitation markets) and the four countries (Bangladesh, India, Malawi and Tanzania).

The following pie charts breakdown the 24 research projects funded through SHARE by country and theme:



Research Project	Research Description	SHARE Partner	Research budget & duration	Location
<b>SHARE Theme: Health</b>				
<i>Risk factor determination attributed to sanitation in contamination of tube-wells in Bangladesh</i>	<i>This research draws upon a pilot study that showed that the contamination of underground aquifers in Bangladesh is related to the distance of nearby pit latrines. Water from 500 randomly selected tube-wells in Delduar Upazila, Tangail district, Bangladesh, will be sampled in three different seasons. Specific objectives include: identifying the risk factors for the contamination of tube-wells and developing a predictive model for the contamination of tube-wells depending on the scoring weight of risk factors.</i>	ICDDR,B	£29,994	Bangladesh
<i>Systematic review of WASH interventions and nutritional status in childhood</i>	<i>The review will, for the first time, systematically evaluate the strength of evidence linking WASH interventions with childhood nutritional status. This research will produce both a wider systematic review for publication in a peer-reviewed journal as well as a separate more restricted Cochrane Review paper. This work will help inform better policy on nutrition, health and WASH and serve as an important basis on which future research priorities can be identified. Evidence for the effectiveness of WASH interventions in preventing nutrition by the following three causal pathways will be considered: via associated repeated bouts of diarrhoea; via associated parasitic infections; and via associated sub-clinical disorders of the gut (for example, tropical enteropathy).</i>	LSHTM and WaterAid	£50,000 (9-12 months)	Global
<i>An investigation of the strengths and weaknesses of ecological sanitation in Malawi:</i>	<i>This research will investigate the strengths and weaknesses of ecological sanitation (ecosan) in urban and rural areas in Malawi. Various criteria will be assessed, including the motivating and demotivating factors for ecological sanitation, the characteristics of households</i>	WaterAid, ICDDR,B, LSHTM	£30,239	Malawi

<p><i>opportunities to improve the system</i></p>	<p><i>that have adopted ecological sanitation, the use and marketing of human compost, and financial gains from sales of human compost. This research will also examine the levels of excreta-related pathogens in human compost. The results of this research are intended to be used as the basis for scaling-up ecological sanitation in urban and rural areas and for developing standards and guidelines for the safe management of human compost.</i></p>			
<p><i>Testing alternative 'best practice' handwashing interventions</i></p>	<p><i>The objective of the proposed study is to generate evidence on the effectiveness of interventions in increasing handwashing with soap in a small-scale, field-based experiment in India, a SHARE priority country. This will be achieved through field testing of proposed intervention methods and materials in a small-scale experimental study. The research will involve field visits with interviews and exposure to the intervention, filming of handwashing behaviours, and focus group discussions. The qualitative work will allow us to refine interventions to be used in the Wellcome Trust Randomised Controlled Trial on handwashing interventions. The results of this study will also provide interim evidence for use by SHARE partners and others in the sector.</i></p>	<p><i>LSHTM, WaterAid, SDI</i></p>	<p><i>£10,508</i></p>	<p><i>India</i></p>
<p><i>A roundtable meeting to develop a proposal for researching the impacts of menstrual hygiene management on health and education outcomes for adolescent girls in South Asia</i></p>	<p><i>Menstrual hygiene management (MHM) is a much neglected issue within the Water, Sanitation and Hygiene (WASH) sector. To address this significant gap in knowledge, a two-day roundtable meeting was held in London in November 2010. A total of 16 participants from SHARE partners (WaterAid and LSHTM) and other agencies concerned with WASH (including UNICEF and WSSCC) took part. Their expertise covered many disciplines, including health, equity and inclusion, education and gender, and they shared experiences from Tanzania, India, Nepal and Bangladesh. Ideas for</i></p>	<p><i>WaterAid, LSHTM</i></p>	<p><i>£9,410</i></p>	<p><i>Global</i></p>

