AFIDEP African Institute for Development Policy
Bridging Development Research, Policy & Practice

Integrating Research Evidence into Policy6Making

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Presented at the 14th World Environmental Health Congress,
326May 2016, Bingu International Conference Centre (BICC), Lilongwe, Malawi

We make research evidence ma/er in African2driven development

Ge:ng Research into Policy is…

- Complex
- Somewhat difficult
- But, it's possible

Outline

1. Role of evidence in policy making

2. Barriers of research uptake – the demand and supply factors

3. Emerging opportunities for increasing evidence use
   - Environmental Health and the SDGs

4. Some practical considerations in navigating barriers of evidence use

5. Ethics in evidence uptake

6. Conclusions

AFIDEP in Brief

- Established in 2009 to bridge the gaps between research, policy and practice in Africa
- **Vision**: 'to make research evidence matter in AfricanS driven development'
- **Mission**: 'to translate and enable the utilization of evidence in policySmaking"
- **Current Areas of Focus**
  - Health System Strengthening
  - Population Change and Sustainable Development

Defining Health Policy SWHO

- "Health policy refers to **decisions, plans, and actions** that are undertaken to achieve specific health care goals within a society.

- An explicit health policy can achieve several things:
  - It defines a vision for the future which in turn helps to establish targets and points of reference for the short and medium term;
  - It outlines priorities and the expected roles of different groups; and
  - It builds consensus and informs people."

EvidenceSInformed Decision Making

- An approach to policy decisions that aims to ensure that decision making is wellSinformed by the best available research evidence

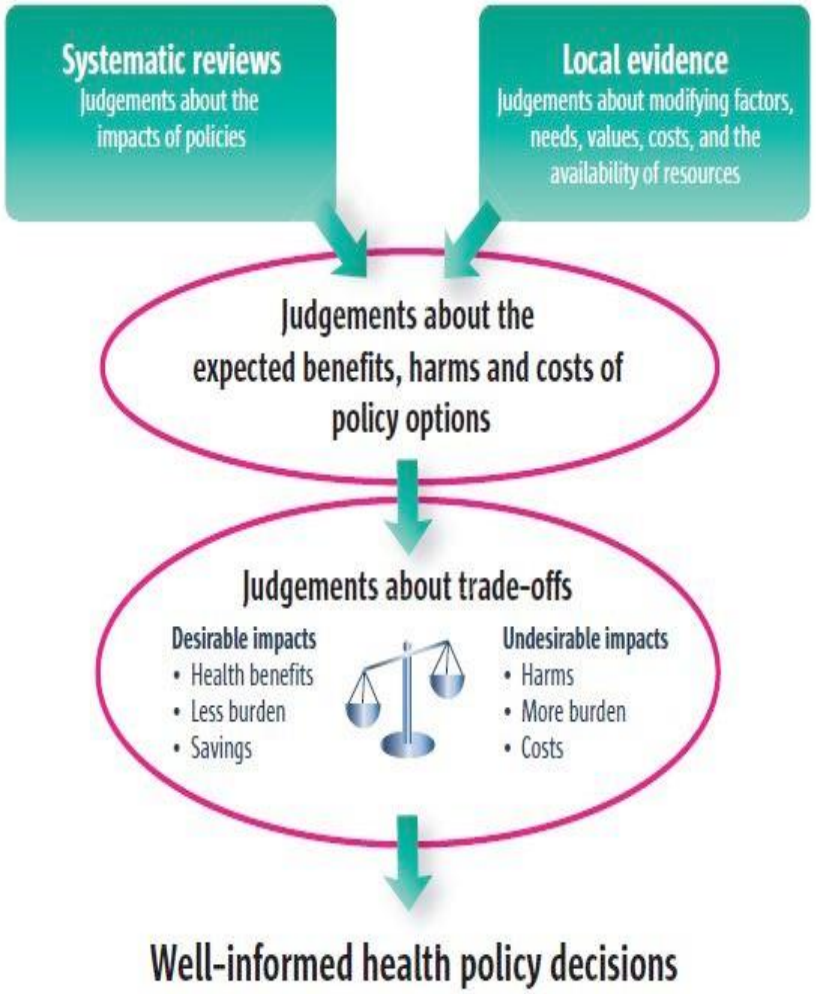
- Characterised by access to, and appraisal of, evidence as an input into the policymaking process that is

  - **Systematic** to ensure that relevant research is identified, appraised and used appropriately

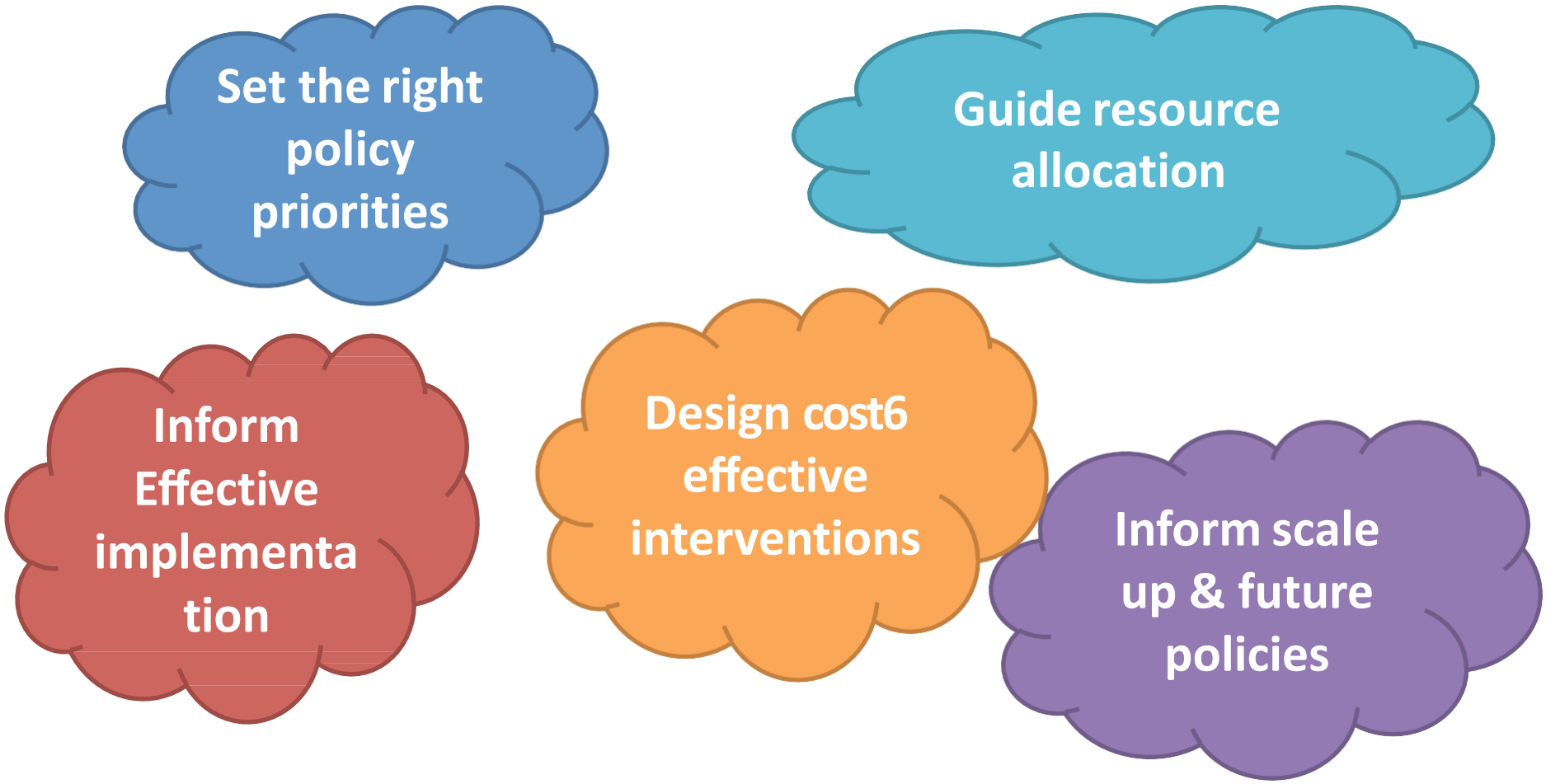
  - **Transparent** so that others can examine what research evidence was used to inform policy decisions, as well as the judgements made about the evidence and its implications

What is the role of evidence in policy and practice?

- The role of evidence is to inform policy and practice
- Evidence is essential, but not sufficient
- Judgements are needed, including judgements about confidence (the quality of the evidence), what to expect in a specific setting, equity and tradeSoffs



Role of evidence6uptake in policy making and development



But, research is not optimally used in decision6making

Why is this so, and what should be done to address the barriers?

