

# WORKSHOP SUMMARY

## Research and evidence: A method review

13th December 2011

*"It often seems that researchers, practitioners, and policy makers live in parallel universes... Researchers cannot understand why there is resistance to policy change despite clear and convincing evidence for it. Policy makers bemoan the inability of many researchers to make their findings accessible and digestible in time for policy decisions. Practitioners often just get on with things."*

Court, J. and J. Young (2006) 'Bridging research and policy in international development: an analytical and practical framework', *Development in Practice*, 16:1, pp.85-90

*"We can only hope that more and more organizations and practitioners will not let evidence-based medicine act as an erroneous "intellectual hegemony" that substitutes for sound judgment and that, instead of waiting for irrefutable analytic scientific evidence, a rising community of the conscientious will insist that we all consistently and thoroughly wash our hands"*

Backman, C., Zoutman, D. E., and Marck, P.B. (2008) An integrative review of the current evidence on the relationship between hand hygiene interventions and the incidence of health care-associated infections. *American Journal of Infection Control*.36(5):333-348.

*"Method is not, and never could, be, innocent or purely technical ... method does not 'report' on something that is already there".*

Law, J (2004) *After Method: Mess in social science research* Routledge: Abingdon UK

*"The problems that he (the scientific researcher) concentrates on are just those that he believes can be both stated and solved within the existing scientific tradition"*

Kuhn, T. (1964) *The Structure of Scientific Revolutions* Princeton Princeton University Press: Princeton US

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Richard Carter  
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(SHARE/LSHTM)

Robert Chambers  
(Institute of Development Studies)

Jamie Bartram  
(UNC-Chapel Hill)

On 13th December 2011, WaterAid hosted at its offices a joint meeting with Institute of Development Studies (IDS), University of North Carolina (UNC) and the London School of Hygiene and Tropical Medicine (LSHTM). The meeting brought together a group of researchers and WASH (water, sanitation and hygiene) sector experts drawn from implementing agencies, research institutes and donor organisations. All participants are working to secure access for the 2.6 billion people that currently lack safe sanitation. All are doing so in a context that demands better value for money as well as adherence to the 'evidence based decision making' and the 'what works?' agendas. They met to examine the potential of WASH research to support them in their roles. This note provides an overview of the meeting and key points arising from the discussions.

## Background and Participants

In response to changing perceptions of the provenance, quality and reliability of WASH research, the WASH community is building an evidence base to help consolidate the sector's work and the efficacy of its influence and application in policy and practice.

The goal of the workshop was to re-ignite debates about purpose, methodologies, values and power in WASH-related research, evidence and influence around policy and practice.

By bringing together key experts in the WASH sector, the workshop aimed to engage researchers, donors and implementers in a dialogue that adds value to existing research work. Participants set out to develop a more heterogeneous research agenda for the WASH sector and strive towards a more coherent and comprehensive evidence base.

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## Workshop overview

*It should be possible to know more about what we do – more than we know.*

As donors, researchers, practitioners and policy makers; participants commented on the need for an urgent review of the potential of research in the WASH sector.

*There is research and there is “research”.*

Participants started the workshop by considering 'what is research?' and whether action learning and networking count as research. For instance if a workshop is convened where practitioners can share practical experience, and through an 'edu-chaos process' it led to an output such as a Declaration or a Note, is this research? Furthermore some asked whether NGOs auditing activities that monitor how to keep services going can be classified as a research method.

The consensus amongst participants was that meetings or processes can be the subject of research but are not really research in and of themselves.

*As a sector we are sitting on a gold mine of information... we have an ethical obligation to do more and do better.*

In the second segment of the day, participants took stock of initiatives currently underway to help strengthen the quantity, quality and accessibility of WASH research.

Participants mapped out the kinds of research initiatives they know of that are taking place in WASH sector, and reflected on the trends, gaps, and opportunities in the research agenda. The group also discussed the increasing flows of funds available for the generation, communication and application of such research.

*"No one method can answer every important question"*

During the third segment entitled *Reality-Check*, the group discussed the primacy of the research question and the promises and limitations of different research methods.

Participants discussed the notion of a 'gold standard' in evidence; in particular the Randomised Controlled Trial (RCT) and systematic review. The group acknowledged that these methods often provide high internal validity but this may come at the expense of external validity. Often the most important questions for international development and global health are related to roots causes or structural inequity, i.e. the 'causes of the causes'<sup>1</sup>. RCTs and systematic reviews alone are not likely to address these questions. And whilst these methods are designed to minimise bias, the way the data is interpreted can still be subject to prior beliefs and agendas.