	<i>collaborative action from the meeting included building a community of practice that supports action and exchange on MHM, and supporting research, including SHARE initiatives, on this subject.</i>			
<i>Outcome and impact monitoring for scaling up the Mtumba sanitation and hygiene participatory approach</i>	<i>A study in Tanzania will monitor outcomes and impacts of the Mtumba participatory approach to sanitation and hygiene (named after the area in Tanzania where it was first used). The cross-sectional qualitative and quantitative research will investigate the potential and optimal process for scaling up access to sanitation and use of hygienic practices. The study will measure the outcome of the Mtumba approach in terms of behaviour change and demand creation, quantify the cost implication of implementing it at the individual, household or community level, and will help to understand the social factors affecting the choice of sanitation and hygiene technologies in the wards under investigation. A total of 1,200 households across three wards will be randomly selected for data collection relating to the knowledge, attitude and perceptions of environmental sanitation and personal hygiene</i>	<i>WaterAid, ICDDR,B, LSHTM</i>	<i>£27,476</i>	<i>Tanzania</i>
<i>Assessing the Soil Adjacent to Latrines as Focus for Soil-transmitted Helminth Transmission</i>	<i>The aim of the proposed research is two-fold: to identify key environmental and design risk factors for the survival of helminth eggs in pit latrines and to test simple and affordable interventions that could minimize the health risk of helminth infection in the same pit latrines. In order to fulfil the objectives, this study will utilize a pretested household questionnaire and an assessment of the physical and environmental factors of the latrine. Soil samples taken from the soil surrounding the latrine will be analyzed using a method of filtration, sedimentation, and flotation for the presence of helminth eggs.</i>	<i>LSHTM and WaterAid</i>	<i>£13,539</i>	<i>Tanzania</i>

<p><i>Faecal Contamination of Commuters' Hands in Public Places in Dhaka City, Bangladesh</i></p>	<p><i>This study will provide information about the levels of contamination of commuters hands with bacteria of faecal origin. We will also be able to know the origin of the faecal bacteria (whether human or animal in origin), whether it varies by socio economic status, age, sex, or occupation or season. The results of this study will help us to organize awareness program about hand hygiene and guide future public health interventions aimed at reducing hand contamination rates in Bangladesh.</i></p>	<p>ICDDR, B</p>	<p>£28,876</p>	<p>Bangladesh</p>
<p><b>SHARE Theme: Equity</b></p>				
<p><i>Gender and sanitation: the experiences of Shack Dwellers Federation of Namibia</i></p>	<p><i>The purpose of this research is to provide information about the influence of gender and age upon community decision-making among residents in poor urban settlements. The research aims to understand if, and how, household development at the settlement level differs by gender or age, and to review previous experiences with toilets. The research aims will be met by the analysis of existing household level data, focus group discussions, and semi-structured household interviews.</i></p>	<p>SDI, IIED</p>	<p>£15,000</p>	<p>Namibia</p>
<p><i>To Develop a Research Proposal on Sanitation and Hygiene Issues for Persons with Disabilities</i></p>	<p><i>The key activity for the partnership/project development will be a 2-day working meeting in London. We anticipate some 20 participants will attend, including WaterAid and representatives from SHARE partners together with other WASH experts in health, equity and inclusion and gender as well as disability specialists. It is our hope that such a small, working meeting will allow us to have very productive discussion and to develop an in-depth research proposal.</i></p> <p><i>During the course of the working meeting we will arrange to speak with key informants from bilateral and multilateral agencies – as well as WaterAid country office</i></p>	<p>WaterAid</p>	<p>£9,910</p>	<p>UK</p>