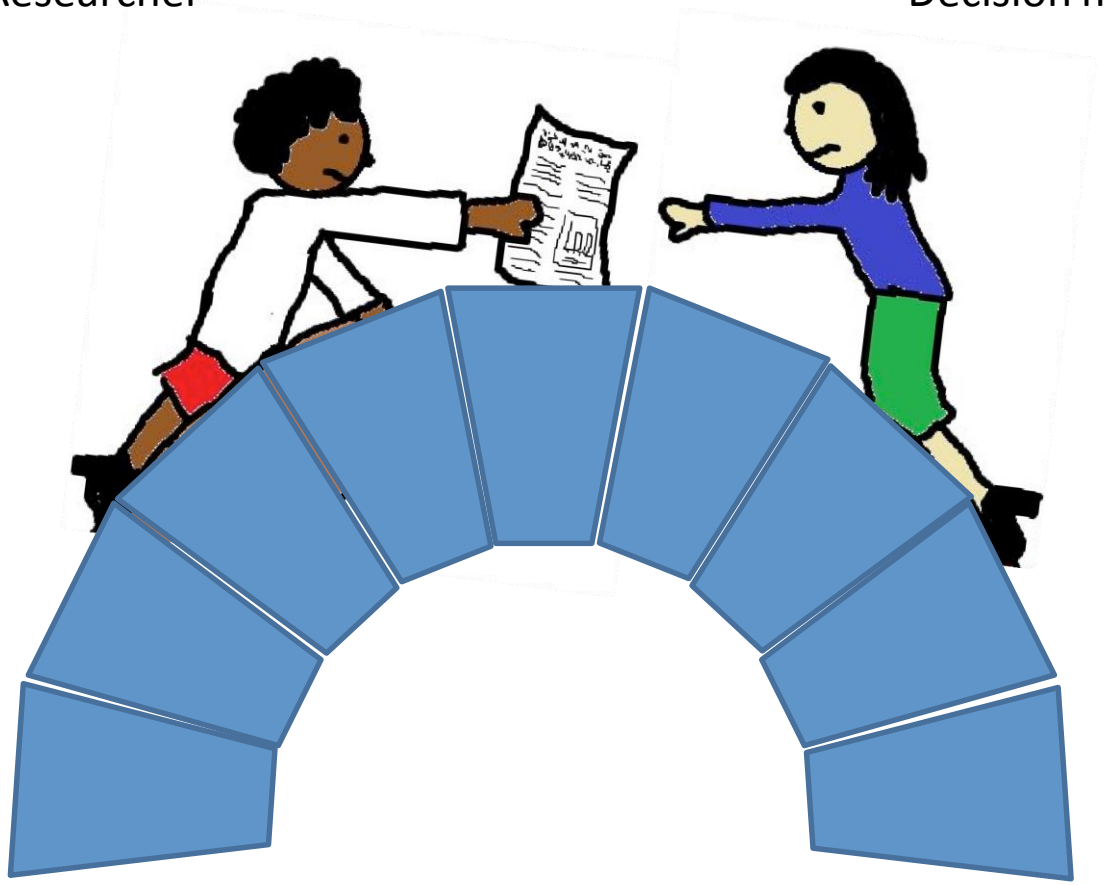
Supply6Demand Divide in Evidence Use

Supply side

Demand side

Researcher

Decision maker



Source: Newman, 2013

Supply Side Barriers

- There is abundant research, but it is mostly fragmented
- The research may not be robust, credible or comprehensive enough
  - need for systematic reviews
- Research may not be relevant to the evidence needs of decisionSmakers
- Poor packaging and communication of evidence for use by decisionSmakers

Demand6side Barriers to Evidence Use – Results of SECURE Health 2014 Study on Status of Research Use in the Health Sector in Malawi

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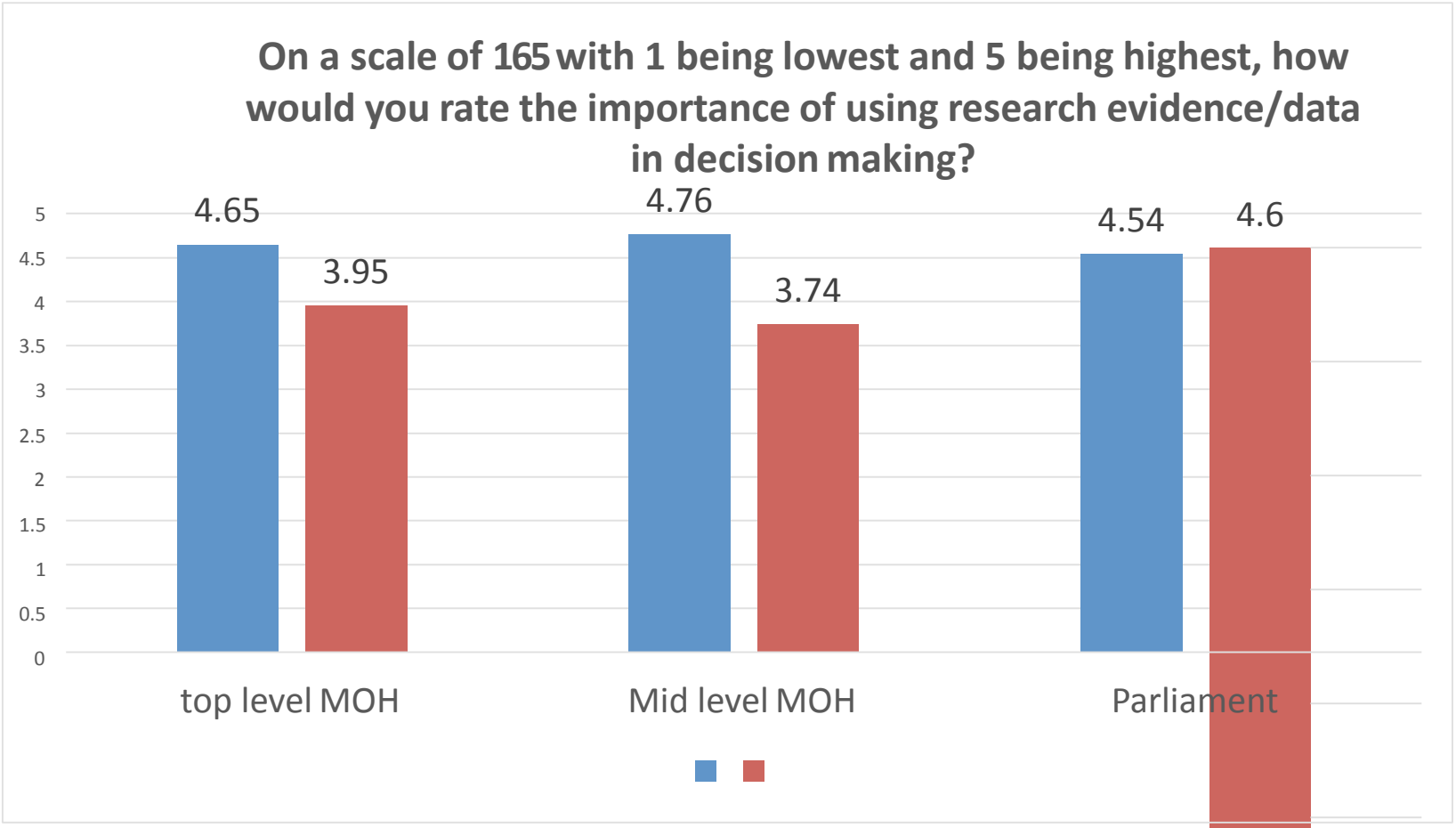
Policymakers rate the importance of research & data use very highly



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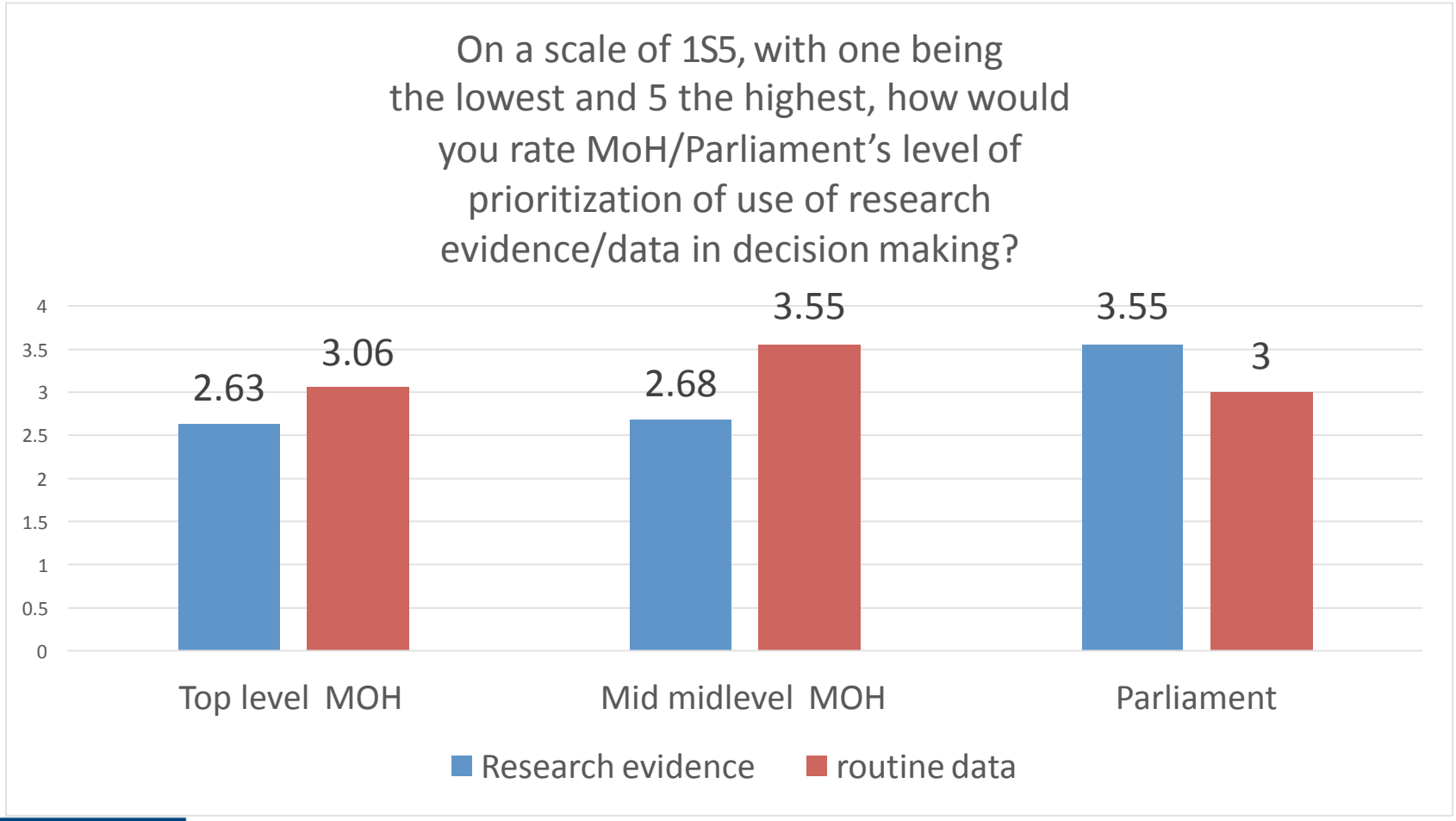
However, most respondents feel that prioritization of research & data use is low at institutional level