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1 Marmot, M (2005) 'The Social Determinants of Health Inequalities' *Lancet* 2005; 365: 1099–104

*"We can't wait for the evidence base to be complete, we need to walk and talk at the same time and this means using the best available evidence"*

There is increasing interest in the development sector in the use of RCTs to rigorously evaluate 'what works'<sup>2</sup>. Whilst many see in the RCT a means to objectively answer important questions, others are more sceptical about their applicability and usefulness in answering often complex questions. Participants discussed how to engage constructively with each other in this issue, for instance in generating greater awareness on these methods and when and where they are appropriate.

Participants recognised that the results of RCTs are often more persuasive when it comes to influencing policy and decision making and that there is an increasing demand in the 'research market' for these products. The group agreed that more research and discussion is required on:

- hierarchies for evidence
- the perception that some research is better than others
- how and why certain types of research influence policy and decision-makers more than others

In general there was a distinction in the approach of NGOs and academics on this issue, with NGOs often more willing to explore alternative ways of producing knowledge and accepting of 'good enough-ness'. Interestingly some donors reported the difficulty in trying to find the alignment between the evidence they believe in and the values they hold in terms of local ownership and local use of information.

*What does quality look like regardless of method?*

In the final segment of the day, participants discussed the progress achieved either individually or jointly during the meeting as well as looking ahead to next steps.

The conversation through the day had moved from the rigour and robustness of the data towards the importance of applied knowledge and even wisdom-based action. Participants acknowledged the role of research with rigorous, systematic and 'objective' approaches for evidence-based WASH implementation. Nevertheless, the group underscored the importance of the judgment that sector professionals acquire through experience - tacit knowledge - as a mediating factor: decision-making processes thereby integrate the 'best' available research evidence with community values and professional wisdom.

To conclude participants were asked to record and share with the group some 'light bulb moments' and actions to take forward after the meeting.

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<sup>2</sup> eg. Banerjee, A. V. and E. Dufflo (2011) *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty* PublicAffairs: New York USA

## Points for further discussion

### Researchers

It is often assumed that research informs and changes practices and policy. This thinking represents a linear process and a causal relationship, whereby a set of research findings have some impact on decision makers and thus programmes on the ground. This does not always happen in practice and the process is sometimes viewed as a 'black box', little understood by the research community.

*"It is astounding: All the research that is going on and we still don't know how to talk to decision-makers. This is a problem; it is a reason for worry. This is why we don't make progress"*

The researchers among the participants were surprised to see the extent to which practitioners are involved in building the evidence base.

### Policy-makers

*"It can be very difficult to decide what to do on the basis of what we know"*

More work needs to be done to understand the policy makers we are trying to influence: the different constraints they are operating under, to see things from their perspective and how to improve their capacity to translate research into policy and programmes.

*"Research aims for perfection but policy making is groping in the dark"*

There are can be very good opportunities to feed research into the policy making process - but timing is critical. The influence of research on policy is notoriously opportunistic.

*"There can often be a disconnect between those that fund research and those that will have to implement the findings"*

Participants noted that some bilateral and multilateral organisations are more evidence based than others. It was suggested that it would make an interesting exercise to map out the different funding institutions and their use of research - otherwise we cannot know who we are talking to and how to talk to them.

*"There is an enormous amount of mediocre research that drives decision making"*

Participants reported examples from their experience of policy makers basing their decisions on anecdotes or personal encounters with individuals or communities in developing countries. Policy makers put these stories in politicians' speeches and repeat them.

The group suggested that Research into Policy (RIP) studies on models of the decision making of senior policy makers and decision makers would be particularly cost effective.

## Practitioners

There is a strong emphasis within NGOs on creating 'knowledge for action' - NGOs typically see the value of research for its use in implementing better programmes or making better policy decisions rather than just creating knowledge for its own sake.

Practitioners are actively contributing to the research agenda and 'the information on which we are sitting' would help build the evidence base in the sector. A number of relevant platforms (such as the Emergencies Environmental Health Forum) have been created to share learning and relationships established with formal researchers.

*"We [WASH practitioners] know what it's like, we can make judgements about the quality of the data and the plausibility of conclusions that are drawn from research based on our experience"*

Humanitarian NGOs are conducting Research and Development (R&D). For example, Oxfam (and the Stoutenberg process) have been doing operational research on how to store faecal matter from toilets where there are few options for disposal. Implementing organisations like WaterAid and Tearfund and their partners either conduct research themselves or collaborate with consultants, research institutes, or universities. This research may be on the impact of interventions (as a programme effectiveness tool); to study and solve particular problems; or to document organisational practices. Participants reported that the research conducted by NGOs has varying degrees of deliberateness and effectiveness.

*"We do a lot of research, but how do we drive up the quality?"*

NGOs also gave examples where there is no formal research but communities of practice have a pivotal role in finding out 'what works' through anecdote-sharing and networking e.g. the finding that small homogeneous communities without tree cover are favourable to Community-Led Total Sanitation (CLTS) triggering.

