



MEDS Convening 2018

Conversations about Sanitation, SDGs and Research

Patna, Bihar, 2017

BILL & MELINDA
GATES *foundation*



ACKNOWLEDGMENTS

We would like to thank all participants for their active engagement during the workshop as well as for their contributions to this report in the months following the Patna meeting. A special word of thanks to the staff of PSI, The World Bank and UNICEF with organizing field trips and other local preparations: Sanjay Singh, and Bikas Sinha from PSI, Kamlesh Prasad from the World Bank, Pravin More and Asad Srahman from UNICEF.

The MEDS community boasts some excellent people, as in past years, we thank all those who played a facilitation, presentation or documentation role. We are grateful, in this capacity, to: Aprajita Singh from PSI; Dean Spears and Dianne Coffey from r.i.c.e.; Molly Lipscomb from the University of Virginia; Barbara Evans from the University of Leeds; Hanh Nguyen from East Meets West; Anthony Waterkeyn from Africa Ahead; Martin Gambrill and Maria Angelica Sotomayor from the World Bank; Sarah Dobseavage and Erik Harvey from WaterAid; Ingeborg Krukkert from IRC, Simon Okoth from SEI / SuSanA and Aiden Cronin and Michael Gnilo from UNICEF; Kate Medlicott from WHO; Oliver Cumming from LSHTM; Tom Clasen and Christine Moe from Emory

University; Lilian Lehman from IDinsight; Neeta Goel from 3ie; Raymond Guiteras from the University of Maryland; Chris Nicoletti from iDE; Jonny Crocker from the University of Washington; Angela Lagat from ZanaAfrica and Geoff Revell from WaterSHED.

A special thanks to Xavier Chauvot De Beauchene from The World Bank, Sanjay Singh from PSI and Madhu Krishna from the Bill & Melinda Gates Foundation India for taking care of government liaison and to Mr. Balamurugan, State Mission Director of the State Rural Livelihoods Mission for taking the time to come to speak at the convening.

Also, many thanks to Sarah Herr and Katie Madson from the Bill & Melinda Gates Foundation for travel and logistical support throughout the workshop (not to mention the period leading up to it).

Finally, we are grateful to our fearless leaders and facilitators for overall organization, Pete Cranston, as well as Pippa Scott for the documentation and reporting of the convening.

Jan Willem Rosenboom and Radu Ban

Table of Contents

PREFACE	4
1 INTRODUCTION	6
1.1 CONVENING AIMS AND FORMAT	6
1.2 CONVENING IN PATNA, BIHAR	7
1.3 REPORT STRUCTURE	8
2 FUNDED PROJECTS AND PROGRAMS	8
3 CONVENING ACTIVITIES	20
3.1 GALLERY WALK	20
3.2 REFLECTIONS ON POSTER GALLERY	20
3.3 FIELD TRIPS	23
3.3.1 Locations & visits	23
3.3.2 Field trip reports	24
3.3.3 Overall reflections of the field visits	30
3.4 SPECIAL REPORTS	31
3.4.1 Tom Classen: Gram Vikas Evaluation	31
3.4.2 Lilian Lehman: IDinsight and UNICEF Learning Partnership	31
3.4.3 Aiden Cronin: UNICEF Support to the Indonesian Sanitation Program	32
3.4.4 Neeta Goel: 3ie Promoting Latrine Use in Rural India	32
3.4.5 Molly Lipscomb: Smart/Targeted Subsidies for Take-Up Of Mechanized Desludging in Ouagadougou	32
3.4.6 Social Incentives for take-up of hygienic latrines in Bangladesh	32
3.5 SPOTLIGHT PRESENTATIONS	33
3.6 THEMATIC DISCUSSIONS	34
3.6.1 Discussion 1: The SDGs—Fishbowl discussion	34
3.6.2 Discussion 2: What are Appropriate Research Methods for Research and Evaluation?	38
3.7 OPEN SPACE	40
3.8 ECO-CYCLE PLANNING	42
3.8.1 Methodology	43
3.8.2 Reflections from the Eco-cycle Exercise	43
3.9 CONVENING ADDRESS BY MR. BALAMURUGAN—STATE MISSION DIRECTOR SRLM	45
4 REFLECTION AND LEARNING	46
4.1 END OF DAY REFLECTIONS	46
4.2 REFLECTIONS ON KEY THEMES	46
4.2.1 Reflections on Theme 1: The SDGs	46
4.2.2 Reflections on Theme 2: The research/evaluation tool for the job	48
4.2.3 Reflections on Theme 3: Spotlight on India	49
4.3 NEW VANTAGE POINTS	50
4.3.1 Are we doing the right things?	50
4.3.2 Are we asking the right questions?	51
4.4 THE YEAR AHEAD FOR MEDS	52
4.4.1 BMGF Updates and 2018 Priorities	52
4.4.2 Ongoing collaborations and tangible outputs	53
4.4.3 Learning Exchange Fund	53
5 CONCLUDING THOUGHTS	54

Preface

The Measurement, Evidence, and Dissemination, for Scale (MEDS) initiative was created by merging the Measurement, Learning and Evaluation (MLE) initiative with the Building Demand for Sanitation (BDS) initiative at the end of 2015 (see box 1 for an overview of MEDS history, priorities and goals). The 2017 MEDS Convening was the 2nd convening under MEDS but the 6th annual meeting for many of the participants, formally convening under the BDS portfolio.

With the Sustainable Development Goal (SDG) baseline for SDG 6.1. and 6.2 having been presented in July 2017, the implications of the SDG framing remain very relevant for MEDS. Whist this is challenging, it remains an enormous privilege to bring together leading academics and practitioners in to the same room for five days to explore this, as well as many other pertinent issues.

The task of documenting the workshop was shared between participants and the convening team. While it is almost impossible to capture all the rich exchanges and presentations, the aim of producing this post convening report is twofold: to provide a flavor of the activities and some pointers to key issues and trends that emerged during the convening and secondly, to serve as a reference document for participants—in the hope that it might spark recollections and encourage further learning, exchange and collaboration. The report includes several links where readers can source additional material.

We opened the 2018 convening with an analogy of a net, where the threads of learning in the MEDS portfolio are like strands of a net, like those that hang between the buildings at the Bill & Melinda Gates Foundation Offices. These threads may be small, but if one knot fails, the whole net does not fall apart; the strings and knots align dynamically allowing it to be resilient to failure and slippage. With this image in mind, we look forward to more collaboration and placing more knots in the MEDS net.

Jan Willem Rosenboom and Radu Ban

¹ leveraging existing data, and not conducting new primary data collection

BOX 1: MEDS HISTORY, GOALS, AND PRIORITIES

The Measurement, Evidence, and Dissemination for Scale (MEDS) initiative was created by merging the Measurement, Learning and Evaluation (MLE) initiative with the Building Demand for Sanitation (BDS) initiative at the end of 2015. The MEDS initiative aims to increase the use of evidence in sanitation policies by investing in measurement and evidence to understand the effectiveness of various sanitation approaches. The MEDS investments employ appropriate and rigorous methods to evaluate “what works” in the delivery of services, to identify innovations that people actually want to use and can afford and—in some cases—to evaluate health and other impacts of different sanitation approaches. We use this information to report on our progress, assess the impact of our grant making, and share lessons that we learn with our partners. A further part of the MEDS effort focuses on the issue that existing evidence is not always adequately translated into practice (for a wide variety of reasons). Addressing this involves working with sanitation providers and partners to help them adopt more evidence-based practices so they can deliver sanitation services that meet people’s needs.

Goal 1: Measurement (what and how is measured) of performance and processes for sanitation service delivery.

Priorities:

- Supporting JMP and selected countries to collect and report data on use of safely managed sanitation
- Expanding use of the Shit Flow Diagrams
- Developing city sanitation ‘dashboards’
- Accurate periodic measurement of rural OD in India

Goal 2: Evidence (what and how works) for sanitation service delivery.

Priorities:

- Stimulating markets for urban Fecal Sludge Management (FSM)
- Establishing the relationship between FSM and health
- How to reduce OD in India

Goal 3: Getting the evidence out and used by decision makers.

Priorities:

- A curated evidence platform exists, is used and is up-to-date
- Partners are using available evidence in their work
- Countries and WSH sector organizations adopt evidence-based sanitation policies

1. Introduction

The Bill & Melinda Gates Foundation’s Water, Sanitation and Hygiene (WSH) team hosted a 6-day workshop for grantees of the Measurement, Evaluation and Dissemination, for Scale (MEDS) program. The convening took place in Patna, Bihar India from 6th-10th November 2017. In addition, a training day was held on the 5th November on “Data-driven Evidence for Decision Making” (see box 2).

1.1 CONVENING AIMS AND FORMAT

The overall aims of the 2017 MEDS convening, like past years, were:

1. **Good participation by a mix of BDS & MLE**
2. **Finding ways to share and exchange about what has been happening in the last 12 months**
 - a. Developments in the sector as a whole
 - b. Projects and grants progress, news: what has gone well, and badly?
 - c. What we have learnt
 - d. How we put learning into practical action
3. **Exploring how to act on knowledge**
 - a. How do we know what is happening, that progress is happening, and that people are putting into practice what is learnt?
 - b. What don’t we know and how do we deal with that?
4. **Finding ways to encourage more participants to collaborate post-convening on themes or issues that arise.**

The design and mix of activities in these convenings has evolved over the past five years. Convenings have been shaped by participant feedback (generally very positive) but activities were also changed to deepen conversations around the portfolio and key issues for the sector. In 2017 we are not introducing any new activity types, so the format is like 2016. Instead the innovation in 2017 is to focus on key themes within the sector and relevant to MEDS. This is partly to help structure and inform the documentation but also an experiment to test whether focusing in this way helps deepen and enrich the conversations in the convening, giving it more coherence, and increase collaborative activities post-convening.

For MEDS 2017 the key themes were:

- **Theme One:** where are the SDGs taking us and is the priority getting us onto the sanitation ladder and/or up it?
- **Theme Two:** the right research/evaluation tool for the job— what are appropriate research methods for research and evaluation?
- **Theme Three:** spotlight on India: What is universally applicable in WASH and what is unique to India?

BOX 2: DAY ZERO TRAINING—DATA-DRIVEN EVIDENCE FOR DECISION MAKING

This training provided by JPAL focused on equipping participants with skills to identify different types of evidence and subsequently incorporate evidence into their programming decisions, essentially, how to be better consumers of data.

There is a need for demand of good quality data at policy and programming level which will drive better research. One of the key take-aways from the day zero training was the importance of matching evidence-based claims to the type of underlying data. For example, descriptive claims (i.e. X percentage of households use mechanized emptying service) need to refer to descriptive data (i.e. a cross-sectional survey), while causal claims (i.e. reduced open defecation leads to reduced stunting) need to refer to causal data (i.e. experimental or quasi-experimental studies).

The presentations from this training are available [here](#).



At the start of the convening, participant facilitator Michael Gnilo invited participants to share their expectations of the convening. These included honest and open debate; identifying innovations and learning in practice; identifying innovations and learning in impact and evaluation; understanding the causation between sanitation and coverage; networking; collaboration; and updates on the latest research and practice.

The post convening evaluation survey shows 72.73% of the participants judged the convening overall as excellent and 27.27% as good overall; 96.97% of the participants had their expectations met and 100% agreed the content was useful and a good opportunity to begin or deepen collaborations with other grantees.

BOX 3: BIHAR AT A GLANCE

- **Population:** at 103.8 million, India's third most populous State; 8.6% of country's population.
- **Would rank 12 in population size,** if it was a country.
- **~ 54 out of 100 people are below the poverty line** (Planning Commission, 2009-10)
- **High population density:** 1,106 persons / sq. km; compact settlement pattern
- **Every second child is stunted** (NFHS 4, 2015-16)
- **Open Defecation prevalence (Rural):** 79.3% (NFHS, 2015-16)

1.2 CONVENING IN PATNA, BIHAR

In 2017, the MEDS grantees convened in Patna, the capital of the 3rd largest Indian State of Bihar. The sanitation challenge in India is unique in its scale and nature for a nation state. Out of the 829 million people in the world who defecate in the open, 524 million reside in India². Regionally, India accounts for 90 per cent of the people in South Asia who defecate outside. Open defecation is still almost universal among the poorest 20 per cent of the population. The populous and northern state of Bihar is considered one of the least developed Indian States. 54% of the population lie below the poverty line. It has a history of political instability and low government investment. Less than a third of households in rural Bihar have access to a toilet and 12% of India's open defecation burden lies in Bihar³ (see box 3).

Also unique in its ambition and scale is the Government of India's Swachh Bharat Mission, aiming to end open defecation by 2019. This acknowledgement of the problem at national scale and mobilization of all levels of government is commendable. Much activity is underway in India and toilets are being built with government subsidy; however, there are concerns regarding the verification of ODF indicators and actual uptake and use of the toilets. A key learning that has come from the Swachh Bharat Mission (SBM) so far is that communication efforts have shifted from patriarchal messaging to gender intentional. (see box 3).

Caste and religion in India add a unique dimension to the sanitation problem in India. Human feces, and having it in or near the house, are associated with notions of impurity. This has huge implications both for generating demand for on-site sanitation (i.e. effectively storing feces near the living environment) and for fecal sludge management (FSM) and the legacy manual scavengers within the caste system. Contrarily, the perceptions of purity around cow dung and its prevalence in the rural living environment may also undermine many of the environmental health gains expected of sanitation interventions in isolation.

India is at a watershed moment in sanitation as the focus moves from OD to safely managed sanitation. Efforts around FSM have increased marked by a draft FSM policy being released in 2017.

Holding the 2017 MEDS convening in Patna offered a unique and timely opportunity for participants to witness first-hand the scale of the challenges and the nature of the response as India works towards these sanitation goals.