	<i>staff and regional programme officers - to help inform (and ground-truth) our thinking and the proposal development</i>			
<i>Menstrual Hygiene Management - What Works? Synthesising existing knowledge to develop guidelines and an online forum for practitioners.</i>	<i>A critical gap research-into-use gap on MHM is that information on successful approaches is not easily accessible to practitioners who are looking to integrate MHM into their programmes. Existing information is scattered and there is no comprehensive resource to provide guidance on what works in different contexts that would encourage the replication of successful MHM approaches by others.</i>	<i>WaterAid</i>	<i>£14,950</i>	<i>Global</i>
<i>Developing Research Activities at the Global Water Initiative Field Sites in West Africa</i>	<i>A proposal for scoping to develop a fully budgeted, multi-year research proposal to address a range of issues including, but not necessarily restricted to: 1. Assessing whether the proxy indicators adopted for field survey can indeed measure progress towards improved health outcomes. 2. Assessing the effectiveness of the messages and processes used by the field teams to encourage behaviour change 3. Analysing willingness/ability to pay constraints to behavioural change, emerging markets for sanitation (in the context of CLTS) and evaluating obstacles to scaling up of sanitation programmes and/or reuse of excreta as fertiliser, especially for the poorest in the community.</i>	<i>WaterAid/ GWI</i>	<i>£23,000</i>	<i>Burkina Faso and Ghana</i>
<i>An Investigation into District Level Sanitation Monitoring Interventions as Tools for Empowerment, Advocacy &amp; Evidence</i>	<i>WaterAid's Water Point Mapper <a href="http://www.waterpointmapper.org">www.waterpointmapper.org</a> is a powerful tool based upon Microsoft Excel and produces interactive maps which can be viewed in Google Earth. The tool has been developed for WASH practitioners working at district and sub district level within rural contexts and is intended for local government and NGO staff to collect data and</i>	<i>WaterAid</i>	<i>£50,090</i>	<i>Global</i>



<p><i>Based Decision Making</i></p>	<p><i>monitor their own water sources. Mimicking the Water Point Mapper's functionality to develop a sanitation mapping tool and approach could help target investments in sanitation services more effectively. A Sanitation Mapper could be used in evidence based decision making at district and sub district level and provide information for advocacy and accountability.</i></p>			
<p><i>Analysis of Disparities in Sanitation Coverage</i></p>	<p><i>This research responds to weak sanitation sector performance in targeting investments and securing related health and other benefits for the poor. This research aims to generate critical knowledge and to present in a way that enables more effective planning and investment in the sanitation sector. Demand for this research has been expressed by key sector actors, including DFID, UNICEF, WHO and key national sector actors in the SHARE focus countries</i></p>	<p>LSHTM</p>	<p>£38,000</p>	<p>Global</p>
<p><i>Study to Review Current Human Resource Capacity and Costs of Scale Up for Sanitation and Hygiene in Tanzania</i></p>	<p><i>This study will focus on two key areas where there are considerable knowledge gaps in the sector – human resource and institutional capacity and financing for the provision of sanitation and hygiene services at household level and in schools, in line with the expected deliverables of the National Campaign. It is hoped that the outputs of the research will directly influence the implementation of the campaign and the scale up of services over the medium term. These two key areas have been selected in consultation with the Ministry of Health and Social Welfare, WSP, UNICEF and GIZ. Understanding the financial and human resource requirements for the sector is felt to be essential for the success of the campaign and for the sustainable scale up of sanitation and hygiene in Tanzania over the longer term</i></p>	<p><i>WaterAid in partnership with the Ministry of Health and Social Welfare</i></p>	<p>£46,000</p>	<p>Tanzania</p>