*"Research may produce wonderful findings but how do we embed them in practice or in policy?"*

The potential for a multi-actor engagement in the research process was flagged, premised on a commitment to equality and social justice and based on collaboration, mentoring and equal power relationships.

## Research Ethics

*"Where do we put the limited resources available - into building the evidence or implementing programmes?"*

Ethics was discussed in 3 key respects:

- Whether limited resources should be spent on research or implementation?
- The imperative of doing research in an ethical way: i.e. not extracting information from communities but developing a relationship with them. Re-framing familiar debates in this way puts people back into the picture and means that researchers may ask new questions as a result
- Donors should also consider their duty of care towards communities. For example, many agencies don't give a long term commitment to WASH research or monitoring the impact of their implementation

## Who does research?

*"Do we need to go through the PhD process to develop the research skills we need?"*

There are many examples within the sector of research initiated and performed by programme implementers or by communities. Participants discussed to what extent non specialists should be part of the research process. To be most effective, it was argued that research should be carried out by individuals and organisations that will implement the findings. However these individuals will often have little or no formal training or experience of conducting research. Participants highlighted the potential to build capacity through the research process. Multi actor collective analysis of research problems leads to 'telling the story of the facts' differently.

## What is good enough: rigour versus process?

*"Who owns the learning agenda?"*

As the thinking on research methods that are appropriate to the development context has evolved, so too has the perceptions of quality, rigour and robustness of the type and strength of evidence in the WASH sector. It was suggested that, however robust the findings, if practitioners or policymakers implementing them don't own or believe the findings they won't be applied. Participants had somewhat divergent perceptions of quality, rigour and robustness of the type and strength of evidence in the WASH sector. The possibility of achieving rigour through a combination of multiple sources of evidence, combined with peer review, was highlighted.

*"No one method leads to the right conclusions"*

We looked at the possibility that there could be a sequence in researching a subject - i.e. from 'quick and dirty' research to large-scale experimental trials. NGOs should not be castigated for 'rough and ready' research: simpler, cheaper studies justify the next level of analysis i.e. more costly but reliable studies. Bodies of evidence change and evolve; certain methods may be good enough at one point. It is in this way that we build analysis of evidence in the sector.



## The impact of research

Research must be useful: 'knowledge for action'. Formative research and market research have been recognised as an integral part of the practice of implementing water, sanitation and hygiene programmes. Methods like outcome mapping are useful for researchers to be able to log the results of a research project and see the difference it has made to the practice. The example of CLTS was used as an illustrative example; now that there has been much more research on the approach, this has helped build the policy case for adopting this approach.

Putting research into use requires the intended user to understand the findings and be able to successfully use and apply the knowledge. 'Double loop learning' was mentioned as a way to ensure research opens possibilities for more relevant and responsive policies and programmes (i.e. the conditions in which research can be applied).

*"There is a lot of research festering in bottom drawers"*

All participants recognised that there is a need to better understand how to put more sanitation and hygiene research to use in order to inform organisational and sector policy and programmes. Participants acknowledged that research is of limited value if it is not published and disseminated within the organisation and sector.

## Conclusions and next steps

Our discussions were intended to locate the development of the research agenda on WASH by:

- clearly articulating the research problem of importance to participants;
- assessing the sector's overall research portfolio;
- taking stock of the existing evidence;
- identifying strengths and weaknesses of the current research agenda;
- initiating discussions on appropriate research tools/study designs;
- surface the assumptions and external factors that shape change;
- and creating specific recommendations for increasing effectiveness in this area.

### *Next steps*

The next steps identified by participants include to:

- Create more opportunities for learning from each other and for collaboration on research (i.e. to change actions, behaviours, mindsets or relationships around WASH research)
- Look at developing policies or minimum commitments on research in our respective organisations in order to re-visit priorities, policies and strategies in research on WASH and make spending more effective
- Work with publishers and reviewers to publish more NGO-led research in peer-reviewed journals
- Meet again as a wider group to develop ideas and conversations that move the WASH research agenda forward over the course of the coming years.

The meeting outputs have been disseminated widely, to participants, organizations in the core group, and the wider community to support ongoing work on WASH research.





## Research for sanitation and hygiene solutions

The world is seriously off-track in meeting the Millennium Development Goal on sanitation and 2.6 billion people are still without a safe toilet.

SHARE aims to address these challenges by accelerating progress on sanitation and hygiene in developing countries by generating rigorous and relevant research, and ensuring new and existing solutions are adopted at scale.

The consortium conducts research across four pillars:

- Health
- Equity
- Urban
- Markets

SHARE's activities primarily take place in its focus countries:

- Bangladesh
- India
- Malawi
- Tanzania

The DFID-funded SHARE consortium is led by the London School of Hygiene and Tropical Medicine. Its other partners are the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), International Institute for Environment and Development (IIED), Shack/Slum Dwellers International (SDI) and WaterAid.



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