1.3 REPORT STRUCTURE

This report is structured into 5 sections. The introduction presents the convening aims and format with a brief overview of our host location Patna in Bihar State, India. The second section provides a quick overview of the current and recently completed MEDS portfolio projects, and their overall focus. Section three is dedicated to the convening activities themselves, where we have kept some granular detail of the exchanges, discussions and observations which took place during the convening. This section may be useful as an aide memoire for participants. Section four focuses on learning and reflection which is a core part of the MEDS convenings. Much of the content here is provided by convening participants either through thematic commentators or plenary reflection. It gives some insight into the collective learning and reflection by the end of the week rather than a position of any one person, or organization. Section five concludes this report.

² Joint Monitoring Program 2017 update and SDG baselines, WHO.

³ Census of India 2011

2. Funded Projects and Programs

MEDS grantees are carrying out a range of interventions and research efforts focused on sanitation demand creation, market establishment, systems strengthening (enabling environment), reaching and empowering marginalized groups, and understanding and improving behavior change approaches. Most of the grant-supported activities are now well underway, nearing completion, or fully completed. Preliminary or mid-project results are available, as well as the final outcomes from a few grantees.

The table (table 1) below provides a quick overview of the current and recently completed MEDS portfolio projects, and their overall focus. The narrative sections which follow the table provide more detail on each project, with highlights of their key contributions and lessons learned.

Table 1: MEDS Portfolio Project Details and Progress

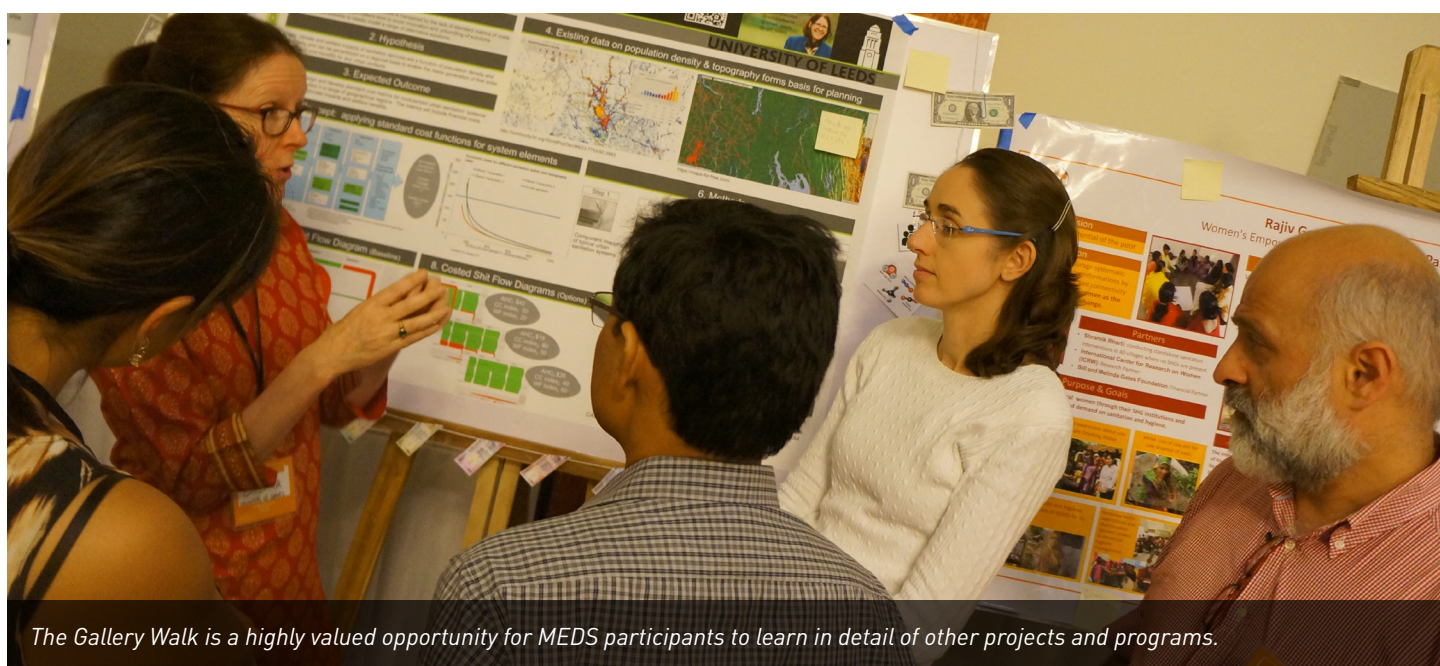
GRANTEE	PROJECT NAME	LOCATION	STATUS	FOCUS
PRODUCT DEVELOPMENT GRANTS				
Fundación In Terris (FIT)	The Earth Auger	Ecuador	Completed	Develop an ecological dry toilet that meets customers' aspirations; goal of product commercialization.
Lixil (formerly American Standard)	Lixil Global Sanitation Products for bottom-of-the-pyramid sanitation improvement	New markets in Sub-Saharan Africa and Asia	Ongoing (follow up on the earlier grant that developed SaTo products for Africa)	To support the acceleration of a new business unit within Lixil Corporation to expand the American Standard Brand 'SaTo' sanitation product line to reach over 53 million low-income people in South Asia and Sub-Saharan Africa by 2020 with extremely affordable, desirable sanitary wares.
World Bank Water and Sanitation Program (WSP) and International Finance Corp (IFC)	Selling Sanitation	Kenya	Completed	Support private sector to expand access to products that meet BoP consumer needs, and help create demand
RESEARCH AND KNOWLEDGE SHARING GRANTS				
Africa Ahead, Rwanda Ministry of Health and IPA	Community-Based Environmental Health Promotion Programme	Rwanda	Completed	RCT to test effectiveness of Community Health Clubs (CHC) as a social mobilization and behavior change approach. The grant makes uses of the fact that Rwanda is establishing CHCs in all villages, over a period of a few years.
Center for Distributive, Labor, and Social Studies (CEDLAS), University of La Plata, Argentina; UNICEF Mali	Evaluation of the Impact of a Rural CLTS Programme	Mali	Completed	RCT to assess effects of a CLTS program on child health, welfare, and household CLTS Programme sanitation behavior in rural Mali
Eawag; USAID	Determining the effectiveness and mode of operation of CLTS: The DEMO-CLTS Study	Cambodia, Ghana, Lao PDR, Mozambique	Ongoing	RCT in Ghana to analyze the effectiveness of behavior change techniques of CLTS only and CLTS + selected ODF adoption process by communities, compared to a control group. Preceded by an evaluation of completed CLTS projects in 3 countries
Environment and Population Research Centre of Bangladesh (EPRC)	Improving Rural Total Sanitation through Empowered Female Local Government Members	Bangladesh	Completed	To learn whether female Local Government members, working with women's groups, can establish effective sanitation improvements at scale.
Innovations for Poverty Action (IPA)	Inter-Linkages in Sanitation Demand Across Households	Bangladesh	Completed	RCT to study effectiveness of demand generation, supply-side marketing, and sanitation subsidies. Investigate influence of sanitation decisions on decisions by others in a social network.

GRANTEE	PROJECT NAME	LOCATION	STATUS	FOCUS
Innovations for Poverty Action (IPA)	Does Sanitation Behavior Migrate	Bangladesh	Completed	Study of how sanitation interventions affect the behavior of seasonal migrants, and how sanitation in towns affects migrants' home villages on their return
Institute for Development Studies (IDS)	CLTS Knowledge Hub		Completed (Continuing Funding from SIDA)	Promote learning and knowledge management for CLTS; expand and strengthen its application
Research Institute for Compassionate Economics (r.i.c.e.)	Evidence, solutions, advocacy, and collaboration for India's sanitation sector.	India	Ongoing	In follow up to the SQUAT Report / Switching Study Grant (India and other countries). This grant is focused on statistical research on costs for human welfare of widespread open defecation in India; to conduct careful qualitative and quantitative fieldwork documenting important policy challenges posed by behaviors, beliefs, and preferences about sanitation. These findings will be increasingly important in helping the sector move from recognizing the urgency of reducing open defecation in India to searching for solutions.
Stockholm Environment Institute	Supporting SuSanA and broader Water, Sanitation and Hygiene (WASH) Community of Practice through on-line platform	Global	Ongoing	To improve the effectiveness of the SuSanA platform for collaborative action; effective knowledge management; peer-peer learning and effective incorporation of key international organizations.
INTEGRATED IMPLEMENTATION AND LEARNING INITIATIVES				
BRAC	WASH in Urban Areas	Bangladesh	Ongoing	Urban work financed by BRAC using outcome payments paid by BMGF based on results from the rural sanitation delivery grant. Not technically a grant to BRAC but included for completeness. Promoting Social Enterprises for WASH in Urban Areas of Bangladesh. Identifying WASH programming needs; providing sustained and integrated WASH services and creating an enabling environment through partnership with local government and other stakeholders.
BRAC	Innovations in Sustainable Sanitation in Bangladesh	Bangladesh	Completed	Increasing sanitation coverage at scale—with a special emphasis on reaching the hardcore poor—as well as innovation and replication components.
CARE, Emory University and Government of Kenya	Sustaining and Scaling School WASH + Community Impact (SWASH+)	Kenya	Ongoing	Extension to original study of government policy for sanitation service provision in schools to now study long term impact (on latrine utilization, costs, attendance) of private service model, i.e. Fresh Life toilets, in schools, relative to government service model based on pour flush toilets.
Central India Initiative (CINI)	Integrated Water and Sanitation Model for Rural India	India : Gujarat and Jharkhand	Ongoing	Sanitation promotion and sustainable sanitation technology for rural households, as part of livelihood projects aimed at alleviating poverty among tribal communities
Community Water and Sanitation Agency of Ghana (CWSA)	Sanitation Prize for Ghana	Ghana	Ongoing	Supporting and extending a DFID scheme of Sanitation Prizes where District Assemblies and Metropolitan Assemblies can submit a proposal for partnering with the private sector to improve sanitation. The best proposals get a large enough cash prize to allow them to start the work they proposed.

GRANTEE	PROJECT NAME	LOCATION	STATUS	FOCUS
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	Promotion of SFDs (Fecal waste flow diagrams or Shit Flow Diagrams)	Global	Completed	to develop an easy-to-understand advocacy, decision and monitoring tool which has the potential to shift the focus of attention, money and activities towards better fecal sludge management, thereby improving the situation of all urban poor residents
East Meets West Foundation (EMW) of THRIVE Networks	Community Hygiene Output Based Aid-2 (CHOBA-2)	Vietnam, Cambodia	Ongoing	Sanitation financing, hygiene education, and marketing in a project driven by financial transfers and incentives payments, to promote sanitation improvement in rural Vietnam and Cambodia, especially among the poorest. Focus of phase 2 on developing a self sustaining model targeting strengthening the sanitation market.
ID Insight, Inc. with UNICEF	Promoting evidence-based programming by sector partners	Kenya, Philippines	Ongoing	to provide research support to UNICEF in order to improve the social impact and cost-effectiveness of UNICEF's water, sanitation and hygiene interventions
International Bank for Reconstruction and Development (World Bank)	Advancing the Implementation of the Global Water Security and Sanitation Partnership (GWSP, formerly known as WSP) business plan	Global	Ongoing	Focus is to develop, test, disseminate and scale best practices in the WaSH sector by providing core support to the GWSP.
International Bank for Reconstruction and Development (World Bank)	Strengthening rural sanitation delivery programs of the Government of India in priority states	Bihar, Uttar Pradesh and other high-OD states in India	Ongoing	Focus is on strengthening the SBM-rural work at state level, through capacity development, TA and other strategic support (delivered through GWSP).
International Bank for Reconstruction and Development (World Bank)	Establishing an India-focused multi-donor trust fund for sanitation and water resources	India	Ongoing	The World Bank has established a Multi-Donor Trust Fund (MDTF) in India, to support government WaSH efforts in priority states. The fund is meant to attract funding from Indian foundations and companies and is supported at a very modest level by the Gates foundation
International Development Enterprises (iDE)	Sanitation Marketing Scale-Up Project (SMSU)	Cambodia	Completed (continuing with funding from other sources)	Brought commercial sales to moderately priced latrines to scale. Demonstrated market-based approaches can significantly increase sanitation coverage in Cambodia, also among the poor. Learning efforts included testing of financing models, consumer price sensitivity and replication in other countries.
Mahilia Housing SEWA Trust	A Framework for Sustainable Sanitation Solution in Bihar	India (Bihar)	Completed	to pilot a women-led model of sanitation service delivery in Bihar, India
Plan International with University of North Carolina (Plan/UNC)	Testing Modified CLTS for Scalability	Ethiopia, Ghana, Kenya	Completed	How to scale up CLTS while maintaining quality and containing costs. Research around testing impact of different internal actors (natural leaders, teachers, and district officials). Learning component includes case studies, literature review, and dissemination.
Population Services International (PSI)	Supporting Sustainable Sanitation Improvements through Supply-side (3SI) Strengthening	India (Bihar)	Ongoing	Develop sustainable sanitation business models and products that match consumer expectations. Demonstrate innovative financing approaches to increase coverage, and conduct multi-media campaigns for sales and marketing.
Population Services International (PSI)	Project Prasaadhan —Business model development for fecal sludge management in rural Bihar	India (Bihar)	Ongoing	Develop and test business models to promote rural FSM practices (focusing on pit latrine emptying).