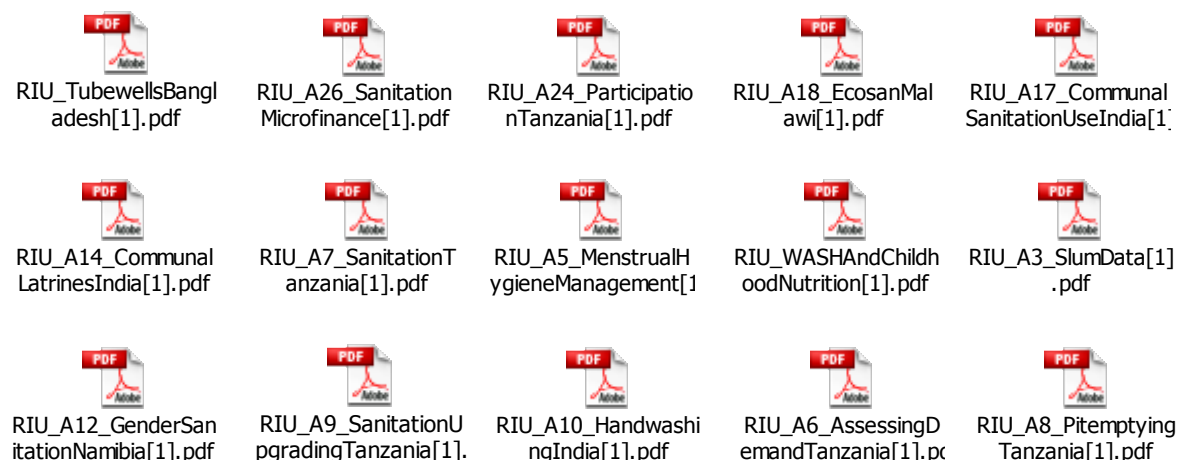
<b>SHARE Theme: <i>Urban sanitation</i></b>				
<i>Understanding and strengthening the role of communal sanitation provision in urban poverty pockets in India</i>	<i>This work includes an analysis of an existing data set collected during a previous collaboration between LSHTM and WaterAid India. The proposed analysis will draw out key factors associated with levels of use and user satisfaction. Particular attention will be given to user attitudes towards the condition of communal facilities, management models and user fees. Gender and income-related disaggregated analyses will increase understanding of equity issues associated with access to sanitation through communal facilities. Knowledge generated by this work will address the key SHARE themes of urban sanitation, equity and gender, and will have a geographical focus on India, a SHARE priority country. There will be an emphasis on actionable knowledge and practical recommendations for improving the design, operation, management and services provided by communal latrines.</i>	<i>LSHTM</i>	<i>£13,140</i>	<i>India</i>
<i>Improving the performance of communal latrines in achieving safe faeces disposal in urban poverty pockets</i>	<i>A major aim of this research is to improve the understanding of the factors that determine where people choose to defecate. The work will also explore what would make communal facilities attractive as defecation places and what would make open defecation intolerable. A study will be designed to assess the patterns of use of communal facilities, and the potential contribution and limitations of communal sanitation provision in ending open defecation in urban poverty pockets. This will be achieved through the design, testing and evaluation of modifications to the physical and/or operating services and conditions of communal facilities in order to encourage greater use.</i>	<i>LSHTM, WaterAid, SDI</i>	<i>£10,508</i>	<i>India</i>
<i>Demand for sanitation upgrading among the</i>	<i>This research will focus on the segment of urban poor in Dar es Salaam with unsafe, unhygienic and inadequate</i>	<i>LSHTM</i>	<i>£14,533</i>	<i>Tanzania</i>

<p><i>urban poor in Dar es Salaam</i></p>	<p><i>sanitation facilities and practices. It will explore and document household upgrading decision-making processes, including existing household sanitation facility upgrading behaviour; the motivations, facilitators and barriers to upgrading among the urban poor; variations in preference for upgrading improvements in terms of sanitation facility design, operation, cleaning, and usage; and explore determinants of demand. The study will be conducted through an equity lens, to investigate the relationship between indicators of household situation and wealth (e.g. income, expenditures, housing type, gender, tenancy, neighbourhood), existing facilities, and sanitation upgrading preferences, motivations and constraints. It will draw upon a study of demand for improved sanitation in Dar es Salaam.</i></p>			
<p><i>Action research for assessing demand for scaling up sanitation to the urban poor in Tanzania</i></p>	<p><i>The overall purpose of the research is to provide a better understanding of how demand for sanitation among the urban poor could be assessed with a view to improving sanitation in informal settlements in Tanzania. The researchers will use action research to develop a sanitation model and framework that can be used to promote demand-led sanitation. The action research will identify approaches and frameworks being promoted in urban informal settlements, investigate factors that can unlock demands for sanitation in urban informal settlements, and determine the necessary environment for scaling up urban sanitation. This application of action research suggests the use of case-study methodology. Field data will be collected using a mixture of qualitative, quantitative and participatory approaches</i></p>	<p><i>SDI, IIED</i></p>	<p><i>£60,000</i></p>	<p><i>Tanzania</i></p>
<p><i>Sanitation conditions, problems, practices, and perceptions in</i></p>	<p><i>This research will use existing data from Dar es Salaam to prepare a paper for submission to a peer-reviewed journal. The paper will quantitatively characterise existing</i></p>	<p><i>LSHTM</i></p>	<p><i>£14,828</i></p>	<p><i>Tanzania</i></p>