Institutional Barriers

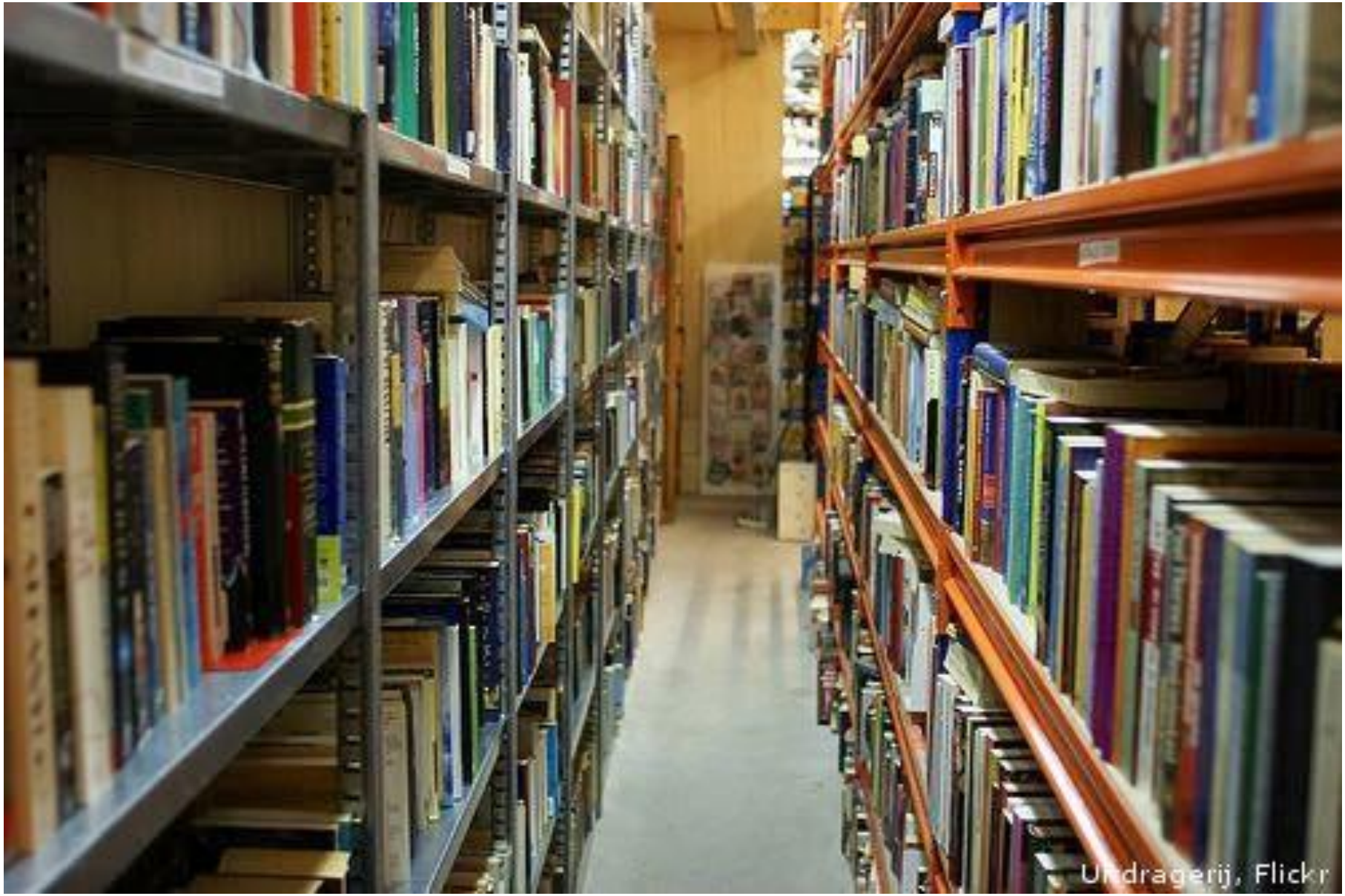
- No clear institutional framework for guiding research & data use
- No guidelines for data & research use
- Weak linkages & coordination between policymakers & researchers
- Inadequate budget for research generation & use
- No institutional incentives
- Politics & personal interest

Access Barriers

- No national repository for health research
- No subscriptions to journals
- Poor packaging & dissemination of research evidence
- Lack of relevant research evidence to improve services
  - Research is seen as an academic output and not for informing policy and programming
- Poor quality of data Sroutine data is incomplete, not well analyzed

Individual level constraints to the use of research evidence/data

- Inadequate staffing
- Lack of technical skills to:
  - Analyze routine data
  - Access research
  - Interpret & Synthesize research
  - Summarize research into clear policy messages
- Lack of incentives
- Lack of time due to competing demands



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Emerging Opportunities for Increased Research Uptake (2 May, 2016)

- Increasing demand for accountability by citizens & within government
- International development paradigms like MDGs and the SDGs call for robust local evidence to understand how countries are doing
- Emerging technologies, social media, mobile phone communication
- Renewed commitment to change the development course, with long term development goals
  - Policy makers asking – "what should we do"?
  - The Value for Money principle taking root

President of Malawi speaking to African cabinet secretaries

- "It is your duty to ensure that appropriate procedures are developed to guide the policyS making process…..

- ……If Africa is to move forward, we cannot tolerate haphazard policy development. We cannot accept policies that do not listen to the people, to the procedures, and to evidence."

“We understand population is a huge development challenge for us, how should we reach men and young people more effectively?”

Former vice President of Malawi, September 2012

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Other critical audiences

- Parliamentarians
- Civil Society
- Journalists

Why Parliament?

- MPs provide valuable oversight role to the Executive (Government)
  - Are policies being implemented effectively (equity consideration, quality of care, …?)
  - What laws are needed to enforce implementation of key policies?
- MPs playing increasingly important role in resource allocation
- As people's representatives, MPs can play a key role in mobilizing communities to increase demand and use of health services

“MPs can not effectively exercise their oversight role without credible evidence” Malawi Parliament Speaker

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Environmental Health & Sustainable Development Goals

- Environmental improvements for health can make important contributions towards achieving SDGs

  – Many of which are closely interlinked with Environmental and social determinants of health

Health & Sustainable Development Goals

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Some practical approaches to enhance evidence uptake

Establishing & sustaining relationships with policymakers

- Getting involved in policymakers' activities such as TWGs
- Partnering with policymakers in research projects

- This ensures a good understanding of emerging policy issues & policy context

Ge:ng policymakers engaged from the outset

- Getting policymakers' inputs into the research question that we seek to answer

- Being clear from the outset on the change being sought:
  - What exactly are we seeking to change?
  - Are policymakers interested in this change?
  - How will policymakers use the evidence generated?

Partnering with influential non6state actors

- Donor & UN agencies often have a lot of influence on policy choices
- A good example is our current work on the Demographic dividend in various African countries
  - Our partnership with UNFPA in this work has opened doors for gov't policy influence

Adopting a mix of activities to get evidence into policy

- One means of engagement is unlikely to bring about the desired change
- Actors are combining various activities:
  - Conventional tools – policy briefs, dialogues, media engagement
  - Emerging & creative tools – data visualization, infographics, social media, engaging evidence champions, videos, etc

Institutional support & sustained funding

- Research uptake efforts require highSlevel institutional support to be successful
  - Is topSlevel management at your institution supportive of research uptake activities?
  - Such support has been shown as critical in ensuring sustained research uptake activities
- Uptake activities cannot be oneSoff side events, they've to be embedded as integral components of funded research project work

Seeking an in6depth understanding of the research uptake process

- How does research uptake happen?
  - What are the intervening factors?

- Information is being used to inform research uptake strategies
  - Especially theorizing on how change will happen – i.e. the Theory of Change

Becoming more critical of what type of evidence should really inform policy?