GRANTEE	PROJECT NAME	LOCATION	STATUS	FOCUS
Rajiv Gandhi Mahila Vikas Pariyojana (RGMVP)	Women's Empowerment and Poverty Reduction in Uttar Pradesh	India (Uttar Pradesh)	Ongoing	Organize women into Self-Help Groups as agents of change in sanitation, hygiene, and other social and economic spheres. Conduct research on effectiveness of different implementation approaches.
The Water Institute, Gillings School of Global Public Health	Phase 2-Proof of Concept of Estimates for the Unsafe Return of Human Excreta to the Environment	India (Tamil Nadu and Bihar)	Ongoing	Following the development and piloting of approaches for the estimation of the fraction of human excreta unsafely returned to the environment in Phase 1, the second phase will bolster the modeling work with a limited set of field data from two states in India
UNICEF	Scaling-up and Strengthening Community Approaches to Total Sanitation	Indonesia, Malawi	Ongoing	Increase access to sanitation through strengthening government sanitation programs at scale (Indonesia, Malawi); analyze program innovations and strategies; distill lessons learned and transmit learning to other Asian and African countries.
WaterAid	Sustainable Total Sanitation Project	Nigeria: Jigawa, Ekiti and Enugu	Ongoing	To improve the effectiveness, efficiency, inclusion and sustainability of total sanitation approaches in 3 States, and contribute to wider national and regional good practice. Research impact of varied combinations of CLTS and marketing approaches.
World Health Organization	Sanitation and Health Guidelines	Global	Ongoing	to develop, publish and broadly disseminate WHO Guidelines for Sanitation and Health, which will provide a sound normative basis for maximizing the health benefits of sanitation interventions
IMPACT EVALUATIONS AND MONITORING				
Emory University	Evidence summary regarding the importance of exposure to fecal pathogens of animal origin		Completed (new grant under development)	to review and synthesize existing scientific literature to assess the risk to human health posed by exposure to poorly managed animal feces. New grant under development to characterize behaviors that drive animal fecal contamination.
Emory University	The SaniPath Exposure Assessment Tool		Ongoing	Applying the SaniPath Exposure Assessment Tool to examine exposure to fecal contamination and target exposure pathways that pose the greatest risk.
International Initiative for Impact Evaluation (3IE)	Evidence for Reducing Open Defecation in Rural India	India: Bihar, Odisha, Gujarat and Karnataka	Ongoing	to generate a body of evidence that can help inform decision-making about what works, why, for whom and when, in order to increase latrine use in rural India
London School of Hygiene and Tropical Medicine	Assessing The Effectiveness Of Improved Sanitation On Diarrhea And Helminth Infection: A Cluster-Randomized, Controlled Field Trial In Orissa, India	India	Ongoing	To provide rigorous evidence on the health impacts of interventions to end open defecation in Orissa, India. Initial trial of the Total Sanitation Campaign intervention implemented by WaterAid between 2011-2014 found no health impact. Subsequently the research team conducted a follow-on study of the Gram Vikas approach. The Gram Vikas approach was found to significantly reduce open defecation and, as a result, reduce stunting. Initial Orissa trial completed and all results published. Gram Vikas trial completed and main results accepted for publication. Secondary outcomes (including gut function) in progress.
London School of Hygiene and Tropical Medicine	MapSan Trial	Mozambique	Ongoing	A before and after (CBA) trial to test 1) If urban, onsite, shared sanitation reduce the risk of enteric infections in children? and; 2) Do enteric infection risks and the effects of urban sanitation vary by localized population density?

GRANTEE	PROJECT NAME	LOCATION	STATUS	FOCUS
Notre Dame and University of Virginia	Pricing People into the Market: Targeting through Mechanism Design	Burkina Faso	Ongoing	Market design approach study to test the impact of subsidies in households switching from manual to mechanical emptying.
University of California, Berkeley	WASH Benefits	Bangladesh, Kenya	Ongoing	to generate rigorous evidence about the impacts of sanitation, water quality, handwashing, and nutrition interventions on child health and development in the first years of life. Study is complete and published, ongoing activities till end 2018 on gut function in Kenya.
University of Maryland, NC State University, Yale University	Social and Financial Incentives for Collective Action Problems	Bangladesh	Complete	A randomized control trial study of the effect of social and financial incentives (namely subsidies, CLTS and marketing test) on communities ability to overcome collective action problems of latrine installation, maintenance and use.
University of Pennsylvania	Understanding and influencing social norms and sanitation in India	Bihar and Tamil Nadu (India)	Ongoing	Study to understand existing sanitation norms and networks within which they operate in urban and rural India. Follow up intervention to form new norms based on gained insights.
World Health Organization	GEMI – Integrated Monitoring of Water and Sanitation Related SDG Targets	Global	Ongoing	to establish a coherent and unified monitoring framework for water and sanitation in order to improve data collection and analysis and support informed country decision-making
World Health Organization	WASH Funding Flow Map: WASH-Accounts/TracFin fund tracking tool	Brazil, Ghana, Marocco (first pilot; now expanding).	Ongoing	to scale-up the implementation of a financial information tracking tool for the Water, Sanitation and Hygiene sector in order to provide countries and donors much needed information for sound, evidence-based decision-making
ZanaAfrica	Amplifying girls voices through Sanitary Pads and Health Education	Kenya	ongoing	A randomized control trial to evaluate the individual effects of school based sanitary pads ad reproductive health education provision on girls' education and well being.
Zvitambo Institute for Maternal and Child Health Research	Sanitation Hygiene Infant Nutrition Efficacy (SHINE) trial	Zimbabwe	Ongoing	to provide causal evidence for the independent and combined effects of interrupting fecal ingestion and optimizing infant dietary quality on stunting and anemia at 18 months.



The Gallery Walk is a highly valued opportunity for MEDS participants to learn in detail of other projects and programs.

3. Convening Activities

3.1 GALLERY WALK

Projects and program progress and outcomes are showcased during a Gallery Walk. The posters are available [here](#). As previous years participants are invited to prepare a poster to update on progress but also at least one reflection on learning; partnership and/or change and innovation.

3.2 REFLECTIONS ON POSTER GALLERY

Simon Okoth noted some reflections on the Gallery Walk, specifically focusing on the elements of learning; partnership and/or change and innovation. Selected posters with Simon's reflections are shared in table 2 below:

Table 2: Selected Participant Reflections from the Gallery Walk

ORGANIZATION	PRESENTER	POSTER TITLE	LEARNING	PARTNERSHIP	CHANGE AND INNOVATION
Bill & Melinda Gates Foundation	Radu Ban	WASH—Benefits Study: effectiveness of WASH and Nutrition Interventions to Improve Child Growth and Development.	The types of WSH interventions (specifically upgrading the quality of latrines unimproved to improved) did not reduce stunting. Furthermore, no complementarities were observed between WSH and Nutrition interventions (i.e. effect of the combined WSH and Nutrition intervention was not different from Nutrition alone). Positive effects were observed on child cognitive and social development, in the Bangladesh site, but it is not clear if these are due to the interventions or to more frequent interactions with, and increased attention to the child.	Bill & Melinda Gates Foundation, International Centre for Diarrheal Disease Research, Bangladesh (ICDDR, B); Innovations for Poverty Action (IPA), and Kenya Medical Research Institute (KEMRI).	The WASH-B study deployed a large set of objectives measures of health impact (including markers of gut dysfunction). In addition, the study also looked at underexplored outcomes such as child cognitive and social development.
East Meet West/Thrive Networks	Hanh Nguyen	Community Hygiene Output-Based Aid (CHOBA) Phase 2.	Governments can be supportive of entrepreneurial approach to development if the right innovative approaches are used. Sector institutional frameworks and country poverty levels can be a barrier to uptake of entrepreneurial based interventions as seen with Lao against Vietnam in this project. The experience in the three countries of Vietnam, Cambodia and Lao have shown how both structures and policy frameworks together with resources make impact on program uptake and up-scaling.	The program is built upon a strong cross-sector collaboration and partnership between Local Governments, Provincial Centers for Rural Water Supply and Sanitation (PCERWASS), ROTO Company, Tana Dai Thanh Company, Happy Tap Enterprise, SATO, Unilever, Asian Institute of Technology (AIT) and EAWAG – Sandec. East Meet West is implementing a fecal sludge management pilot in Vietnam which focuses on 1) demand generation, 2) strengthening the existing service chain and 3) supporting the enabling environment for FSM (not the hardware component). However, they will need to identify an appropriate treatment technology before they could plan the pilot.	Shifting of implementation mindsets to buy-in to the entrepreneurial approach to increase sanitation intervention uptake. This further built trust in new sanitation products and despite the entrepreneurial approach, the sustained collaboration with the government remains important for program sustainability.

ORGANIZATION	PRESENTER	POSTER TITLE	LEARNING	PARTNERSHIP	CHANGE AND INNOVATION
iDE	Yi Wei	Contextualized replication.	<p>Markets are a flexible and powerful tool that already exist in the areas where we are working. Markets can support efforts to raise awareness, create demand, provide access to latrine products, provide access to related services, segment the market, help you understand users, reach large amounts of people, facilitate innovation, etc.</p> <p>Each of the 6 countries from where the evidence was gathered had its own unique setting and context that needed an adapted approach and iDE used their knowledge in sanitation market development to ensure that each unique situation was addressed.</p>	inCompass, Whitten & Roy Partnership, 17 Triggers, Amplify, Engineers Without Borders, Causal Design, The Bill & Melinda Gates Foundation, Eau Vive, GRET, RFL, American Standard and governments among others.	The cutting-edge innovation and change agent emerging from this presentation is the establishment of mechanisms to understand market knowledge and think creatively about how to engage markets for improvement of scale, impact, and cost-effectiveness of your sanitation program.
Stockholm Environment Institute	Simon Okoth	Supporting sustainable sanitation through knowledge management and collaborative action within SuSanA	The persona concept came out as the new real deal for improved and effective targeting. This has been taken up as one of the key considerations for the SuSanA Strategy and Business Plan currently under development. In the next two years SuSanA will improve its catalog of "personas" by doing more research on the needs and interests of a wider range of stakeholder groups.	The project is implemented through a consortium consisting of the SuSanA Secretariat (GIZ), SEI, Ostella, Kellogg, Oxfam and WaterAid.	For SuSanA to become a more central player in the process towards meeting SDG6 through Think Tank and KM activities, SuSanA will have to: Intensify both intra/inter-sectoral collaborative partnerships to share leadership within the sector; Further strengthen SuSanA's capacities in curation and targeting of knowledge services and products; Convene critical regional and in-country meetings to help catalyze consensus on best practices and implementation programs; and Increase targeted outreach to relevant stakeholders.
Emory University	Matthew Freeman	Sustaining and Scaling School WASH+ Community Impact (SWASH+)— Evidence and partnership to inform policy in Kenya.	Sustained advocacy backed with evidence has the potential to influence policy shifts by government. The government has since passed into law the school menstrual hygiene management, making provision of sanitary pads mandatory. Engaging with the government at the early stages of research makes it easy to utilize evidence from the research to influence policy and keep the government involved even beyond the project.	The program was built and is sustained on partnerships bringing together: CARE, Emory University, the Great Lakes University of Kisumu, the Government of Kenya, and Water.org. SWASH+ is funded by the Bill & Melinda Gates Foundation, Georgetown University and Sanergy.	Based on the program outcomes and strengthened partnerships, the government of Kenya increased visibility and allocation for sanitary pads for school girls. The government is also allocating funds for school WASH operation and maintenance.

3.3 FIELD TRIPS

Field trips are a core component of the convenings. Aprajita Singh and Dean Spears designed and facilitated the preparatory and feedback sessions for the field trips, and Aprajita gave an introductory overview of the Indian and Bihar context. This year participants we encouraged to reflect on what is universally applicable in WASH and what is unique to India.

Six visits were organized, two to each of the three MEDS partners with programs in Bihar (PSI; UNICEF⁴ and World Bank), details below (table 03).

Table 3: Field Visit Details

ORGANIZATION	LOCATION	FIELD TRIP COMPONENTS
PSI	3Si Project, Mokama, PSI	A. Visit to a Cement Ring Manufacturer, Radha Enterprise; Gosain Goan Village visit, meeting with community members and Mukhiya (Village Chief) to understand demand and target location.
	3Si Project, Vidhupur, PSI	B. Visit to a Cement Ring Manufacturer Om Shanti Part Udyog; Meeting with toilet motivators linked to the Enterprise; Muthrapur village visit, meeting with community members and Mukhiya (Village Chief) to understand demand and target location. Meeting with Mr. Raman Shyam (Sahyog Development Services (SGS); MFI)
UNICEF	Nanpur Gram Panchayat, Nanpur, Sitamarhi	C. Visit to see the Swachh Sitamarhi, Swastha Sitamarhi, Sundar Sitamarhi Campaign (Clean Sitamarhi, Healthy Sitamarhi, Beautiful Sitamarhi): <ul style="list-style-type: none"> • 273 Gram Panchayats (GPs) • Population – 3,419,622 • Started in December 2015 • Phase 1: 4 GPs ▶ Phase 2: 1 sub-division (36 GPs) ▶ Phase 3: 100 GPs [Community scale up across district] • Community taking charge and control of the campaign • Innovations: Nanpur block—self-propelled; Payment mechanism, Sanitation Technology Park; Community biogas • Challenges: Space, technology, poverty, floods, ...
	Pachaura Gram Panchayat, Harnaut, Nalanda	D. Visit to see the Nirmal Nalanda Campaign <ul style="list-style-type: none"> • 249 Gram Panchayats; • Population – 2,872,523 • Comprehensive start in March 2016; one block ODF • Initial focus on toilet construction; recent focus on behavior change—including the use of “Dawn Patrols” • Campaign features: Highly motivated leadership; high rate of motivator retention; State Rural Livelihoods Mission (SLRM) JEEViKA pilot • Challenges: Private players, Space constraints, poverty...
JEEViKA / The World Bank	JEEViKA, Muraul block, Muzaffarpur District	E. Visit to Muraul block (peri-urban) to understand and appreciate the roles and journey to ODF and appreciate the structure of Community Institutions and their role in sanitation. Meeting Pragatisheel JEEViKA Cluster Level Federation (CLF), Dholi, Muraul Block. Meet with the Directors of Cluster Level Federation Village visit and household visit, Sonali Village organization, WASH CRPs and Sanitation Vigilance Committee, Local Government, Block development officer.
	Chainpur village, Sampatchak Block, Patna District	F. Visit to Chainpur village to understand and appreciate the roles and journey to ODF. Meeting with block project managers, village organization, community mobiliser and Water Sanitation and Health Community Resource Persons (WASH CRPs) and Nigrani Samiti (Vigilance Committee), transect walk, household visit, Local Government.

⁴ UNICEF is a MEDS partner and grantee, but UNICEF’s WASH program in India does not receive BMGF funding.