<i>unplanned areas of Dar es Salaam</i>	<i>household sanitation conditions, problems, practices, and perceptions related to on-site sanitation technologies in use in unplanned urban areas of Dar es Salaam. It will provide a comprehensive overview of levels of facility investment, ownership, and practices related to toilet sharing, usage, cleaning, replacement, upgrading and pit management.</i>			
<i>Roundtable meeting to discuss the data available for monitoring access to sanitation in slums</i>	<i>This roundtable discussion in London will highlight the issues surrounding the monitoring of sanitation progress in urban area slums. The event will bring together researchers from both SHARE and non-SHARE organisations to discuss: How reliable is current data on access to sanitation and hygiene in urban areas, particularly slums? How can monitoring of access to sanitation and hygiene in slums be improved?</i>	<i>WaterAid /IIED &amp; Slum / Shack Dwellers International (SDI), World Health Organization , UNICEF and UN-Habitat.</i>	<i>£7,850</i>	<i>UK</i>
<i>Demand for pit-emptying services in unplanned areas of Dar es Salaam</i>	<i>This research will draw on existing survey data from Dar es Salaam and generate practical and actionable knowledge and recommendations on increasing household demand for and uptake of improved and safer pit-emptying services. Analyses and multivariate modelling will be conducted to develop an in-depth behavioural understanding of the choice of pit-emptying method as a function of cost, income, housing type, location, and other socio-economic factors. Interest in and willingness-to-pay for an improved pit-emptying service offer will be examined. The work will assist with understanding of the factors associated with levels of expressed demand for improved pit-emptying services in unplanned low- income areas of Dar es Salaam.</i>	<i>LSHTM</i>	<i>£14,862</i>	<i>Tanzania</i>

<b>SHARE Theme: Sanitation Markets</b>				
<i>Exploring the potential for microfinance in sanitation</i>	<i>The key objective of the activity is to investigate how microfinance can be used effectively to increase financing for sanitation facilities and services. This research is the first step in a broader research programme investigating the use of microfinance for sanitation, which will include a series of case studies to understand how microfinance products for sanitation have been designed. Researchers will conduct a review of the literature on the subject and consult with potential research partners and key informants and other microfinance professionals and experts to identify research partners, key research questions, and proposed case study locations.</i>	<i>LSHTM and associate (Sophie Tremolet)</i>	<i>£9,950</i>	<i>UK (desk based)</i>
<i>Microfinance for Sanitation</i>	<i>The specific research aim is to investigate how household financing for sanitation could be mobilised via microfinance in order to accelerate sustainable access to sanitation. The proposed research will document existing microfinance activities (with a particular focus on India and Bangladesh) and develop a guidance document on using microfinance for sanitation. This guidance document will be tested in two countries (Tanzania and Malawi) and subsequently adjusted and refined. Research results will be disseminated so as to facilitate the inclusion of microfinance components into sanitation projects and to encourage microfinance institutions to develop sanitation-related products. The research will be focused on microfinance products for households (as opposed to financing for small-scale independent providers or slum improvement projects).</i>	<i>LSHTM and associates</i>		<i>India, Bangladesh, Tanzania and Malawi.</i>

One page Research into Use summaries of 15 projects are available as pdfs on [www.research.org/resource](http://www.research.org/resource)



### Indicator 3 – Visit to the UK by Dr Peter Morgan and Ms Annie Shangwa

#### Outcomes:

1. Meetings between Dr Peter Morgan and Annie Shangwa with WaterAid, LSHTM, IIED and DFID
2. Specific advice on Richard Chunga's project ecosan project and Therese Mahon's menstrual hygiene research
3. Networking opportunities for Peter Morgan and WEDC
4. Facilitating opportunities for Richard Chunga (WaterAid Malawi) and Annie Shangwa to develop networks with water and sanitation stakeholders
5. SHARE consortium hosts the visit