- Actors are asking themselves the question: which types of evidence should we really push to influence policy?
  - Single studies?
  - Systematic reviews?
- This is an important appreciation of the fact that not all research evidence should influence policy

Evidence uptake is a dynamic process

- Evidence to policy is critical, however,
  - SIt must be supported by rigorous research
  - SPolicymakers MUST be engaged at all levels for ownership of the process and effective implementation
  - SNeeds and interests of policymakers may shift and requires reSshifting in goals

Collins Ouma, 2015

Ethics in Evidence Uptake

- Are we overplaying our evidence to show we are having an impact?
- Are we overstating our roles in influencing policies – claiming everything under the sun in the counties where we work?
- Are we promoting legitimate, credible, and verifiable evidence?
- Are we under so much donor pressure to show we are making a difference that we overwhelm decisionSmakers in endless dissemination seminars even when out results are not robust enough?

Concluding Points

- There is growing demand for greater evidence uptake in decisionSmaking

- Need for researchers to listen more to the evidence needs of decisionSmakers and understand bottlenecks that curtail optimal evidence use
  - The research needs to be relevant, credible, well packaged, communicated

Concluding Points

- Forge mutually reinforcing partnerships between researchers and decisionSmakers (e.g. policy dialogues)

- Evidence uptake efforts do work and can be fulfilling – but it is complex, time consuming, costly, and requires solid technical and people skills

- Building sustainable capacity for evidence use should involve introduction of evidence uptake course in tertiary schools

Last Word…

- Most research is meant to address some public issue

- But often, most efforts go into generating the research than getting it to actually address the public issue that motivated its generation

- Focus is changing, but more needs to be done…

Thank You

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Uptake of Evidence
SHARE's experience

May 2016 – IFEH

Erin Flynn & Emily Balls
London School of Hygiene and Tropical Medicine
Faculty of Infectious and Tropical Diseases

Overview

- Introducing SHARE
- SHARE Phase I & II
- What change are we trying to achieve?
- Our strategy and impact
- Measuring our impact

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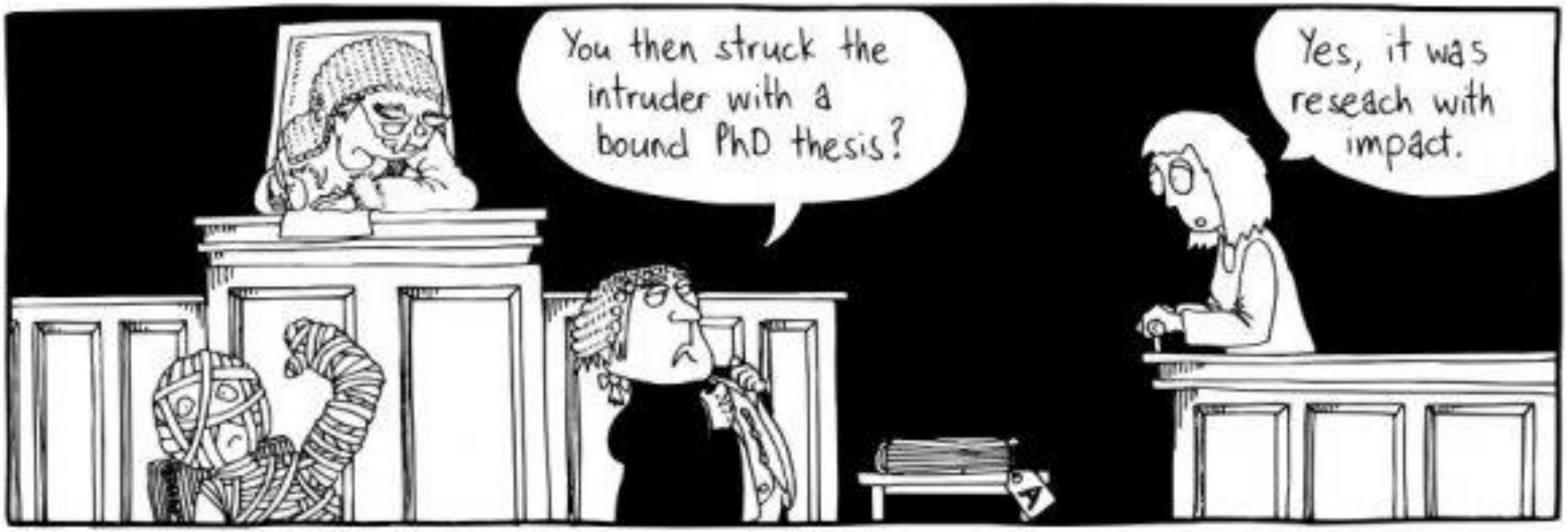

SOURCE: [EFPSA blog]

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Introducing SHARE

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Building Knowledge. Improving the WASH sector.

The SHARE Consortium contributes to achieving universal access to effective, sustainable and equitable sanitation and hygiene by generating, synthesising and translating evidence to improve policy and practice worldwide

Funded by UK DFID and led by LSHTM, Phase I 2010-2015. P2 – 2018

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SHARE Phase I

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SHARE Phase II

- Phase II from 2015 – 2018
- 4 countries with 5 core partners
- Focus on four thematic areas
- Building on SHARE Phase 1's work
- 5 core studies plus one additional study
- Plus capacity development and research into use

Capacity development

SHARE creates varied opportunities for the development of young investigators, works with national universities to train future researchers, and helps strengthen national sector programmes.

Research

SHARE conducts research across a range of sanitation and hygiene-related themes to address sector needs in the countries where it works.

Research into use

SHARE effectively communicates its research to key audiences, in a useful and accessible way, to contribute to better performance and accelerated progress

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What change are we trying to achieve?

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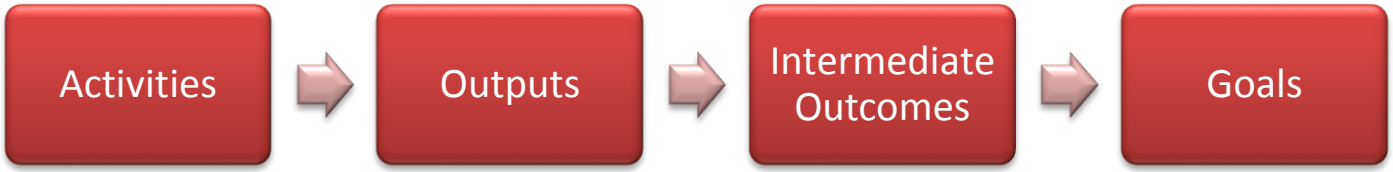
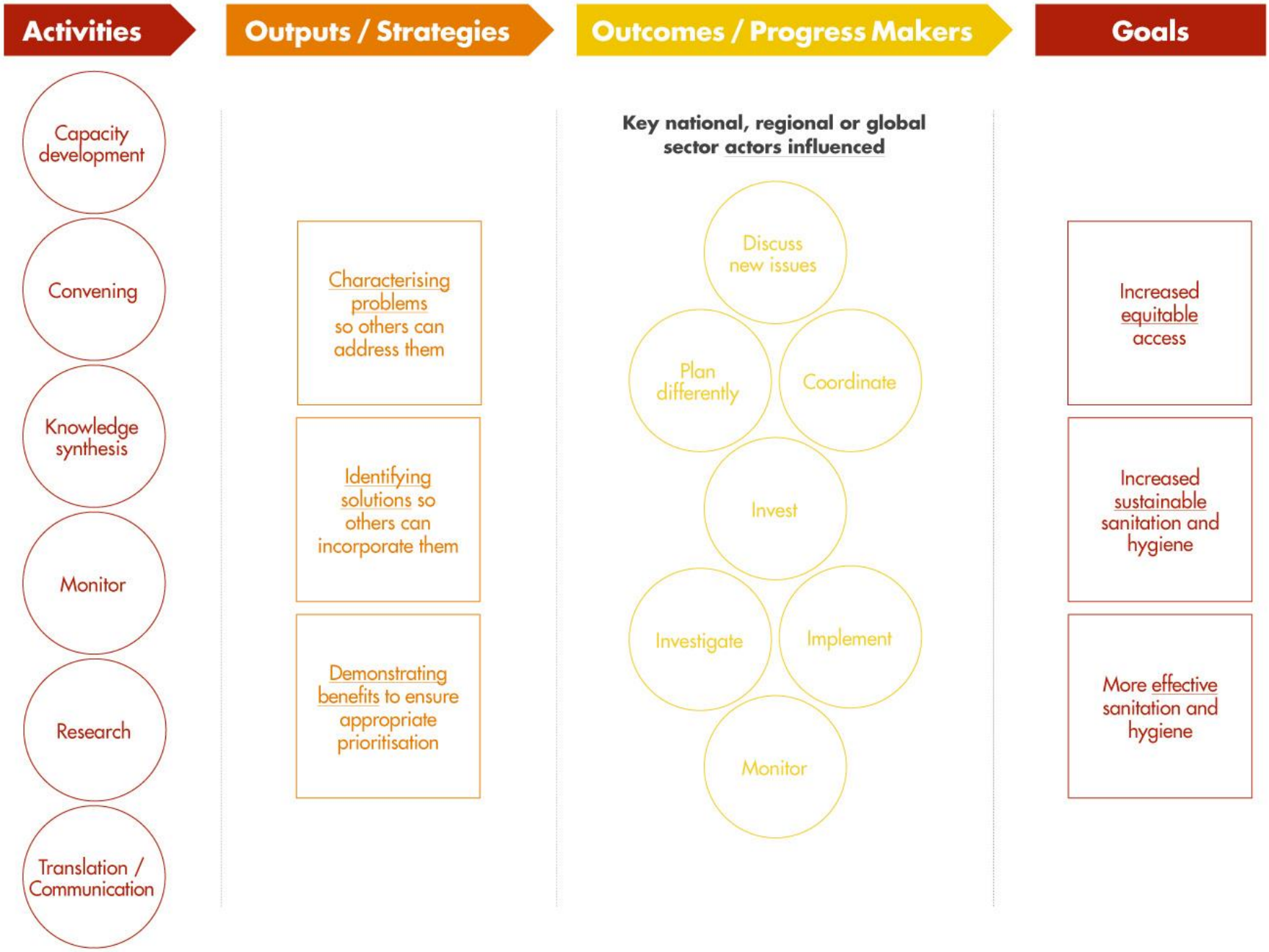
What's our Theory of Change?