3.3.2 Field Trips Reports

Each group was asked to report from their visits using the same format—what were the contextual factors that either presented as enablers or challenges in the Indian context compared to participants from other countries or implementation areas? What was surprising both positively (AHA) and negatively (OHO) in what they witnessed? Finally, groups were asked to bring one story back to share with the group. The field trip feedback is presented in the tables 04-09 below.

Table 4: Group A—PSI 3Si Project, Mokama

Group A—PSI	
Contextual factors	<p>Success:</p> <ul style="list-style-type: none"> • High population density • Subsidy of 12,000 Rs per latrine (pour flush single/twin pit) • Existing enterprises to build on • Strong push for sanitation via government (SBM) and local village head <p>What worked well?</p> <ul style="list-style-type: none"> • Flyer printed by entrepreneur not organization • Entrepreneur paid the salary to the motivator • Entrepreneur paid commission <p>What did not work well?</p> <ul style="list-style-type: none"> • Subsidy is only given to some communities
AHA	<p>Private enterprises motivations are towards positive outcomes</p> <ul style="list-style-type: none"> • Employment generation • Sanitation improvement for the community • Livelihood opportunities for them and their family
OHO	Pressure seems to be more external than from household perspective, there seem to be no community motivators.
Story	It is not common to share latrine in India but those that have no space to build do. Group A shared a story of a woman who accessed land to construct her own toilet.

Table 5: Group B—PSI 3Si Project, Vidhupur

Group B—PSI	
Contextual factors	<p>Success:</p> <ul style="list-style-type: none"> • Everyone had a bank account <p>Challenge:</p> <ul style="list-style-type: none"> • No loans by MFIs for non-income generating purpose <p>Comparing to other countries: In Ecuador, the dedicated MFI for sanitation (SDS) would work well; the toilet before marriage would not</p>
AHA	Dedicated MFI to sanitation—specifically designed for sanitation products and peculiarities. In the sector we have tried to retrofit sanitation loans into existing MFI's, which has proved difficult as they are not appropriate to purpose.
OHO	12,000-rupee incentive does not matter. People build toilets for themselves not for the incentive itself. Subsidy in Bihar is when the whole ward is ODF.
Learning takeaways	Demand generation interventions need to be intentionally designed to match supply side interventions
Story	<p>Group B shared a story of Raman Singh—Founder of Sahyog Development Services a dedicated MFI for sanitation products.</p> <p>Initial stages Raman was dubious, but he has now disbursed over 3000 loans and anticipates business growth. He still has 95.9% repayment. His biggest challenge is accessing sufficient capital to generate business. Limitations of accessing capital to fund non-income generating loans. Institutional support worked against him (i.e. the government incentive wasn't paid).</p> <p>This MFI is dedicated to sanitation and started from scratch—can we replicate this?</p>



MEDS participants meeting with community members and Mukhiya (Village Chief) to understand demand and target location of the 3ie PSI intervention.

Table 6: Group C—UNICEF Nanpur Gram Panchayat

Group C—UNICEF	
Contextual factors	<p>Success:</p> <ul style="list-style-type: none"> • Swachh Bharat Mission • Talented motivators • Strong leadership <p>Challenge:</p> <ul style="list-style-type: none"> • 85% ODF • Men’s perspective of toilets as women’s business
AHA	<p>Random inspection was positive</p> <p>Geotagging (if it worked)</p> <p>Swachh Bharat Mission knowledge</p> <p>Street play</p> <p>Is there a link between alcohol ban and ODF progress?</p> <p>Disruption as opportunity?</p>
OHO	<p>Technology questions, what are these toilets</p> <p>Naming and shaming of open defecators (painting names on walls like criminals—cross a human rights line).</p>
Learning takeaways	<p>CLTS methods are nuanced, time intensive, individual connections</p> <p>What actually makes a difference?</p> <p>Do sanctions work? Does funding?</p> <p>Transaction costs are high</p>



MEDS participants met with women’s self-help groups, an incredible source of social capital which made it easier for the women to organize themselves and talk about behavior change.

Table 7: Group D—UNICEF Pachaura Gram Panchayat

Group D—UNICEF	
Contextual factors	<p>Fairly prosperous households in village</p> <p>The value of existing social capital (i.e. women’s self-help groups) which made it easier for the women to organize themselves and talk about behavior change.</p>
AHA	<p>They weren’t telling us there were latrines for everyone; they weren’t telling us everyone was using them.</p> <p>One woman and husband built a latrine on their own without waiting for a trained mason</p> <p>People had answers about a timeline for emptying (X number of years, not months)</p> <p>Motivators knew their toilet technology</p> <p>Different latrine designs for tight spaces (Twin pit design (pits not placed on either side of pit); Latrine on roof tops)</p>
OHO	<p>The ability of motivators to integrate with community within a limited timeframe (3 months) and at 1 motivator per 200 households</p> <p>The potential complex processes around distributing subsidies through microfinance schemes (NGO or village council)</p> <p>Distance between water point and latrine was often less than 10m apart</p> <p>Covering pits with bricks and concrete (as if they were not thinking of emptying)</p> <p>Lack of attention to handwashing</p> <p>Old man/powerful villager blows whistle when he witnesses open defecation (maybe?); this may lead to conflicts</p>
Learning Takeaways	<ul style="list-style-type: none"> • The value and power of the women’s self-help groups and mobilization through the Rural Livelihoods Program. • The critical importance of buy-in from district administration (with whom we met) to close the gap between top-down (SB) and bottom-up (CLTS)
Story	<p>Group C shared a story of a SBM Fellow—a female masters student from Kerala. She was recruited by the Ministry of Drinking Water and Sanitation as part of a SBM scheme to recruit young professionals and put them close to the ground. She considers herself answerable to Ministry itself.</p>

Table 8: JEEViKA / The World Bank—Muraul block, Muzaffarpur District (peri-urban)

Group E—JEEViKA (peri-urban)	
Contextual factors	<p>Elements of success:</p> <ul style="list-style-type: none"> • Women’s SHGs • JEEViKA team earned the community trust <p>Challenges for context</p> <ul style="list-style-type: none"> • Socio-cultural norms and beliefs for example animal feces is not dangerous • Despite the relative wealth the main motivator was subsidy • Chasing metrics to sign off on government targets
AHA	The SHG, sanitation works well with women as agents of change
OHO	<p>“What is your role?” “I am the one who inspires people”</p> <p>“What would you do with the money if you were paid?”</p> <p>“I would give it to my husband”</p>
Learning Takeaways	ODF ≠ public health and clean environment
Story	Group E shared a story of <i>The Day of the Jackal</i> : Song of self-help group (SHG), talks about all the activities that the SHG does. The woman is a volunteer to sensitizing to stop people OD. She gets abuse, chased, threatened her hair would get pulled out and stomach punched in. So, she turned it into a song, made experience as lyrics. She then walks through the streets singing this song—singing <i>I am telling people of OD, and people shout abuse, but I am continuing to sing my song. Continuing in the face of adversity</i> . There is a saying that women hold up half the sky, in this group they felt that women held up more than half the sky.

Table 9: JEEViKA / The World Bank - Chainpur village, Sampatchak Block, Patna District (rural)

Group F - JEEViKA (rural)	
Contextual factors	<p>Elements of success:</p> <ul style="list-style-type: none"> • Multiple levels of the JEEViKA structure all working well and working together—local leaders, ward members, CBO, SHG, persuasion of the wives to the husbands. • JEEViKA is a wider poverty alleviation program but in this district toilet and sanitation have been prioritized. • Good example of SHG working well • Dedicated professional team at all levels • Social cohesion • Shortages of water is not a problem in Bihar but Government policies on other sectors (mining) may impact water availability elsewhere and disrupt these sanitation activities. change priorities. <p>Challenges for context</p> <ul style="list-style-type: none"> • Socio-cultural norms and beliefs in Bihar re women, open defecation, purity.
AHA	The whole experience—witnessing it working at multiple levels: local government leader engaged and fluently articulating challenges and successes; engagement of CBOs; well established SHG; women’s empowerment; toilets being built (and used?)
OHO	The level of support and dedicated resources that this village receives to make it a success across all levels may not be replicable elsewhere.
Learning Takeaways	Women can be a powerful social change agent
Story	Group F shared a story of Uma, Uma had a toilet at her family home, but her in-laws did not. She tried unsuccessfully to convince her in-laws to build a toilet in her married home. Finally, she saved from the household allowance her husband gave her and accessed a loan through the SHG to build her own toilet. Another woman shared a similar story that she built a toilet to welcome her daughter in law when she joined the family. Similar narratives to the 2017 film <i>Toilet—a Love Story</i> .



MEDS participants met with the women of Sonali Village Muraul block, Muzaffarpur District



MEDS participants met with the women of Chainpur village to understand and appreciate the roles and journey to ODF

3.3.3 Overall reflections of the field visits

- Women can be powerful agents of social change
- What actually makes a difference? Motivators? administrator and priority at district level? women harassing husbands? legal sanctions? No toilet, no bride?
- Latent demand—demand generated by interventions needs to be matched by supply
- ODF does not equal public health and change, especially in small town areas where FS and solid waste are big problems
- Pressure from the top and grassroot mobilization is big enough to meet in the middle. The group witnessed some evidence of engaged local government.
- The versions of CLTS that are shared internationally are often whitewashed with sweeping generalizations, what the group witnessed was more nuanced and tailored.

3.4 SPECIAL REPORTS

The Special Reports sessions are when selected grantees give an in-depth presentation on a subject that is of interest and relevance to all grantees. These presentations are typically based on results from research done as a standalone effort, or as part of a larger service delivery implementation program. Presenters are encouraged to include any practical implications of emerging evidence (“How should this new evidence influence program design?”).

Molly Lipscomb and Barbara Evans moderated the two sessions of six special reports, which were as follows:

3.4.1 Tom Classen: Gram Vikas Evaluation

Tom Clasen’s special report presented the findings of the Gram Vikas evaluation of a combined household-level piped water and sanitation intervention in rural Odisha, India. The evaluation measured impact on diarrheal diseases, respiratory infection, soil-transmitted helminth infection, and undernutrition. This was a matched cohort study, looking at interventions that were already in place. While the results show substantial increases in sanitation access and use and access to improved water in the intervention areas, there was little or no effect on the measures of environmental fecal contamination, and no effect on diarrhea or respiratory infection. There was a large effect on stunting and a decrease in STH infections. Importantly the magnitude of the reduction in stunting is very consistent with the existing evidence on the relationship between change in open defecation and change in stunting. Finally, there was no effect on women’s empowerment and a reduction in women’s mobility attributable to reduced time spent going for defecation and for fetching water. This research gives rise to the need for better understanding of environmental hazard exposures in the household and mechanisms through which these effects may occur.

3.4.2 Lilian Lehman: IDinsight and UNICEF Learning Partnership

Lilian Lehman presented on the IDinsight UNICEF learning partnership. IDinsight teams were embedded in two UNICEF country offices to support UNICEF WASH programs to generate and use rigorous evidence to inform decisions on design and scale-up of their interventions. In Kenya UNICEF was interested in finding out how to incorporate nutrition messages into sanitation programming: could it be done? Was it feasible? Would it show an impact? And in The Philippines UNICEF wanted to inform modifications of a sanitation subsidy program to improve access. Lessons learnt from this partnership include:

- Embeddedness is central to understanding the program and identifying evidence needs / questions not immediately obvious
- Capacity building is mutually beneficial, allows evaluation team to identify needs and focuses on implementation team “mind-set shift”
- Longer time-lines (~2.5 years min.) for integration and alignment with program cycle, esp. for question sourcing and follow-up
- A suite of evaluation methodologies should be considered, as not all decision-relevant questions in need of better evidence lend themselves to an impact evaluation
- Alignment of key stakeholders and funding from beginning is critical for follow-up and scaling

3.4.3 Aiden Cronin: UNICEF Support to the Indonesian Sanitation Program

Aiden Cronin presented on UNICEF’s support to the Indonesia government to accelerate the national sanitation program (building on existing work, technical capacity support, strengthen the enabling environment). Using a matrix UNICEF could track the capacity across WASH programming approaches and governance functions. Key take homes from Aiden’s presentation:

- The heavy lifting is at the start—WASH work begins with ODF, but there are still many issues re. water safety.
- Track the change agents—who drives change at each stage in the project?
- No subsidy does not mean a free program—one third of the budget went on HR capacity, funding HR requirements is a significant chunk to make things work.
- Enabling environment (structural; institutional; governance) if any one of these is constrained then the program is not as effective
- Ensure the targets being tracked are accurate (coverage vs. ODF). In Indonesia’s case, UNICEF convinced the government to watch ODF figures instead of sanitation

access as an indicator of real progress and this helped mobilize new funding at the right time.

- No one size fits all (but umbrella guidance is needed to give funding and priority setting)

3.4.4 Neeta Goel: 3ie Promoting Latrine Use in Rural India

Neeta Goel presented on 3ie’s Promoting Latrine Use in Rural India grant program which aims to generate evidence on low-cost behavior change interventions to reduce open defecation in India. Neeta explained the funding window and proposals that have been selected for full trials in approaching latrine use promotion with rigor and a theory of behavior science. There is no silver bullet approach that promotes latrine use (CLTS, mass media campaigns, theatre) but 3ie are applying the rigor and theory of behavioral science, with counterfactual evidence, to improve the accuracy of data on latrine use and inform policy.



3.4.5 Molly Lipscomb: Smart/Targeted Subsidies for Take-Up Of Mechanized Desludging in Ouagadougou

Molly Lipscomb presented her results on a study on how subsidies encouraged households to adopt mechanized on-site pit / septic tank emptying in Ouagadougou. Through a targeted subsidy approach the study was able to minimize the budget necessary by targeting the poorest households for subsidies, include the wealthy households in the market and charge them higher rates and instigate increase competition to lower procurement costs. The research contributes to the set of evidence-based interventions that cities can use, with limited budgets, to improve the effectiveness and equity (i.e. pro-poor impact) of their programs.