#### Technical and organisational experience of

- Over the last 4 decades, **Dr Peter Morgan** has developed the most innovative technical ideas in sanitation and hygiene. His innovations include the Ventilated Improved Pit-latrines and ecological approaches to sanitation including the *Arborloo*, the *skyloo* and the *Fossa Alterna*. Dr Morgan has also pioneered many innovative low-cost hand-washing aids including the tippy tap, and many other devices, using locally available materials. His work has had an impact throughout Africa, including Malawi and Tanzania. Dr Morgan was awarded the AMCOW AfricaSan honour for Technical Innovation
- Annie Shangwa is a teacher at Chisungu Primary School, Zimbabwe. Annie has worked with Peter for a number of years and has much practical experience working on ecosan,

handwashing technologies and MHM – for example, Annie is the senior trainer and educator on a teaching ecological sanitation project at Chisungu Primary School in Epworth, Zimbabwe.

### **Areas of interest**

SHARE is primarily interested in the experience of Peter Morgan and Annie Shangwa in the following areas:

- **Ecosan:** what are key problems and recommendations? Has there been any change in the recent years? Richard Chunga is leading a research project funded in the 1<sup>st</sup> round of SHARE on “*An investigation of the strengths and weaknesses of ecological sanitation in Malawi: opportunities to improve the system*”
- **Menstrual Hygiene Management:** what works in schools? How to design inclusive MHM programmes? Therese Mahon has had two proposals on MHM funded by SHARE. The second is a Research into Use manual on what works and is current developing a research proposal on for a research trial on the health and education of MHM practices.
- **School sanitation:** what components need to be in place for successful programmes?
- **Enabling technologies for handwashing devices and assessments of best practice hand washing interventions:** innovations in recent years with the tippy tap?
- **Zimbabwe:** IIED has identified Zimbabwe one of the countries in their research project

## **2.9. Output 5 – Effective management of the consortium, including M & E of impact and value for money**

### **The following projects have been successfully completed:**

MR01 - ‘Choose Soap’ Hygiene Resource  
MR02 - Weaning foods pilot study in Bangladesh  
MR03 - Inception Phase of Sanitation RCT, Orissa  
MR04 - Menstrual hygiene meeting for girls in south Asia  
MR11 - Exploring the potential for micro-finance in sanitation

## SHARE - Hygiene promotion: 'Choose Soap' (MR01)

### Communicating effective hygiene promotion

Hand-washing with soap is one of the most effective and cost effective ways of improving public health in developing countries. Whilst there is widespread dissatisfaction with current approaches to promoting safe behaviour change there are still too few examples of how to go about it. There are no high quality handwash promotion template materials available to the many NGOs, government and international agencies that require and often request them. Modern approaches are needed, designed with the help of creative professionals, that get attention, use the power of emotion and innate motivations (rather than cognitive arguments), and which employ social networks, mass media, community action and schools in a cost-effective manner.

### SHARE's role

A SHARE-commissioned tool kit of activities has been produced to help promote hand-washing with soap in households in low income settings and draws on ideas and best practices from different fields including hygiene and health promotion, behavioural sciences and marketing.

The kit, called 'Choose Soap', offers a blueprint for activities that can be carried out in households, in schools, in communities and via mass media to encourage the practice of handwashing with soap at key times. Designed by creative agency 'Good Pilot' with LSHTM and WaterAid, the resource is available on the SHARE and Hygiene Centre websites, and at [www.choosesoap.org](http://www.choosesoap.org).

The activities are based on many years of research into the drivers of hand hygiene and best current science concerning effective approaches to behaviour change, including pledging and the emotive power of disgust.



<http://choosesoap.hygienecentral.org.uk/index.php>

### Catalysing further research

The kit will be used in a flagship Wellcome trial of the efficacy of handwash behaviour change. The kit will be pilot tested to show its efficacy in eliciting behaviour change can be tested in the trial of handwashing behaviour change in Andhra Pradesh with the support of the Wellcome Trust



which is due to start in January 2011. If the kit is shown to be effective in eliciting behaviour change it is likely to become a standard approach for the sector.