TOC was a useful framework to make explicit **what kind of change** SHARE is trying to achieve, **how it will achieve** that change, and **how it will measure** the degree of change

Participatory, backwards mapping process that defines all the building blocks required to bring about a long-term given goal



Based on assumptions about the change process


Activities
Outputs / Strategies
Outcomes / Progress Makers
Goals
Capacity development
Convening
Knowledge synthesis
Monitor
Research
Translation / Communication
Characterising problems so others can address them
Identifying solutions so others can incorporate them
Demonstrating benefits to ensure appropriate prioritisation
Key national, regional or global sector actors influenced
Discuss new issues
Plan differently
Coordinate
Invest
Investigate
Implement
Monitor
Increased equitable access
Increased sustainable sanitation and hygiene
More effective sanitation and hygiene

Our Strategy

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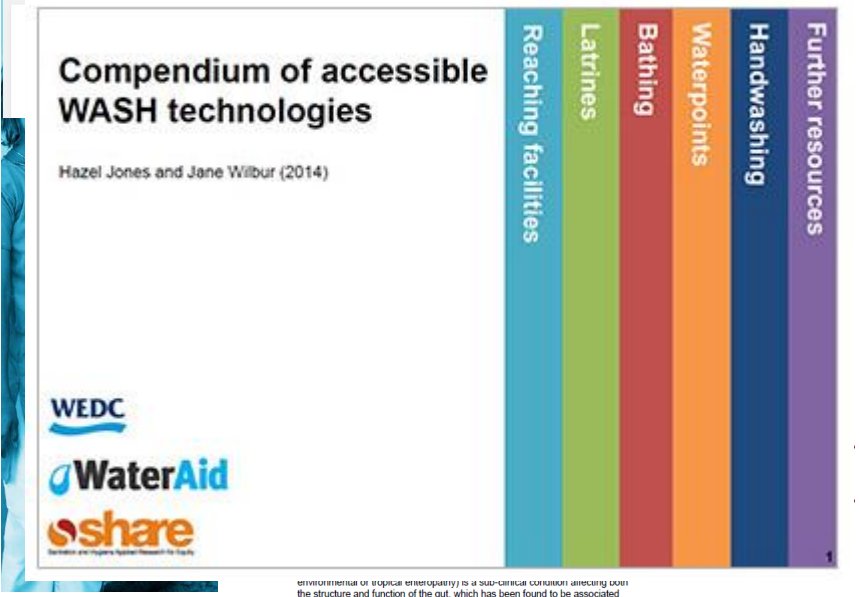
Translating research



- Policy briefs
- Videos
- Practitioner manuals/guides/training guides
- Event reports
- Blogs
- UNICEF training course
- UNICEF evidence paper
- Targeted presentations – DFID, WaterAid brownbags; UNICEF Maldives conference
- Website news stories and newsletter

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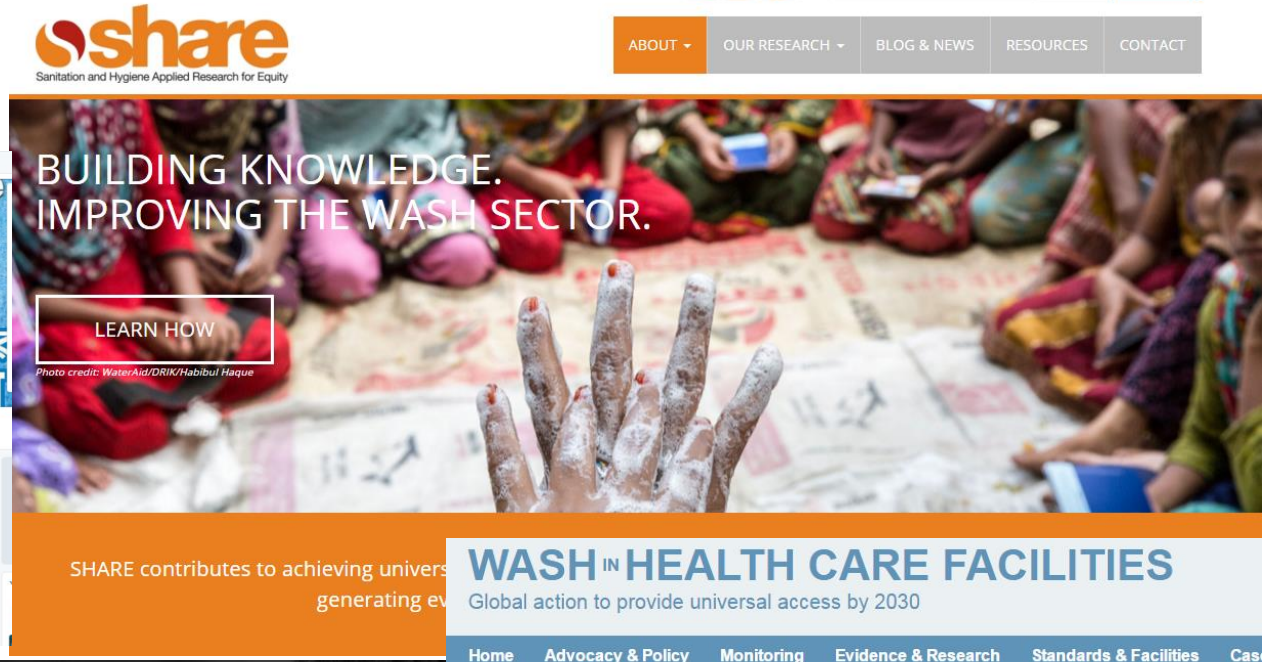
Projecting through online platforms



Convening

Feb	March	April	May	June	July	Aug	Sept	Oct	Nov
India WASH Summit	Brisbane International WASH Conference	Kenya National Sanitation Research Symposium	WASH Value for Money Seminar		WEDC Capacity Development Workshop on Gender, Violence & WASH	Tanzania National Sanitation & Hygiene Research Symposium		Global Handwashing Day Panel Session	Bonn WASH & Nutrition Conference
	Kings College London Seminar	AfricaSan			Malawi National Sanitation & Hygiene Research Symposium	Stockholm Water Week		Emergency Environmental Health Forum	
						International Society for NTDs Conference		Global Maternal & Newborn Health Conference	

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Outcomes – 2015

Publications

Number of publications by journal

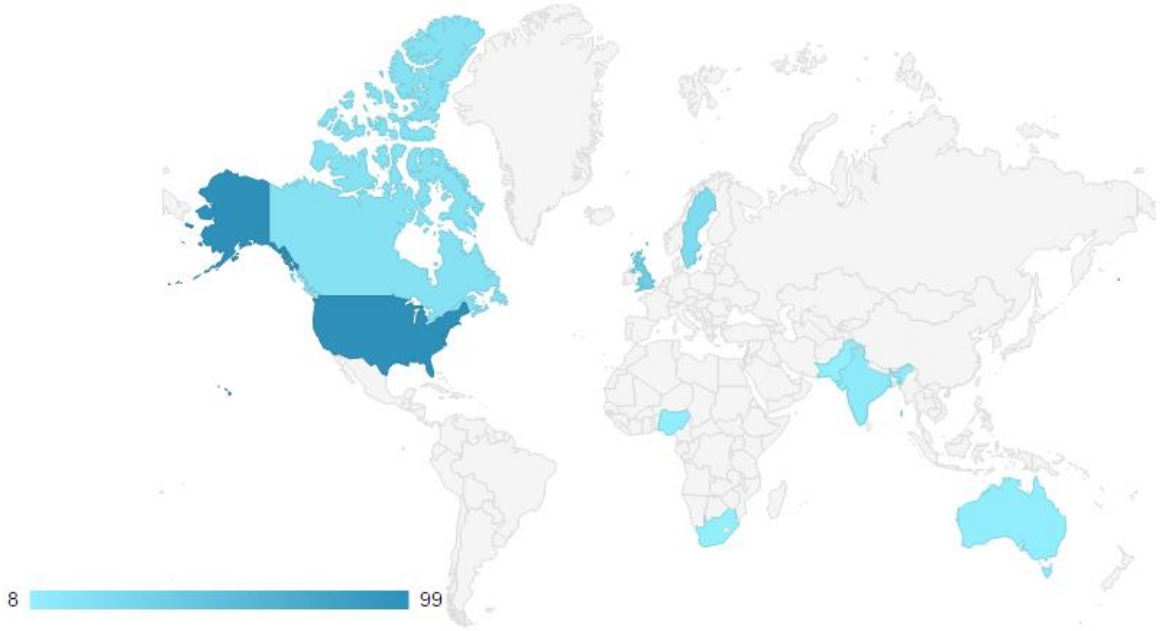
Indicators: Web of Science Documents.

InCites dataset updated Mar 31, 2016. Includes Web of Science™ content indexed through Feb 12, 2016. Export Date: Apr 29, 2016.