3.4.6 Social Incentives for take-up of hygienic latrines in Bangladesh

Raymond Guiteras presented on a randomized control trial (RCT) study in North West Bangladesh with two streams of treatments: rewards (monetary and non-monetary) and commitment pledges to install and use a hygienic latrine. The commitments could either be made publicly, at a village gathering, or privately, made by the household directly to the facilitator without others witnessing it. The findings showed that for the reward treatment, monetary reward (USD 3.5-7) was the most successful; for the commitment, the public commitment was moderately successful, the private pledge had little effect. There were also some positive externalities i.e. if your peers received subsidies you were more likely to receive a subsidy.

Table 10: Spotlight Presentations

Name	Title	One Pager	ppt
Barbara Evans, University of Leeds	<p>Urban Sanitation—It’s Complicated Barbara presented on the complexities of guaranteeing reliable and affordable sanitation services while also managing the environmental challenges of rapidly growing cities.</p>		
Chris Nicoletti, IDE	<p>Leveraging Targeted Subsidies to Increase Sanitation Coverage Chris presented evidence of a RCT in Cambodia regarding the impact and cost-effectiveness of well-targeted subsidies on latrine uptake among lower-income households in a market-based approach.</p>		
Jonny Crocker University of Washington	<p>Research into Practice Jonny presented on UNC and Plan International’s first-hand experience overcoming the challenges that come with conducting a research-implementation partnership.</p>		
Angela Lagat	<p>The Trojan Horse: Menstrual Hygiene Management Angela presented ZanaAfrica’s health magazine (Nia Teen) and reproductive health and life skills curriculum (Nia Yetu) demonstrating how communications around menstrual hygiene management can offer a ‘trojan horse’ mechanism to help adolescent girls navigate wider puberty challenges positively and safely.</p>		
Dean Spears r.i.c.e.	<p>Where India Goes—Abandoned Toilets, Stunted Development, and the Costs of Caste Dean introduced his and Diane Coffey’s book ‘Where India Goes—Abandoned Toilets, Stunted Development, and the Costs of Caste’ which demonstrates India’s exceptional open defecation is not the result of poverty. It is an enduring consequence of the caste system, untouchability, and ritual purity</p>		
Erik Harvey WaterAid	<p>Tribulations and Triumphs: Lessons from six years in Nigeria—Blending Research and Implementation/An NGO and Sanitation Marketing Erik presented WaterAid’s experience of the Sustainable Total Sanitation project and the unique learning opportunities the organic project design allowed including learnings and pitfalls of blending research and implementation and the role and scope of NGO’s sanitation marketing for sanitation service delivery.</p>		
Geoff Revell/ Sophy Ny WaterSHED	<p>Civic Champions Geoff and Sophy put forward the idea that improved local leadership will not only strengthen any sanitation intervention, but that true sustainability depends on it. They presented the story of Ms. Samy, an elected official in rural Cambodia who participated in WaterSHED’s leadership development program for local government. She was initially inactive as a councilor, but through an iterative process of participatory learning, peer mentorship, and coaching, became highly engaged and a very potent force for sanitation—leading her community to ODF within 9 months. The program, Civic Champions, has been shown to significantly accelerate access to sanitation by fostering leadership behaviors of government officials, and may be an important way to boost sustainability of sanitation outcomes.</p>		
Tom Clasen Emory	<p>The Forthcoming WHO Guidelines on Sanitation and Health: Developing the Evidence Base Tom summarized the development of the WHO’s first ever Guidelines on Sanitation and Health that are expected to be released in late 2018. Focusing particularly on the evidence base for the guidelines which was led by Emory University.</p>		
Ingeborg Krukkert IRC	<p>Monitoring for Sustainability = Monitoring Systems Change Ingeborg presented on the hugely ambitious challenge of the SDG’s—sustainability for everyone, forever, and its implications for monitoring. To monitor for sustainability, we must go beyond monitoring toilets, we even must go beyond monitoring services, we must monitor change in the WASH system.</p>		

3.5 SPOTLIGHT PRESENTATIONS

The Spotlight Presentations, introduced to the convening series in 2016, are short presentations inspired by the ‘Ted Talk’ format. These are aimed at stimulating thought and conversation about new ideas (particularly those influencing programming quality and potential for reaching scale). There were nine presentations, several given twice, during six separate sessions in three rooms. Presenters gave a 60 second pitch to all participants who then selected which talk to attend, so there was some competition. Participant facilitators Hanh Nguyen, Anthony Waterkeyn and Dianne Coffey each moderated a room for these spotlight sessions. The one pager and PowerPoint slides for each presentation are found using the icons in the table 10 on page 20.

3.6 THEMATIC DISCUSSIONS

One of the knowledge sharing modes that we wanted to encourage in the convening, as in previous years, were deeper conversations, providing reflective space to share experience and opinions publicly, while involving as many participants as possible. Two themes were targeted for these deeper conversations: the SDG’s and Appropriate Research Methods. These sessions are summarized below.

3.6.1 Discussion 1: The SDGs—Fishbowl discussion

The first discussion session was moderated by participant facilitator Martin Gambrill, using the fishbowl technique where five discussants sit in a circle (aka the ‘fishbowl’) while the other participants observe from the outside. Any participant may join the discussion by tapping one of the fishbowl discussants on the shoulder, thus requesting their seat in the fishbowl.

Jan Willem seeded the debate with the following statement and questions:

The change in ambition from the MDG to SDG era is real—both in terms of universality and the numbers of people we must reach but also in addressing the next level of service of ‘safely managed sanitation’. Under SDG 6.2 we have renamed the categories and added an extra step on the sanitation ladder:

- OD (same)
- Unimproved (same)
- Limited service (used to be shared)
- Basic service (used to be improved)
- Safely managed service (new)

The Implication of the new step is the need to consider the service chain (emptying, transport, treatment, reuse/disposal)

Universality and the safely managed requirement means a real change in ambition (even if it is not true that a country must pass through basic before it gets to safely managed: pit latrine not emptied is safely managed for example). But at the same time, existing inequalities (rich-poor, urban-rural) continue to exist.

If we look at the JMP baseline survey published in June 2017, we can see that the challenges are also real—the existing inequalities (rich-poor, urban-rural) continue to exist and we are not yet managing to eliminate OD fast enough, or even progress to basic services fast enough. The 2017 baseline stated that only 1 in 10 countries that do not already have 95% coverage will reach basic coverage by 2030. There are still almost 900 million practising OD, 90% of whom are rural. 2/3rd of those are in Asia and in Sub-Saharan Africa the population practicing OD is increasing.



Fishbowl discussion on the SDGs

There is a second problem of data. We do not have enough data at country level to reliably report on on safely managed. Much of the data that does exist is from high income countries or Latin America (especially related to the “wastewater treated” (a.k.a. sewer) category). There is no data included in the 2017 baseline from South Asia. There are two countries in Africa and no regional estimates for Sub-Saharan Africa.

This gives rise to 2 questions:

- **What is the risk that countries will disengage from the sanitation SDG targets and required investments given the difficulty in reporting and the efforts required to bring standards up?**
 - o What are implications of “safely managed” for the MEDS portfolio and partner investments going forward?
 - o What can MEDS partners do to support countries in filling the data gaps?
- **Are we setting the bar too high by aiming for safely managed services that we are placing meaningful progress out of reach?**
 - o Should countries invest in universal basic, or limited safely managed, or both?

The conversation followed six key areas, which are summarized below:

The complexity and framing of the SDG 6—how to use and interpret the SDG targets

- It is not necessarily helpful to think in terms of *either getting people onto the ladder or up the ladder*. The overall aim is to move the distribution towards the right, meaning countries where OD remains a high priority need to focus on the bottom of the ladder, whereas for others, it may be more meaningful to focus further up. To achieve safely managed services, we will always need to achieve basic services.
- **Safely managed means getting shit away from the people and keeping it away.** Note on-site systems that allow for safe disposal in situ (e.g. a twin pit latrine in rural India) is a cost effective appropriate technology that could take you from the bottom of the ladder to the top in one simple intervention. The signal needs to be very clear it is about any system that safely manages—no need to get caught in complexity. We need to get the right metrics to promote simple and cost-effective solutions and market them well to avoid opening the door to costlier technologically heavy options.

Indicators, Monitoring and Definitions

- The JMP evolved a lot over the MDGs, it was not set in stone from the start. The fact that we do not know exactly how to measure now gives us the opportunity to determine what the indicators mean.
- SDG 6.3 is about % of wastewater safely treated and re-used, the sanitation sector needs to engage with this to ensure all

the waste is managed in an effective way, not just sewage. The JMP is now looking at all the generators of wastewater which includes all improved plus shared sanitation systems. However, we must guard against perverse incentives in the reporting as the data that is available is for sewers in developed countries and the other waste streams are much harder to capture.

- Moving beyond the ODF indicator—we have successfully institutionalized ODF as an indicator with governments, communities, practitioners but there are growing amounts of info regarding slippage and health impacts to know that ODF alone is not sufficient BUT how to manage the risk of new indicators manifesting as competing priorities or confusion of focus. Need to work with our stakeholders on moving the sanitation distribution right; targeting the right problem appropriate for context.
- What gets monitored gets done, especially in the climate of declining ODA, implementers do what they get paid to do. There has been much discussion about commercializing rural FSM but maybe it is just as simple as an alternating twin pit, so what for a practitioner is their indicator for a safely managed twin pit?

National targets, discussions and implications for working with governments and in-country partners?

- Disaggregated basic indicators at country level are potentially more meaningful than integrated global indicators.
- For India, the new SDG ladder helps articulate the vision, recognizes the scale of the problem and plan for on-site sanitation that can be safely managed. There is a momentum around safely managed, increasing components of FSM (**Note the National FSM policy 2017**).
- In Vietnam, it is not as optimistic—FSM is not well understood or thought through. There is no clear institutional mandate for FSM or regulatory framework. The local government would be the most influential actor, but has no knowledge of or capacity for FSM.
- Indonesia has taken a proactive approach, they have set their own targets and are tracking those, including ODF target. There has been national level ownership of developing SDG 6 indicators and monitoring with support of UNICEF/WHO. The SDG results showed a dramatic drop from MDG to SDG notably for water (water safety at HH level). These were a huge shock to government “like going back to square one”.
- Role of international sector: to maintain pressure on the public health imperative rather than simply meeting targets; offer clear definitions on steps on the ladder and appropriate technology.
- Governments being averse to the new reporting framework demonstrates they care.

Implications for policy and advocacy

- The international targets are important for non-governmental actors to lobby and put pressure. The SDGs are a powerful thing, they influence policy and practice. It really matters that we had a MDG target for sanitation. It really matters now that we have brought in ‘safely managed.’
- Not to overlook the 829 million people who are still OD. Do we know who they are and how to reach them? SDG 6.2 is eradicating OD by 2030, it is great to hear talk of the higher service ladders, but do we have the mechanisms for reaching these 829 million?
- Governments really care what is said about progress. 10 years from now we will have a better idea how to manage and report them with improved tools.
- Sanitation alone does not trigger economic change, but no country has ever gone through its economic transformation without getting on top of its sanitation. There is confidence on an empirical level that there is a connection between those 2 things.

Implementation

- Capacity. Do we have the institutions and capacity to manage the SDGs and specifically what is required by a utility? Do utilities have the capacity to manage fecal sludge management (FSM) and/or decide when an autonomous system is more cost effective and easier to manage than a service-based FSM approach? How to engage other institutions beyond the utilities to get the full sanitation service chain to work with appropriate solutions?
- Finance. How do we finance all these activities implicated in ‘safely managed sanitation’? Neither development money, nor government money, will be sufficient. In the MDG era we tripled the amount of resources going into the sector, it is unlikely we can triple again to meet SDGs in the timeframe. We need to reach out and lever other urban actors including mayors, urban experts the financial sector. The role of the private sector is critical—and when we talk about the private sector we talk about the value chain (i.e. emptiers, composters) but it starts with the banking sector—access to financing is the no.1 problem.
- Practitioners and decision makers need clear guidance on what to work to that aligns with the monitoring framework—what does safely managed mean in different contexts and what technology is appropriate?

Learning, Evidence and Research

- SDGs influence researchers but while the ladder is a nice simple and aspirational concept, when combining indicators that are inherently distinct into a single variable, information is lost (for example as is the case for shared latrines and FSM). Researchers need to make sure that they are not only measuring and reporting SDG indicators but more explicit realities.
- There is an important gap in our evidence base on the public health case for safely managed sanitation. The WHO Disease



Do we need a randomized control trial to know that parachutes work?

Burden team are looking for more evidence on this—how do we address this? Can we define these studies carefully to build the right evidence in this area?

- Re indicators for FSM, can we learn from other sectors? i.e. Solid Waste Management Sector is 20 years ahead on measuring volumes of waste produced, what is collected by a well-managed service to a well-managed dump.
- Environmental hazards and contamination is also key for health impacts (animal waste, solid waste).
- The quality of data—need more countries covered and higher quality of data, not necessarily with an aim to inform the JMP, but to drive high quality service provision.

3.6.2 Discussion 2: What are Appropriate Research Methods for Research and Evaluation?

The second discussion session was led and facilitated by Radu Ban on the appropriate research methods for evaluation. This session aimed to explore some potentially more contentious questions relating to evaluation and programming, such as: should you invest in research and evaluation only if you can get clear results? and should donors only fund programs where there is evidence that it will demonstrate clear results and impact? Where the design of an evaluation needs to be driven by the specific uncertainty in a theory of change; do the proposed outcomes lead to the desired impact? do the proposed activities lead to the desired outcomes? what outputs need to be delivered (formative research); and, what bias affects the selection of study sites?

⁵ Smith Gordon C S, Pell Jill P. Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomized controlled trials BMJ 2003; 327 :1459

Figure 1: The Theory of Change



Radu introduced the session with the example of the tongue in cheek Smith and Pell (2003)⁵ parachute paper to illustrate that research and evaluation needs to be driven by the **specific uncertainty** in a theory of change, either:

A. Uncertainty about whether and how impact can be achieved

B. Uncertainty about what/how outputs can be delivered

Where the following questions are applicable (see figure 01):

A1. Do the proposed outcomes lead to the desired impact?