## **SHARE - Impact of food hygiene in reducing the contamination of weaning food and water in a diarrhoea-endemic area in Bangladesh (MR02)**

### **Background**

Diarrhoeal diseases remain a main cause of preventable child mortality in developing countries. Many studies have demonstrated that the level of contamination is higher in weaning foods than in drinking water, or addressed food microbiological contamination and its role in diarrhoea. But few involved an intervention.

### **The Study**

A recent ground-breaking intervention study of weaning food hygiene in Mali showed how simple measures could achieve large reductions in the numbers of faecal bacteria ingested by young children. Replication of the study aims to confirm or qualify these very positive findings, and also to examine how widely they are applicable. Details of the study were shared with ICDDR-B, and local weaning foods selected for investigation. 30 volunteer mothers have been selected and their preparation methods analysed by the Hazard Analysis Critical Control Points (HACCP) approach, with a view to identifying an intervention appropriate to Bangladesh.

### **Outcome**

The research on food hygiene promotion in low-income communities aims to show whether food safety improvement achieved through the HACCP approach result in diarrhoea morbidity and mortality reduction among young children. It also aims to show whether the approach scalable and cost effective. The findings have significant implications for diarrhoea prevalence and other child health outcomes.

### **3. Management Structure Changes**

Changes within the Management Group are as follows:

Rick Rheingans – formerly Research Manager now becomes Impact Director at 0.50 FTE. The Impact Director will have responsibility for the identification, facilitation and measurement of the impact of SHARE research and therefore takes on oversight of monitoring and evaluation from the CEO, together with the strategic research vision.

Oliver Cumming changes his title from Policy and Communications Manager to Policy Research Manager. This reflects the much wider role that he is playing within SHARE including research project management.

Monitoring and Evaluation Officer – 1.0 FTE under recruitment.

### **Financial Summary**

#### Management Budget

The effect of an increase in time of 25% for Rick Rheingans and the addition of a full time Monitoring and Evaluation officer are currently being assessed, together with the changes of management time from Shack/Slum Dwellers International to the International Institute for Environment and Development. To 31 March 2011, expenditure on management was running to budget

#### Communications Activities

There are seventeen independent projects within the communications budget totally in excess of £260,000. Some, such as the production and maintenance of the SHARE website will be on-going throughout the life of SHARE and beyond. Others are discrete pieces of work, many contracted to SHARE partners and other outside organisations. In addition the communications budget contributed to an element of the *Choose Soap* research project (CM02 and MR01).

#### Capacity Building Activities

At the time of writing there are nine Capacity Building projects totaling £504,545. Five of these relate to the PhD students which are scheduled to begin their programmes in the autumn of 2011. Due to a dramatic increase in cost of the fees for these students, more of the capacity building budget has had to be put aside to ensure that there is sufficient to complete their studies.

Expenditure on the PhD programmes will commence in the last quarter of 2011.

Three projects have already been completed (CB01, CB02 and CB04), and one project (CB03) has been deferred due to contractual issues and timing.

#### Research Fund Activities

Funds have been committed for twenty research projects including SHARE's contribution to the SPLASH programme.

Three Quick Start projects and sixteen research projects Calls A and B have already been funded. Four have been completed (MR01, MR02, MR04 and MR11) and one has been deferred.

Two projects are due to commence work later in the summer of this year and the remaining projects are now work-in-progress. Expenditure on these will start to be seen in the accounts in the September submission as invoices for field work costs are submitted.

Two additional large items within the budget are a) £250,000 for research managed by each of the four country research groups (platforms) and b) £1,100,000 set aside for a sanitation large research programme run by IIED and SDI. The proposal for this programme is currently under review by DFID and should it be successful, will roll out over three years. The pattern of expenditure will be discussed with the team and the SHARE research fund spend adjusted accordingly.

Including allocations set aside for the four country research groups and to cover the IIED/SDI sanitation project, 87% of the available research funds has already been committed. Completed projects on this fund currently represent 7% of the original budget.

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<sup>i</sup> Information on all research funded under Calls A and B is available on [www.SHAREresearch.org](http://www.SHAREresearch.org)

<sup>ii</sup> See Annex 1 and Annex 2