Outcomes - 2015
Online reach

Burden of disease from inadequate water, sanitation and hygiene in low- and middle-income settings: a retrospective analysis of data from 145 countries

Overview of attention for article published in Tropical Medicine & International Health, August 2014



About this score

In the top 5% of all research outputs scored by Altmetric

Impacts

Undoing Inequity Uganda and Zambia

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Measuring our impact

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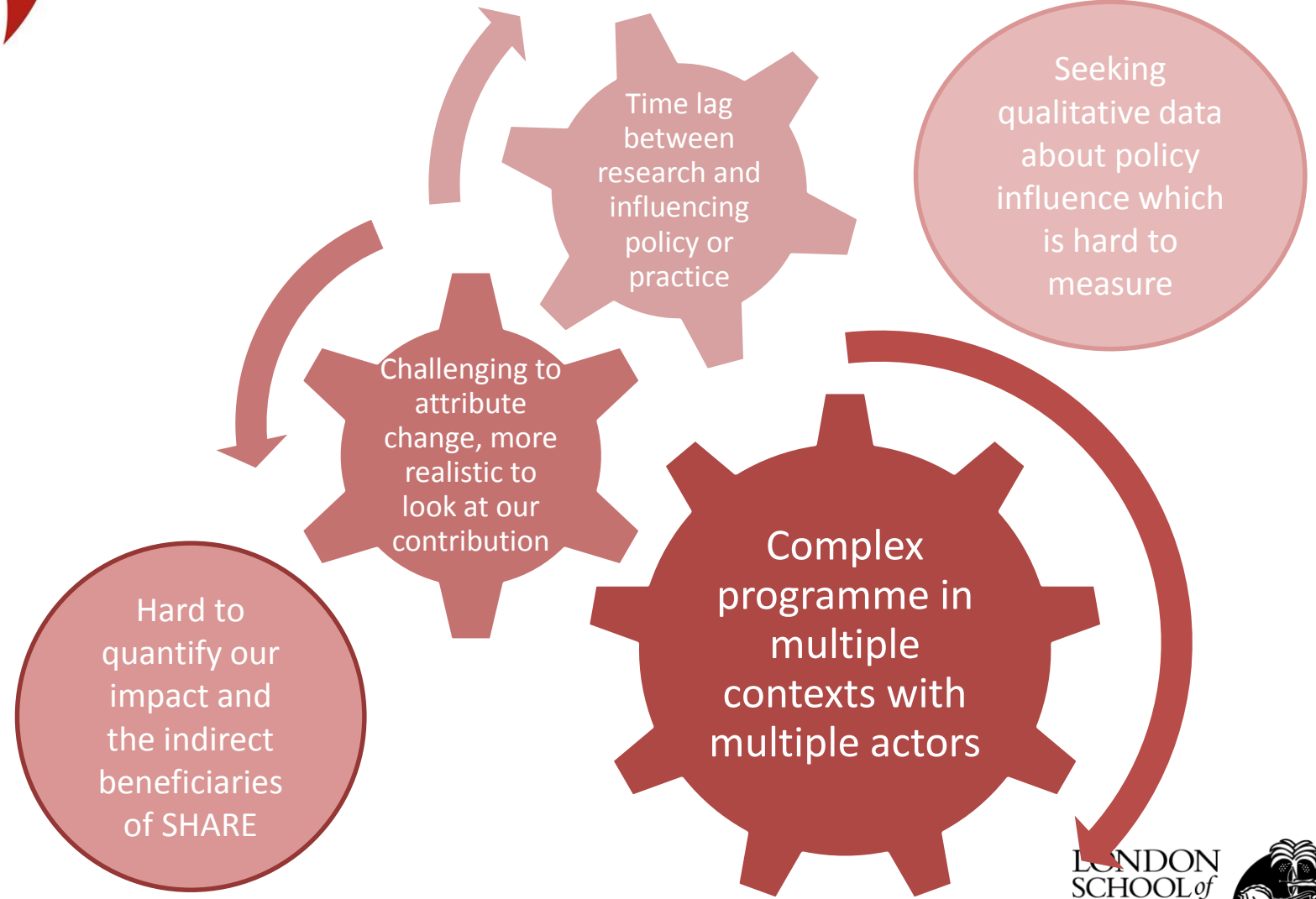
Challenges



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Outcome Mapping 1 - Stakeholders

Outcome mapping 2 – Progress Markers

Expect to see

Stakeholders provide feedback and advice on SHARE research.

Stakeholders aware of the research

Like to see

Stakeholders request updates on SHARE research and the project's findings specifically.

Stakeholders discuss and consider implications of SHARE research findings.

Donor national office consult research team during reviews of current and future country strategies

Challenge: Donors reflect a multidisciplinary approach for WASH and complementary food hygiene.

Love to see

Future donor strategies reflect multidisciplinary approach for WASH and complementary food hygiene

Stakeholders advocate the work of SHARE II in public fora.

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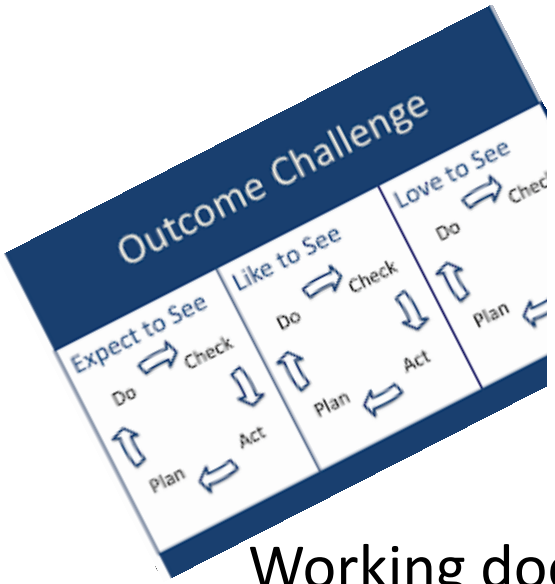
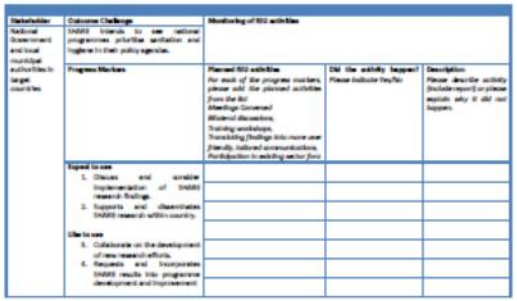
Outcome Mapping 3 – Advantages

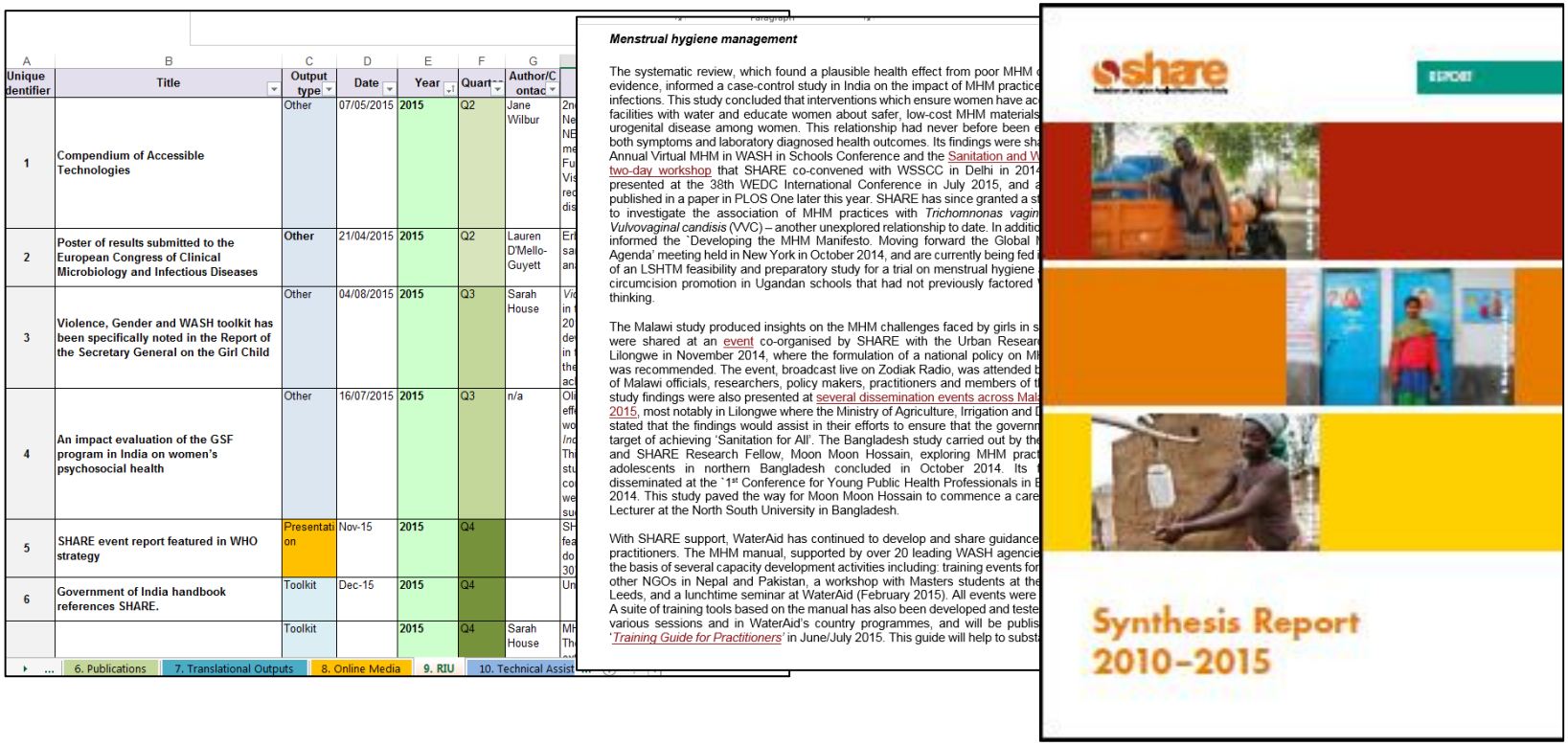
- Allows us to plan RIU activities that we think will lead to our progress markers
- Participatory and inclusive approach