A2. Do the proposed outputs lead to the desired outcome?

B1. What outputs need to be delivered (i.e. formative research)?

B2. How can the required outputs be delivered?

To explore these questions and to weigh up the experience in the room, participants were invited to write on different colored cards: a question or challenge (pink) and an area of expertise or learning to share (yellow). Each corner of the room was designed A1, A2, B1, B2 and participants placed their cards in the relevant area. Participants then rotated around the four areas and clustered in discussion at the corner which was the most relevant to them. The session concluded with participants sharing the following general reflections:

- The most activity and majority of people clustered around A1/A2 (i.e. Uncertainty about whether and how impact can be achieved). Participants reflected that this is where the funding comes from, there are a lot of incentives around those questions and is an area where participants felt more familiar. Also, there may be assumptions that B1/B2 (i.e. what/how outputs can be delivered) is easier, but the data is not always of good quality.
- There is a lot of money being spent at B1/B2 (what/how outputs can be delivered) but little process evaluation.
- The ratio of pink cards to yellow was mostly balanced at each corner except A1 (Do the proposed outcomes lead to the desired impact?) where questions outweighed the answers. This underlines that in WASH and sanitation there are still big questions around achieving the desired outcomes but not the impact.
- Several of the participants focusing around market interventions clustered at A2 (i.e. Do the proposed outputs lead to the desired outcome?)

More details of the responses can be found [here](#).

3.7 OPEN SPACE

Encouraging participants to frame and drive the conversations is one of the key principles underpinning the MEDS (and formally BDS) convenings. Open Space is a format, also used in previous years, that fully hands over the agenda to participants for half a day. In Open Space participants propose the topics they wish to discuss, and in a market place, these are allocated a time and a place to begin a conversation. Participant facilitators Sarah Dobeavage and Ingeborg Krukkert moderated the open space session. There is no required output from open space but this year the participants came back to plenary and each group shared a summary of the conversation that took place. An overview of the open space conversations follows:

- **Rural FSM:** There are simple solutions that we can start testing, not as complicated as we might think. Issues of context but the conversation highlighted a direction forward and guidance to build from.
- **Women and girls in sanitation:** The conversation focused on the role of women in business in selling latrines and/or menstruation pads. Does women's empowerment lead to WASH outcomes or vice versa? Are there other impacts that we are not measuring?
- **Urban sanitation:** The group discussed the need for sanitation plans or not and the conversation flagged the need to connect outside the sanitation group and move towards urban sphere, influencing mayors, there is no one size fits all, across or within, cities; the challenge is more about incorporating individual solutions into a wider city plan.
- **Knowledge networks for scale in country and between districts:** the conversation focused on how this happens / or could happen. The group discussed that a lot of this does not happen purposefully unless it is integrated into project objectives and outcomes. The group spoke of identifying the change in your program that you want to see and using knowledge management (KM) to do that, importantly that the outcome is not KM per say, rather real change in sanitation outcomes that are underpinned by good KM. The conversation also touched upon the differences between evidence and research.
- **Practical evidence for good practice:** The conversation covered different understandings around the aims of research and what practitioners need including the life

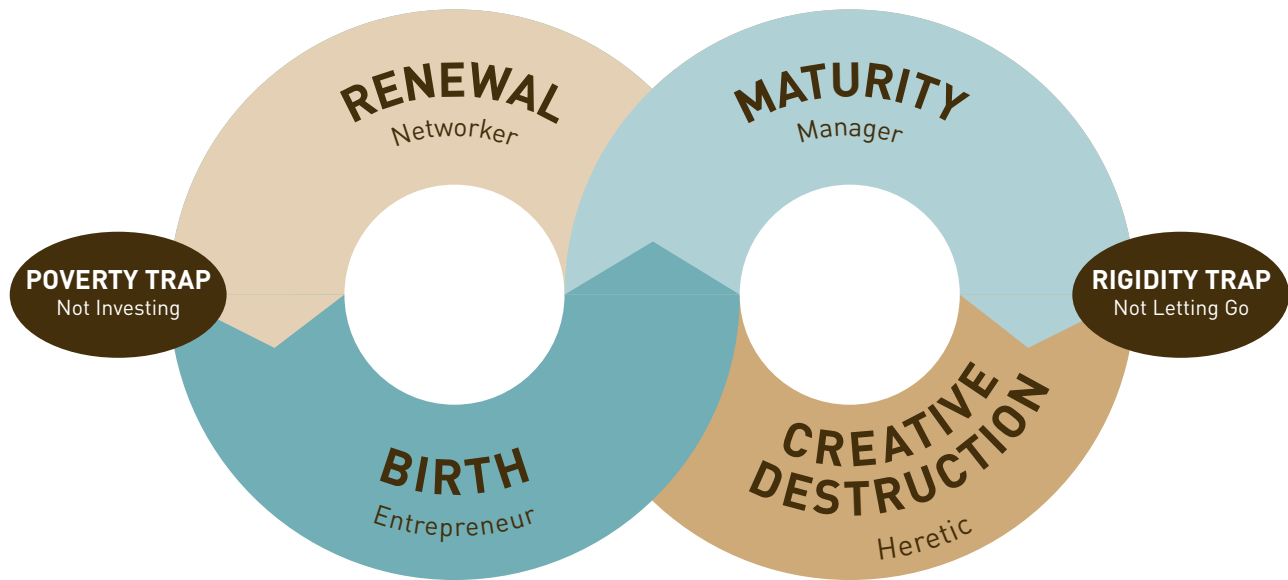
cycle of partnerships and how collaborative work happens together. The group discussed that different partnerships have different aims and different stakeholders. Programs need to design for change that you want to effect from the start and collaboration between research and practice can help this however require longer lead times to set up partnerships, paid time for reflection to understand how the partnership works; and resources to disseminate that knowledge.

- **ICT4D (Information Communication Technology for Development):** Erik and Ingeborg presented the knowledge point QA technical advisory services. How it was set up and being used. The group discussed how people act differently when we ask a question compared to participating in a discussion and there is a need to be purposeful in its use. Erik also presented a Facebook closed page in Cambodia, set up to generate discussion, which has proved very popular because of Facebook's ubiquitous use. Erik is now doing analytics of information to see what is being discussed in that group with a view that this tool will become free to use for analytics on other ICT4D platforms.
- **Role of the Champion:** The conversation focused on the incentives champions have, understanding them, being honest about them and designing them explicitly or implicitly. The group also discussed recruiting champions; leadership development; change management; performance measurement; scorecards and what we can learn across them.
- **Social processes:** This conversation focused on the barriers for uptake of sustained sanitation from the social perspective; social capital. Participatory process can work but will participatory process enhance community variables and collective behavior. Participatory processes can provoke a conflict in the community where some want to change, others don't want to, and others will wait to see what will happen. The group also discussed if these participatory processes work in urban areas where we don't find social capital? Money brings anarchy and changes the social capital and social cohesion.
- **Sanitation Subsidies:** This conversation focused on what the current knowledge was on subsidies in the sanitation sector as part of a World Bank Water review of the sector. To date little is known, and the group did not add many examples. Where are the hidden subsidies in the sanitation chain? What typology. The conclusion was we need to do far more to understand where the subsidies are and what they could be; how can we be sure we are targeting the poorest.
- **Safely managed sanitation indicator under SDG:** The conversation discussed that countries are quite familiar with the concept, but they haven't necessarily moved ahead with

the implications of what that means. We could be facing a problem of reconciliation of national targets and JMP and there is a need to move quickly to reconcile these. Also discussed was the SDG category of safely managed sanitation (safely disposed in situ) which is overshadowed by treatment and FSM, so a reminder to each other to keep that option as part of the mix (i.e. interventions could go from OD to safely managed).

- **The sanitation ladder:** this group discussed going beyond a simplistic understanding of pathways of fecal contamination; how we design policies, not only looking at OD but moving the distribution across the sanitation ladder towards the right
- **Health impact evaluation:** The conversation shared the consensus WASH is important for public health but talked about the WASH benefits and SHINE studies; neither of which demonstrated health impact. Considered the apparent contradiction between the sanitation/stunting work (r.i.c.e.) and these more recent studies. The WASH-B and SHINE findings are not necessarily inconsistent with large changes in OD leading to improvements in child growth, in high population density settings. The group then discussed how we could improve epidemiology studies. We need a better understanding on how studies are impacting on exposure and why important exposure pathways that are not being hit by the interventions as they are being done. This group needs to engage better with negative findings.
- **Results based rural sanitation at scale:** this group discussed the WB support to SBM which is output based reward using the government definitions of outcomes. Now 2019 is so near we need to focus on the next step.
- **The lives and livelihoods of manual scavengers:** this group discussed the scenario in which the progress we are seeing today in India re coverage further institutionalizes Dalits as those who deal with the removal of fecal waste. There is slow progress of emancipation of the lower caste and introducing the need for pit emptying on such a vast scale could reverse some of this progress. So, what can be done? Address the taboos? – Visuals and high-profile Mayors emptying pits? Could partners work with motivators to do pit emptying by other castes to show that it can be done? Can we work with advocacy groups of Dalits to ensure they're part of the discussion? Technology of pit emptying so no-one must go in a pit (realistic in rural setting?)
- **Sanitation Indicators:** this group discussed the different way of addressing sanitation indicators, what those indicators are and protocol, process evaluation indicators and targeting. Looking to present something next year with UNICEF.

Figure 2: The Eco-cycle



3.8 ECO-CYCLE PLANNING

The convening re-ran the Ecocycle Planning activity from 2016, moderated by Pete Cranston. Ecocycle Planning is a method devised by the team at Liberating Structures⁶ and uses a simple depiction of a natural ecocycle as a format for event participants to map and discuss where they judge their work activities map onto the eco-cycle, using four developmental phases: birth, maturity, creative destruction, and renewal (see figure 02)

3.8.2 Reflections from the Eco-cycle Exercise

- Responding to participant feedback from the previous year, the maturity phase was made larger, as this is the target stage for all projects to reach and sustain. This is where the most productive use of resources is delivering tangible and measurable benefits—and maintain that position for as long as possible, and certainly while benefits continue to accrue. However, in changing the diagram this way the creative destruction stage, inadvertently also got bigger. Whereas in practice the largest phases should be Birth and Maturity, and participants suggest the path between Creative Destruction and Renewal (i.e. the key Learning phase) should be as short as practically possible.
- Another design suggestion was to include an ‘embedded’ branch or loop at the top right of the diagram, where elements that have become embedded through maturity branch off and do not fall into the rigidity trap.

⁶ <http://www.liberatingstructures.com/31-ecocycle-planning> Adapted by Henri Lipmanowicz and Keith McCandless from professor Brenda Zimmerman (see www.change-ability.ca) and ecologists (see <http://www.resalliance.org>).



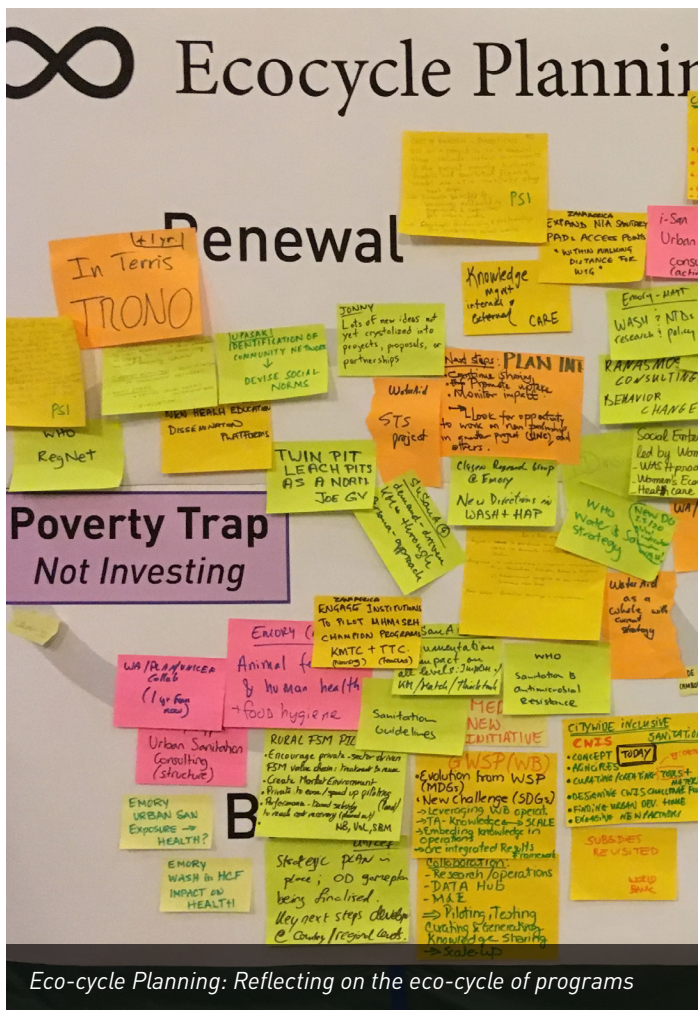
- Large organizations sit on the cycle with a tail/trail, where there is institutional change at the head office but country and national programs follow/lag. Smaller country programs take time to work around the cycle.
- Is MEDS heading towards the rigidity trap? Many of the grants are maturing and drawing conclusions, every research says more research is needed. How can we lever what we know, curate the knowledge and apply?
- One participant reflected eco-cycle also worked on an individual level: “It’s weeks like this (MEDS convening) that I challenge myself and try and trip over the rigidity trap and think how to mobilize to effect change management inside my organization.”
- It is the role of organizations like IDinsight to catalyze ideas and help programs move around the cycle.
- Compared to last year, the eco-cycle was much more heavily populated. This is partly because more participants were present but also several organizations added more than one note to reflect different elements of their programs at different stages in the cycle.
- The Birth phase was more heavily populated this year compared to 2016.