Working documents that allow us to reflect on progress and amend activities and approach accordingly

Communicating our impact



Unique identifier	Title	Output type	Date	Year	Quart	Author/Contac
1	Compendium of Accessible Technologies	Other	07/05/2015	2015	Q2	Jane Wilbur
2	Poster of results submitted to the European Congress of Clinical Microbiology and Infectious Diseases	Other	21/04/2015	2015	Q2	Lauren D'Mello-Guyett
3	Violence, Gender and WASH toolkit has been specifically noted in the Report of the Secretary General on the Girl Child	Other	04/08/2015	2015	Q3	Sarah House
4	An impact evaluation of the GSF program in India on women's psychosocial health	Other	16/07/2015	2015	Q3	n/a
5	SHARE event report featured in WHO strategy	Presentation	Nov-15	2015	Q4	
6	Government of India handbook references SHARE.	Toolkit	Dec-15	2015	Q4	
		Toolkit		2015	Q4	Sarah House

6. Publications | 7. Translational Outputs | 8. Online Media | 9. RIU | 10. Technical Assist

Menstrual hygiene management

The systematic review, which found a plausible health effect from poor MHM evidence, informed a case-control study in India on the impact of MHM practice infections. This study concluded that interventions which ensure women have ac facilities with water and educate women about safer, low-cost MHM materials urogenital disease among women. This relationship had never before been both symptoms and laboratory diagnosed health outcomes. Its findings were sh Annual Virtual MHM in WASH in Schools Conference and the Sanitation and W two-day workshop that SHARE co-convened with WSSCC in Delhi in 2014 presented at the 38th WEDC International Conference in July 2015, and published in a paper in PLOS One later this year. SHARE has since granted a s to investigate the association of MHM practices with *Trichomonas vagin Vulvovaginal candisis* (VVC) – another unexplored relationship to date. In additi informed the `Developing the MHM Manifesto. Moving forward the Global Agenda' meeting held in New York in October 2014, and are currently being fed of an LSHTM feasibility and preparatory study for a trial on menstrual hygiene circumcision promotion in Ugandan schools that had not previously factored thinking.

The Malawi study produced insights on the MHM challenges faced by girls in s were shared at an event co-organised by SHARE with the Urban Researc Lilongwe in November 2014, where the formulation of a national policy on M was recommended. The event, broadcast live on Zodiak Radio, was attended b of Malawi officials, researchers, policy makers, practitioners and members of t study findings were also presented at several dissemination events across Mal 2015, most notably in Lilongwe where the Ministry of Agriculture, Irrigation and D stated that the findings would assist in their efforts to ensure that the governm target of achieving 'Sanitation for All'. The Bangladesh study carried out by th and SHARE Research Fellow, Moon Moon Hossain, exploring MHM pract adolescents in northern Bangladesh concluded in October 2014. Its disseminated at the `1st Conference for Young Public Health Professionals in B 2014. This study paved the way for Moon Moon Hossain to commence a care Lecturer at the North South University in Bangladesh.

With SHARE support, WaterAid has continued to develop and share guidance practitioners. The MHM manual, supported by over 20 leading WASH agencie the basis of several capacity development activities including: training events for other NGOs in Nepal and Pakistan, a workshop with Masters students at the Leeds, and a lunchtime seminar at WaterAid (February 2015). All events were A suite of training tools based on the manual has also been developed and teste various sessions and in WaterAid's country programmes, and will be publis *'Training Guide for Practitioners'* in June/July 2015. This guide will help to subst

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Sign up to our newsletter: http://bit.ly/WhMMzR

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WASH and undernutrition

An overview of the evidence

May 2016

Erin Flynn
London School of Hygiene and Tropical Medicine
Faculty of Infectious and Tropical Diseases

Content informed by Oliver Cummings presentation at Bonn WASH & Nutrition forum 2015

Overview

- What's the problem?
- The WASH and nutrition nexus
- Can WASH affect childhood undernutrition?
- Evidence gaps
- What next

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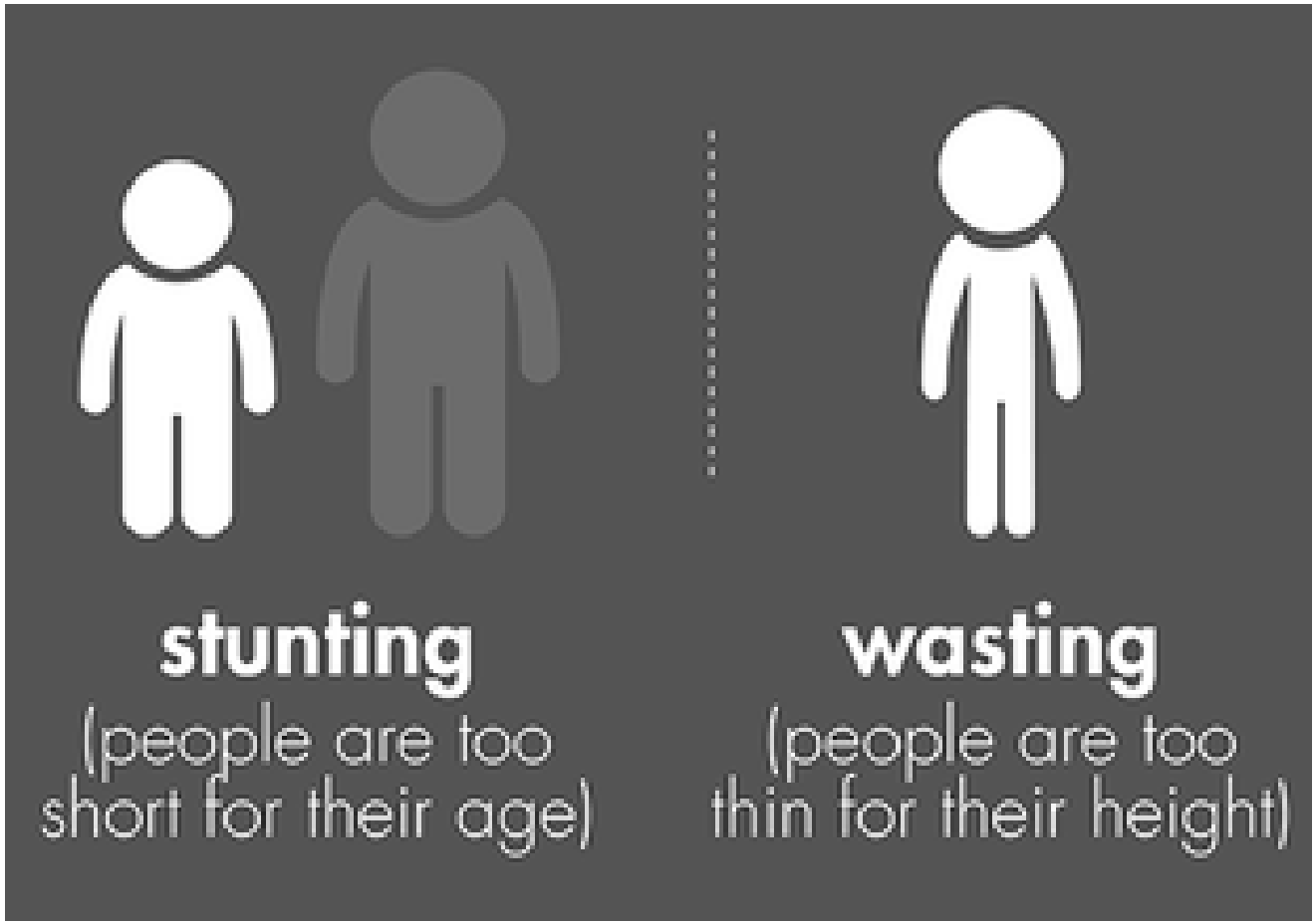

Figure: International Food Policy Research Institute, 2015

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What's the problem?

- **159 million children stunted** and at least 16 million children severely wasted (WHO, 2015c).
- Undernutrition **increases the risk of death** from infectious diseases in childhood (Pelletier et al, 1995; Caulfield et al, 2004; Black et al, 2013; Olofin et al, 2013).
- Accounts for **45% of the global burden of child mortality** in 2011 and 3.1 million deaths (Black et al, 2013).
- **Negative impact on motor and cognitive development** in children (Grantham-McGregor et al, 2007; Aburto et al, 2009; Walker et al, 2011; Walker et al, 2012; Black et al, 2013).

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What's the problem?

Short-term

↑ risk of mortality

↑ susceptibility to infections/morbidity

Long-term

↓Educational achievement

↓ Work capacity

↓ Economic productivity

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What's the problem?