3.9 CONVENING ADDRESS BY MR. BALAMURUGAN—STATE MISSION DIRECTOR SRLM

Mr. Balamurugan, CEO cum State Mission Director of the State Rural Livelihoods Mission spoke passionately about the JEEViKA program which includes institutional capacity building; financial inclusion and livelihoods components, health and sanitation being part of the latter. Mr. Balamurugan explained that the foot soldiers of JEEViKA are the community resource persons who help set up the women’s self-help groups (SHGs). 8.4 million families in Bihar have been mobilized through 1 million SHGs as part of JEEViKA. Empowering women through these self-help groups is particularly transformational in Bihar as traditionally women did not come out of the family home, but slowly it has worked and is recognized as a major success.

Mr. Balamurugan expressed confidence in meeting the SBM 2019 OD targets but explained his approach to sustainability is to strive for emotionally engaged and committed staff that believe in the approach and not simply about reaching numbers and targets. His view is very much that sustainability is only feasible with this type of commitment. Sustainability beyond 2019 is a key aspect of program design, the JEEViKA program has their own internal structure for SBM within the wider structure with continuity and sustainability beyond 2019 in mind.

The MEDS participants expressed to Mr. Balamurugan their very positive impressions of the JEEViKA field visits and motivation of women in the SHGs “There is a saying that women hold up half the sky, but it seemed in Bihar the women were holding up more than half!”



4. Reflection and Learning

A learning agenda is a key part of the MEDS portfolio and has evolved over the MEDS/BDS convening series. Convenings are designed to maximize space for reflection and be explicit and intentional in participants' learning both within and across grantees. Techniques have evolved over the convenings, including the Objective, Reflective, Interpretive and Decisional (ORID) methods of focused conversation⁷ and allocating time for end-of-day reflection. New for the 2017 convening was a focus on specific themes which were reflected on both during and post the convening. In this section the report presents an overview of the reflections that were shared during the convening.

4.1 END OF DAY REFLECTIONS

End of day reflections have become an integral part of this learning agenda, providing a space and impetus for participants to consider and discuss ideas and themes that had emerged during the day. This year Jan Willem facilitated the end of day reflection on Day One and participant facilitators (Eric Harvey and Christine Moe) led 30-minute reflection sessions at the end of Day Three and Four. Pippa Scott and the thematic commentators Aprajita Singh; Dean Spears Maria Angelica Sotomayor; Kate Medlicott and Oliver Cumming led the closing reflection session on Day Five. Recurrent topics that emerged throughout those sessions revolved around:

- Getting on to or up the sanitation ladder is not exclusive, progress (depending on starting point) is an overall move of the distribution along the sanitation ladder to the right.
- Interpreting the SDGs for different audiences: International level targets are useful for advocacy and pressure; disaggregated basic indicators at country level are likely more meaningful at national level; rather than use the SDGs researchers need to identify what is the correct indicator and then determine how and where it informs the SDGs. Governments, decision makers and practitioners need practical outputs, understanding what they need to monitor to see improvements and sensible interpretations of the SDG and safely managed targets. They need to understand the full scope of sanitation options and what they cost.
- Environmental Health: How much can be achieved in terms of health impact with OD alone given the many other environmental hazards (animal feces) in the rural living environment?

4.2 REFLECTIONS ON KEY THEMES

Five Thematic Commentators were requested to observe the convening through the lens of their theme and provide a reflection at the end of the week of what they witnessed.

4.2.1 Reflections on Theme 1: The SDGs

Kate Medlicott and Maria Angelica Sotomayor reflected on the SDGs. Their observations on these themes collected throughout the convening are noted below:

The 2 key SDG targets relevant for the MEDS portfolio are 6.2 and 6.3

6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1: Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water
6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1: Proportion of wastewater safely treated

Whilst the scope of the SDGs presents a new challenge for the sector, it also presents a golden opportunity for raising the aspirations, sourcing new funding and new partners both within and outside the WASH sector.

As the SDG era gets underway, we are reminded that at the beginning of the MDG era there were many questions on the right indicators and measurement approaches at the time, and over the years the MDGs have been hugely instrumental in unifying efforts and rallying the sector. We are reminded that these indicators are not set in stone and there is a sub-group working on the methodology, indicators and their implementation. What was evident and encouraging from

⁷ Stanfield, Brian (2000) *The Art of Focused Conversation: 100 Ways to Access Group Wisdom in the Workplace*, New Society Publishers, Gabriola Island, Canada.



Encouraging participants to frame and drive the conversations is one of the key principles underpinning the MEDS convenings.

the MEDS'17 convening was the willingness to collaborate, share knowledge, use whatever tools, means and projects to collaborate and contribute to this knowledge base.

In terms of the SDG 6.1. and 6.2 indicator themselves, the JMP baseline was presented in July 2017. It focuses on few countries (mostly on countries in Latin America, and a couple in Africa, none from South Asia) but there is a definition and a methodology that are agreed and well accepted by most, and for good or for bad, provide a draft baseline. In comparison to some of the other indicators in SDG6 (e.g. 6.3-6.6), this is substantial progress.

It is important to be practical on how we monitor these indicators. For instance, it is key to take the “ladder” for getting a sense of the “distribution” of the population in terms of access to sanitation services so we can aspire to moving the distribution towards to the right. Also, depending the level of development, countries should be focusing on different segments in the ladder. Countries that are in the lower end should be focusing in OD. For most of the countries, the old MDG standard is still relevant and binding. They should be focusing on these while they are start transition to aiming at and measuring higher level indicators (such as safely managed sanitation); When we are moving higher up in the ladder we should also start paying more attention to SDG6.3 that focuses in halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally. In addition to the country level estimates, it will be key to

think about as disaggregated as possible estimates, so they will help for better planning, local monitoring, and why not, peer pressure in achieving the SDGs

Moving forward, there are some other issues that we should keep in mind:

- How we help our country clients to better communicate and strategize the SDGs—there will be a lot of support needed;
- (Statistical) Local capacity is quite limited in many of the countries. We should aim for a coalition on well crafted (and coordinated) TAs for supporting national statistical offices (requiring support outside of the WASH sector);
- Funding these activities remains a challenge. The role of the donors and NGOs should be key on this. Perhaps we should be thinking about an MoU on how we “collectively” support the progress towards to the SDGs on both the support of the interventions as well as the monitoring capabilities.
- We need to think more seriously about the urban sanitation. There was a small focus on this at this MEDS convening but the magnitude of the challenge is great, whilst recognizing OD remains the core focus in India.
- Change in thinking from facilities to services covering the full sanitation chain (including treatment and reuse under SDG 6.3): For many MEDS partners this is not new or challenging and the SDGs simply affirms the service delivery models addressing urban services and FSM. Some business as usual approaches remain very relevant in the SDG era. Especially rural sanitation programs delivering safe disposal in situ.



A Latrine and Owner in Chainpur Village

- When finishing MDGs (ODF programs) the SDG challenges us to plan with the end in mind by ensuring that ODF solutions do not lock us in to solutions that do not fit with a sustainable service chains for SMS.
- Interlinkages with other SDGs (health, poverty, education)—much is made of the contribution of SDG6 to other SDGs, but evidence presented at this convening is discouraging. The SDGs challenge us to strengthen the evidence not just on what but how sanitation interventions impact on exposure and health to drive evidence-based improvements.
- Data to track progress needs strengthening of regulators and services providers—this serves the national and global monitoring objectives but more importantly builds the institutions for sustainable service delivery.
- Ambition and scale—The 2017 GLAAS report shows that national and donor assistance is not sufficient to meet existing targets let alone the higher ambition of the SDGs. Progress will require new partnerships and more innovative and efficient models.

As a final thought, as is mentioned in the Poor Economics book, the three main reasons policies may not work, and aid is not always effective can be attributed to the “three I’s”—Ideology, Ignorance and Inertia. But there’s no reason to lose hope. Development is about disruptions of the status quo. Incremental and real changes can be made. We need to think and work differently if gaps in water supply and sanitation services are going to be closed. Use the SDGs as a compass to think and work differently a) to better coordinate interventions across sectors; b) to better target investments; and c) to bridge the gap between policy and implementation.

4.2.2 Reflections on Theme 2 The research/evaluation tool for the job

Oliver Cumming reflected on the question at the core of MEDS—appropriate research methods in practice—the divisions between researchers and practitioners—characterized as “pointy heads” vs “muddy boots”—were less pronounced than possibly anticipated. To coin an expression used often by John Briscoe, participants tended more towards the ideal of “thinking practitioners” or, in the case of the researchers, perhaps, “grounded thinkers”. A key point of discussion during the workshop, regarding research, was the negative results of the WASH-B and SHINE studies—very large epidemiological trials of the impact of WASH intervention on various child health and growth outcomes—which have recently been released and, in the case of WASH-B, will be published imminently. Against this backdrop, three clear—and mostly shared—conclusions emerged.

Firstly, that the results of these large studies present an exciting opportunity for sectoral reflection. The findings raise many important questions about how we do WASH research, for example better assessments of changes in environmental exposure, but also and, more fundamentally, how we can deliver more effective interventions with the potential to improve public health.

Secondly, there was much discussion and broad agreement on the importance of contextualizing study findings. Rigorous research plays a critical role in supporting better policy and practice but all research findings, however rigorous the methods may be, require contextual information for effective uptake. This context may be characterizing the study setting by, for example, accounting for population density, or it may be describing atypical political or policy factors that impeded the standard delivery of an evaluated intervention.

Lastly, there was a reflection that we are now in the SDG era and need to look beyond the scope of the MDG target in terms of the challenge of achieving universal coverage and the much higher service level of access to ‘safely managed’ water and sanitation. As national policy-makers, and the international community, respond to the ambitious targets under SDG 6, so too the

research community must begin to ask different questions and generate an evidence base to support effective and efficient investments.

4.2.3 Reflections on Theme 3: Spotlight on India

Dean Spears and Aprajita Singh reflected on what of the week was universally applicable to WASH and what was unique to India.

The context in India is unique both in terms of the scale of the problem and the complexities around sanitation as an issue which is influenced by political, social, religious and cultural underpinnings of the region. However, the universal barriers associated with access and use of latrines—finance, land, supply chain are relevant also for the Indian context.

Firstly, the Indian Government is currently paying a lot of attention to rural sanitation including coverage numbers. This has its benefits and its costs. In a positive light, this leadership and call to action from the highest political power—Prime Minister Modi has made sanitation everyone’s business. Women are playing a key role in driving this change at the grass root level as sanitation champions, which was evident from the JEEViKA and UNICEF trips. However, obscurity and misunderstanding around the government incentives for building a toilet have created market distortions. Furthermore, with that level of political interest there is a balance between the need to report, and to report the right things. Practitioners are warning of simply chasing targets resulting in poor quality of construction, over reporting and potentially major slippage issues, potentially generating vast numbers of sub-standard toilets in 2019 that may have little/negative health impacts. MEDS, as a group, need to continue to consider how to mitigate these risks and how to leverage the political prioritization.

A second issue that is very important in India is that open defecation (OD) is still very much the challenge in India, which is not the case in other places—this has consequences on the focus and scope of research. We need to take care about measuring effects of OD and slippage as well as demonstrating health impacts; we need to make sure we are measuring the right things.

Finally, a very important feature for India is linked to FSM, there are FS challenges everywhere but in India these are compounded and framed by the caste system and the ongoing legacy of manual scavenging and untouchability. The very unique issues of caste and religion in India attach notions of impurity to human feces and having it in or near the house. This has huge implications for the future as the toilets that are being built now fill up but also it has implications in the present day as it affects people’s decisions regarding using (i.e. filling) the toilet. Advocates for Dalit rights also caution against how the advent of FSM on a large scale in India could further institutionalize their social status. Contrarily, animal faces are

not afforded the same level of impurity and in rural areas dung fuel cakes can often found in the living environment. These practices may counter any environmental health benefits of good sanitation in the immediate living environment.

4.3 NEW VANTAGE POINTS

The convening concluded with participants sharing new vantage points the MEDS 2017 convening had given them and how these might influence their thoughts and work. Responses were grouped into Doing the Right Things (practice-related) and Asking the Right Questions (research-related), and those which were specific to India or globally applicable. A synthesis of the responses is presented here.

4.3.1 Are we doing the right things?

For India, the new vantage points for practice focused primarily around India’s challenge of moving its focus from OD to achieving safely managed sanitation. In recent years the primary sanitation focus in India has been on behavior change for stopping open defecation and creating demand for latrines. MEDS participants welcomed the positive evidence shared this year around behavior change (e.g. Raymond Guiteras of the University of Maryland and Hans Mosler of eawag). Hardware has been a secondary concern however, now faced with the challenge of ensuring fecal waste is safely managed, questions arose around what safely managed actually means in practice. During the SDG discussion we were reminded, particularly for rural areas, that safely managed does not necessarily mean that sludge must be collected and removed (i.e. FSM) as there are appropriate and low cost on-site systems that allow for safe disposal in situ (e.g. a twin pit latrine) and fulfill the SDG targets. Discussions around this during the convening were pertinent for both practitioners and decision makers, in terms of gaining a better understanding of the safely managed SDG indicator and gain insight into combining sanitation hardware and software, but also for those working at the global monitoring level to ensure the right metrics are in place to promote simple, cost-effective sanitation solutions to drive the right implementation behavior. In contexts where FSM is relevant, a timely issue was raised in the open space: what is the ‘right thing to do’ for sanitation service delivery in India without reinforcing negative caste consequences? And related to this but more relevant for research—what evidence do we need to negotiate this?

Witnessing the dynamism and power of the Women’s Self-Help Groups (SHG) and hearing Mr. Balamurugan speak of the JEEViKA State Rural Livelihoods Mission was a real privilege for many of the convening participants offering a new vantage point on the role of women. Under the State Rural Livelihoods Mission sanitation is just one component of a much broader program which includes institutional capacity building; financial inclusion and livelihoods components, health and

sanitation being part of the latter. The social capital and community structure that these SHG provide acts as a critical foundation and interface to work with communities. The SHG have been particularly transformational in terms of empowering women to improve sanitation in Bihar. Participants came away from the convening with an appreciation of the focus on women as agents of change and questions on how to incorporate gender into their own programs and data collection.

New vantage points and many questions around environmental health featured during this year's convening. The Gram Vikas results demonstrate that improved latrine coverage and ODF levels do not necessarily translate to improved public health improvements. MEDS '17 participants gained a heightened appreciation of the need for better understanding of how produce gets contaminated and better exposure assessment in different contexts.

Context was recognized as paramount and the value of understanding context was a recurrent thread throughout the convening. This year participants came away from the convening reflecting on how to adapt knowledge into context specific practice.

4.3.2 Are we asking the right questions?

In terms of asking the right questions, again for India specifically the new vantage points that emerged relate to India's challenge of moving from OD to achieving 'safely managed' sanitation and collecting the right evidence to support that.

More globally, some of the questions highlighted during the convening were:

- What are the exposure pathways in different contexts?
- How to sustain rural sanitation markets?
- How to reach the bottom of the pyramid through market development?
- What is the role of private enterprise on sanitation marketing?
- What are the potential cross learnings between different subsidy interventions in MEDS?
- How do we finance?
- How to meet SDG 6.2 through national targets?
- Is there a possibility to incorporate 'Safe disposal in-situ' into CLTS / ODF for India?

Taking a global perspective on research, several MEDS'17 participants gained an appreciation of the role of quality evidence for systematic and strategic implementation as well as convincing decision makers. Others gained a new vantage point that they could directly apply in their work, including different types of evidence at each stage of theory of change; the spillover effect of sanitation; the WASH Benefits and Gram Vikas results. Participants also saw linkages 'joining the dots' on different pieces of work; linkages between projects and recognizing common evidence gaps. Participants gained new perspectives

from the Eco-Cycle exercise, notably how to tell when one is dangerously close to the 'rigidity trap' and how to measure or concede the end game goal of improved health in the creative deconstruction phase.

Further, MEDS occupies a very unique nexus between research and practice and many participants expressed that they gained an appreciation of the opportunities for collaboration and partnership between these two areas. There are many shared challenges within the MEDS portfolio with a clear willingness for collaboration and learning. Below are some of the vantage points shared around the research—practice nexus:

- Achieving SDG6 will require collaboration—across the entire sanitation value chain, not only between practitioners, researchers but also government, finance and the private sector. There is a need to work closely together (or at least talk, which requires some work on a common language).
- The MEDS community is a rich resource for questions on implementation science, operational research, decision focused evaluations that MEDS grantees can tap into for ideas and insights.

4.4 THE YEAR AHEAD FOR MEDS

This section of the report looks ahead at the international and organizational priorities, what knowledge MEDS has accumulated to date and how we can better leverage this going forward.

4.4.1 BMGF Updates and 2018 Priorities

On Day Five Jan Willem and Radu presented the BMGF updates and 2018 priorities for the MEDS program, articulated in the table 11 below. These include tracking meaningful progress in terms of what is measured and how, including support for SDG Indicator data collection; generating new evidence driven by uncertainties in the theory of change; ensuring access and uptake of existing evidence through knowledge management and the strengthen organizations' capacity to use evaluation methods in their program design.

4.4.2 Ongoing collaborations and tangible outputs

Each convening is a fertile ground for cross grant learning and collaboration. Over the last year there have been several tangible outputs that we can share, notably:

- **Rethinking Approaches to Rural Sanitation:** an outcome of the 2016 MEDS convening was a collaboration between Plan, WaterAid and UNICEF to undertake a review on rural sanitation approaches; prepare guidance on program costing and provide programming guidance harmonized across the three agencies. In 2017 the consortium presented a poster of their work to date and the collaboration is ongoing. Indeed, they are looking to broaden this partnership particularly to include those focused on market based and financing approaches. Several organizations at the MEDS 2017 convening expressed interest in supporting this initiative.

Table 11: 2018 priorities for the MEDS program

Measurement	Evaluation	Dissemination	For Scale
Tracking (meaningful) progress <ul style="list-style-type: none"> • What is measured • How it is measured 	The generation of evidence, broadly defined (including work on delivery models and scale)	Ensuring access to and use of evidence through active knowledge management	Strengthen organizations by building their capacity and appetite to use evaluation methods when designing programs
Support for SDG Indicators data collection <ul style="list-style-type: none"> • Potential for big data • Improved city level monitoring (counting trucks, volumes) • Barriers for use of existing data Open Defecation measurement in India <ul style="list-style-type: none"> • Support for NARSS • SQUAT 2 Environmental Contamination	New urban sanitation evidence <ul style="list-style-type: none"> • Driven by uncertainties in theory of change • Stopping short of new health trials • In support of existing or planned urban sanitation investments New evidence prioritized by WHO sanitation guidelines <ul style="list-style-type: none"> • Underexplored contamination pathways: fresh produce, animal feces 	<ul style="list-style-type: none"> • MEDS portfolio analysis • WHO Sanitation Guidelines • WSH “collection” of curated evidence • FSTP design book • Consistent dissemination of completed health trials: Gram Vikas, WASH-B, SHINE, MAPSAN (when ready) 	SDG6—business as usual will not get us there, need to think differently about connections more than just collections of knowledge—bringing knowledge, practitioners and technology together? <p>SDG 6 Market place concept where investors and others interested in WASH would be able to find the latest evidence on solutions; find quality information that helps them due diligence on the investment potential of technologies, geographies, and businesses; and find other with whom to co-invest in solutions.</p>

- **Developing markets for Sanitation: A Blog Series:**

Following the 2016 BDS convening PSI, iDE and Water for People spent 3 days discussing their work and role as organization as part of a learning exchange. The output was a blog series which was released in 2017.

- **From new evidence to better practice:** finding the sanitation sweet spot by Jan Willem Rosenboom and Radu Ban (2017) Waterlines, Vol. 36 No.4.

- **Where India Goes: Abandoned Toilets, Stunted Development and the Costs of Caste** by Coffey, D. and Spears, D. (2017) HarperCollins India, Noida Uttar Pradesh.

- **Enabling Factors for Sustaining Open Defecation-Free Communities in Rural Indonesia:** A Cross-Sectional Study by Odagiri, M., Zainal, M., Cronin, A., Gnilo, M.E., Mardikanto, A.K., Umam, K., Asamou, Y.T. (2017) International Journal of Environmental Research and Public Health. 14. 1572.

- **Pricing People into the Market: Targeting through Mechanism Design** by Johnson, T.R. and Lipscomb, M., (2017). Working Paper.

- **WHO Sanitation Guidelines:** several MEDS grantees are working with the WHO on the guidelines.

- **Publication of a SDM/BDS/MEDS portfolio analysis,** exploring the results, evidence and lessons learned from ten years of Foundation investments in rural sanitation (2007-2010). Contact for this is Jan Willem Rosenboom.

4.4.3 Learning Exchange Fund

To further the MEDS learning agenda, MEDS will bring back the learning exchange fund for 2017, trialed in 2015. The MEDS program has made a budget available for 3-5 regional peer-peer learning exchanges in 2018—the aim and scope of which are to fulfil a learning objective in the context of MEDS and based on something to come out the MEDS convening. These exchanges would typically involve one MEDS grantee organization visiting another, and vice versa. Learning Exchanges will be guided by a learning objective and participants will share their learning back to the MEDS community and prior to the 2018 convening.

The learning objective is open for grantee organizations to determine but may pick up an opportunity highlighted during the 2017 convening (for example: open space, complementary questions and experience from the discussion on research methods).

5. Concluding Thoughts

“The more I learn, the more I realize how much I don’t know.”
Einstein

As we reflect on the MEDS 2017 convening, size of the convening itself has grown over recent years as have the challenges we face in the broader scope of the SDGs as well as appreciating the wider environmental exposure pathways and the specifics of diverse contexts. This, now more than ever, highlights the role MEDS can play in terms of stimulating discussion around what is measured and to ground research in practice and vice versa and generally building capacity in this area.

This year’s MEDS convening offered the unique opportunity to consider the rural India context in more detail, and attempt to tease out what was universally applicable in WASH and what is unique to India. It also allowed us to dig deeper on

the implications of the SDGs for both research and practice, recognizing that the aim is to move the overall distribution of access to sanitation services to the right; and to highlight the needs of practitioners and decision makers and the role of the international community in responding to them. Finally, the feedback received was that participants gained a greater appreciation of the potential for collaboration of integrating research and evaluation into practice. There is, as always, much work to be done. The MEDS community will continue to work on joining the dots in the evidence and leveraging the knowledge to strengthen our efforts as a sector in working towards SDGs and beyond.

Participant List

Ariella Park	apark@povertyactionlab.org	Abdul Latif Jameel Poverty Action Lab
Anthony Waterkeyn	anthony@africaahead.com	Africa AHEAD
Radu Ban	radu.ban@gatesfoundation.org	Bill & Melinda Gates Foundation
Sarah Herr	sarah.herr@gatesfoundation.org	Bill & Melinda Gates Foundation
Jan Willem Rosenboom	janwillem.rosenboom@gatesfoundation.org	Bill & Melinda Gates Foundation
Md. Abu Taleb	abu.taleb@brac.net	BRAC
Kelly Biswas Alexander	ktalexander@care.org	CARE
Christine Moe	clmoe@emory.edu	Center for Global Safe WASH at Emory University
Sharon Barnhardt	sharonbarnhardt@gmail.com	CESS Nuffield—FLAME University
Tara Hill	tara.hill@eastmeetswest.org	East Meets West / Thrive Networks
Hanh Nguyen	hanh.nguyen1@eastmeetswest.org	East Meets West / Thrive Networks
Hans-Joachim Mosler	mosler@eawag.ch	Eawag
Thomas Clasen	tclasen@emory.edu	Emory University
Matthew Freeman	matthew.freeman@emory.edu	Emory University
Pete Cranston	pete.euforic@gmail.com	Euforic Services
Marcos Fioravanti	mtfioravanti@gmail.com	Fundacion In Terris
Arne Panesar	Arne.Panesar@giz.de	GIZ
Joseph Madiath	joemadiath@gmail.com	Gram Vikas
Christopher Nicoletti	cnicoletti@ideglobal.org	iDE
Yi Wei	ywei@ideglobal.org	iDE
Lilian	lilian.lehmann@idinsight.org	IDinsight
Neeta Goel	ngoel@3ieimpact.org	International Initiative for Impact Evaluation (3ie)

Ingeborg Krukkert	krukkert@ircwash.org	IRC WASH
Pippa Scott	pippa.scott@i-san.co.uk	i-San
Vishal Aneja	vishal.aneja@lixil.com	Lixil India Pvt.Ltd.
Oliver Cumming	oliver.cumming@lshtm.ac.uk	London School of Hygiene and Tropical Medicine
Raymond Guiteras	rpguiter@ncsu.edu	North Carolina State University
Fisseha Atalie	fisseha.atalie@plan-international.org	Plan International Ethiopia
William Domapielle	william.domapielle@plan-international.org	Plan International Ghana
Elijah Gichora	elijah.gichora@plan-international.org	Plan International Kenya
Mulugeta Balecha	Mulugeta.Balecha@planusa.org	Plan International USA
Aprajita Singh	aprajitasingh@psi.org.in	Population Services International India
Sanjay Singh	sanjaysingh@psi.org.in	Population Services International India
Diane Coffey	diane@riceinstitute.org	r.i.c.e.
Dean Spears	dean@riceinstitute.org	r.i.c.e.
Arima Singh	arima@rgmvp.org	Rajiv Gandhi Charitable Trust (RGMVP)
Vinay Singh	vinay@rgmvp.org	Rajiv Gandhi Charitable Trust (RGMVP)
Felix Sayinzoga	felix.sayinzoga@rbc.gov.rw	Rwanda Biomedical Center
Simon Okoth	simon.okoth@sei-international.org	Stockholm Environment Institute
Divyang Waghela	dwaghela@tatatrusters.org	TATA Trusts
Jonathan Crocker	jonny.crocker@alumni.unc.edu	The University of Washington
Musa Manga	mmanga@email.unc.edu	The Water Institute at University of North Carolina (UNC)
Luis Andres	Landres@worldbank.org	The World Bank
Xavier Chauvot de Beauchene	xchauvot@worldbank.org	The World Bank
Martin Gambrell	mgambrell@worldbank.org	The World Bank
Raghava Neti	nraghava@worldbank.org	The World Bank
Maria Angelica Sotomayor	msotomayor@worldbank.org	The World Bank
Michael Gnilo	megnulo@unicef.org	UNICEF
Anu Gautam	apgautam@unicef.org	UNICEF East Asia and Pacific Regional Office, Bangkok
Aidan Cronin	acronin@unicef.org	UNICEF Indonesia
Perry Landman	plandman@unicefusa.org	UNICEF USA
Barbara Evans	b.e.evans@leeds.ac.uk	University of Leeds
Upasak Das	upasak@sas.upenn.edu	University of Pennsylvania
Molly Lipscomb	molly.lipscomb@virginia.edu	University of Virginia
Sarah Dobsevage	sdobsevage@wateraidamerica.org	WaterAid America
Erik Harvey	erikharvey@wateraid.org	WaterAid U.K.
Sophy Ny	sophy@watershedasia.org	WaterSHED
Geoff Revell	geoff@watershedasia.org	WaterSHED
Kate Medlicott	medlicottk@who.int	WHO
Angela Lagat	angela@zanaafrica.com	ZanaAfrica Group Limited Kenya

www.gatesfoundation.org

Guided by the belief that every life has equal value, the Bill & Melinda Gates Foundation works to help all people lead healthy, productive lives. In developing countries, it focuses on improving people's health and giving them the chance to lift themselves out of hunger and extreme poverty. In the United States, it seeks to ensure that all people—especially those with the fewest resources—have access to the opportunities they need to succeed in school and life. Based in Seattle, Washington, the foundation is led by CEO Sue Desmond-Hellmann and Co-chair William H. Gates Sr., under the direction of Bill and Melinda Gates and Warren Buffett.

For additional information on the Bill & Melinda Gates Foundation, please visit our website: www.gatesfoundation.org.

© 2018 Bill & Melinda Gates Foundation. All Rights Reserved. Bill & Melinda Gates Foundation is a registered trademark in the United States and other countries.