Progress was made during the MDG era however it was unevenly distributed - between and within different regions - AND the current rates of improvement will fall well short of SDG targets.

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The WASH & Nutrition nexus

1. Food availability	→	Water (and excreta) are a resource for agriculture
2. Food access	→	Cost of services may divert scarce household income from food
3. Food stability or resilience	→	Economic shock presented by ill health or death of household members
4. Food utilization	→	Enteric infection affecting how food is absorbed and utilized

SOURCE: Cumming O, Watson L, Dangour AD (In Press)

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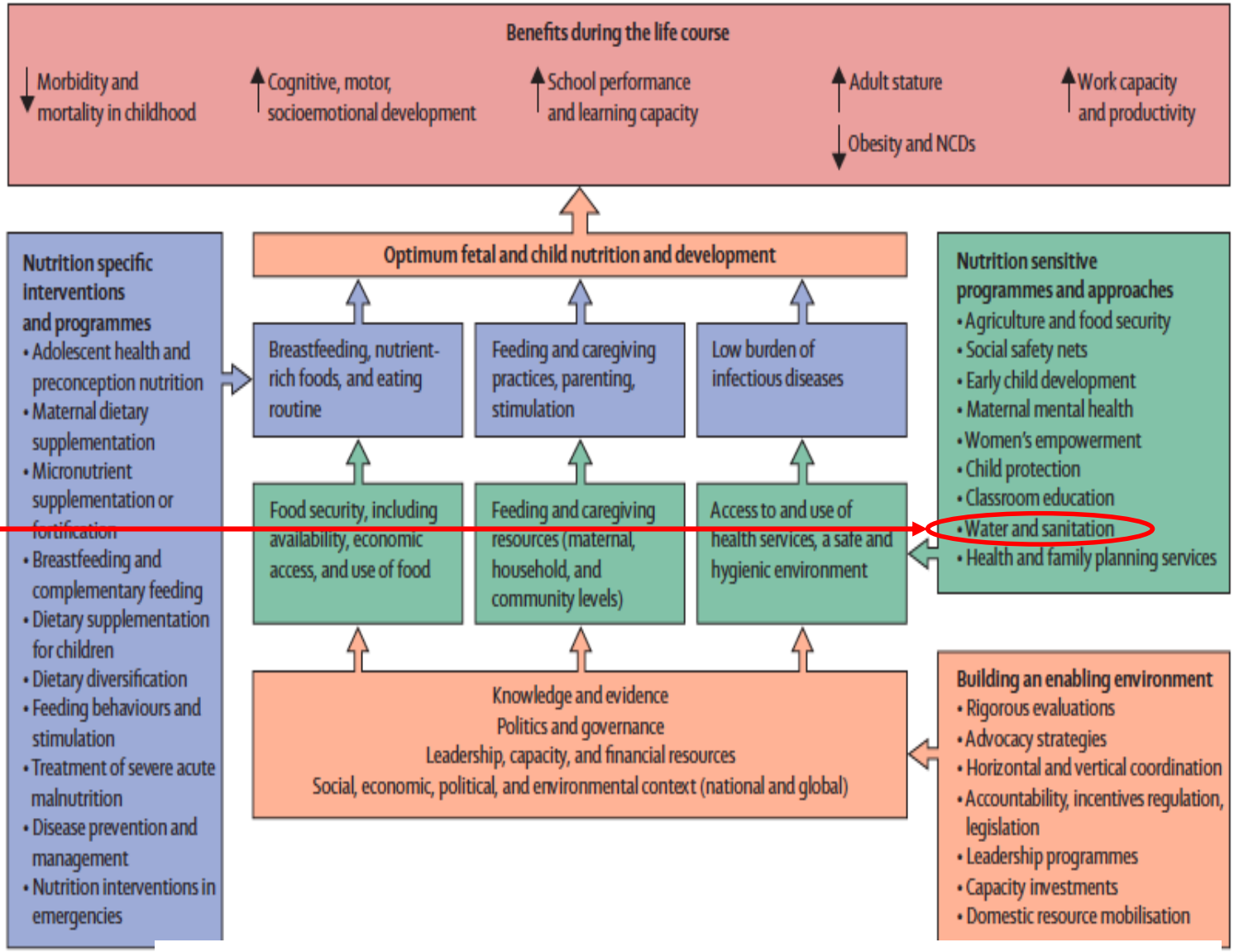
Can WASH affect childhood undernutrition?

Achieving SDG 2 requires a set of complex and cross-cutting interventions and programmes

A small but important part of the puzzle



Lancet Series on Maternal and Child Undernutrition and Overweight (Black et al, 2013), building on the UNICEF framework used in the 2008 series.

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Can WASH affect childhood undernutrition?

It has been estimated that:

…environmental factors, including no access to WASH, may account for **50% undernutrition** (Blossner & de Onis 2005; Pruss-Ustun & Corvalan, 2006; World Bank 2008; Victoria & Fall 2008)

…approximately **860,000 deaths** attributable to undernutrition could be prevented with improved WASH (Pruss-Ustun et al 2008)

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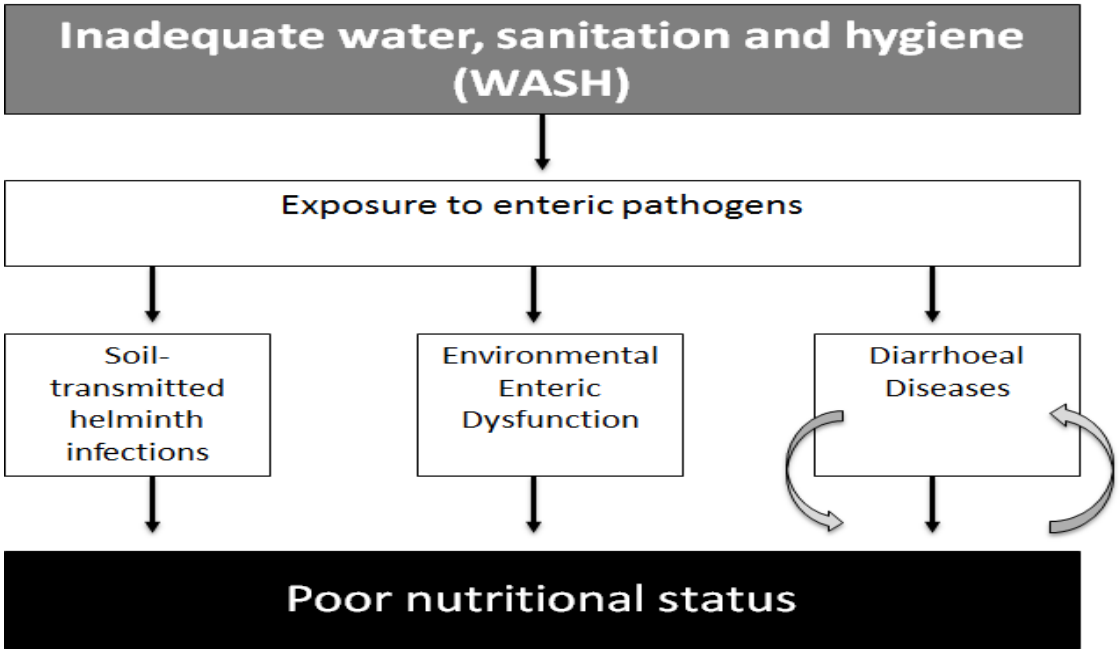
Can WASH affect childhood undernutrition?



SOURCE: (Cumming et al, 2015)

Indirect: time taken collecting water, the cost of buying water, which may divert scarce resources from food and time spent feeding by infants, and the chemical contamination of water (Cumming & Cairncross, 2015).

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Environmental Enteric Dysfunction (EED)

Healthy villi
Absorbs nutrients
Pathogenic barrier

Villi atrophy
Malabsorption
“Leaky” intestine

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Does undernutrition reduce as a result of improvements in WASH?

Observational studies have shown a robust association between WASH & childhood nutrition (Spears, 2013; Spears et al, 2013; Rah et al, 2015; Liu et al, 2015)

However, evidence on the effects of WASH interventions on the nutritional status of children is less well establish.

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Does undernutrition reduce as a result of improvements in WASH?

2013 Cochrane Review on the topic found **"suggestive evidence of a small benefit"** for children under the age of 5, in terms of reduced stunting (HAZ by ~0.08 SD. Approximately equivalent to 0.5 cm at 24 months; relative reduction in stunting prevalence of 15%)

<u>But:</u>

- All studies medium to high risk of bias
- Mostly PoU water treatment
- No sanitation studies

THE COCHRANE COLLABORATION®

2013 – 2016 five RCTs

- 2 found large effects on childhood stunting (Hammer & spears, 2013; Pickering et al, 2015)
- 3 reported no effect <u>BUT</u> **low levels of uptake and compliance**

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What don't we know?

- **Benefits of integrated approaches:** WASH and nutrition interventions;
- **Better understanding of the effect of targeted interventions:** in particular the effects of WASH interventions targeting in-utero and early life exposure;
- **The effects of WASH on EED and specific enteric infections;**
- **Informal urban settlements:** effect of onsite sanitation on child health in informal/high density settings;

Ongoing studies:
SHINE trial (Zimbabwe); WASH Benefits (Kenya and Bangladesh) and MapSan (Mozambique). SHARE studies in Malawi and Kenya.

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What next?

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Window of opportunity

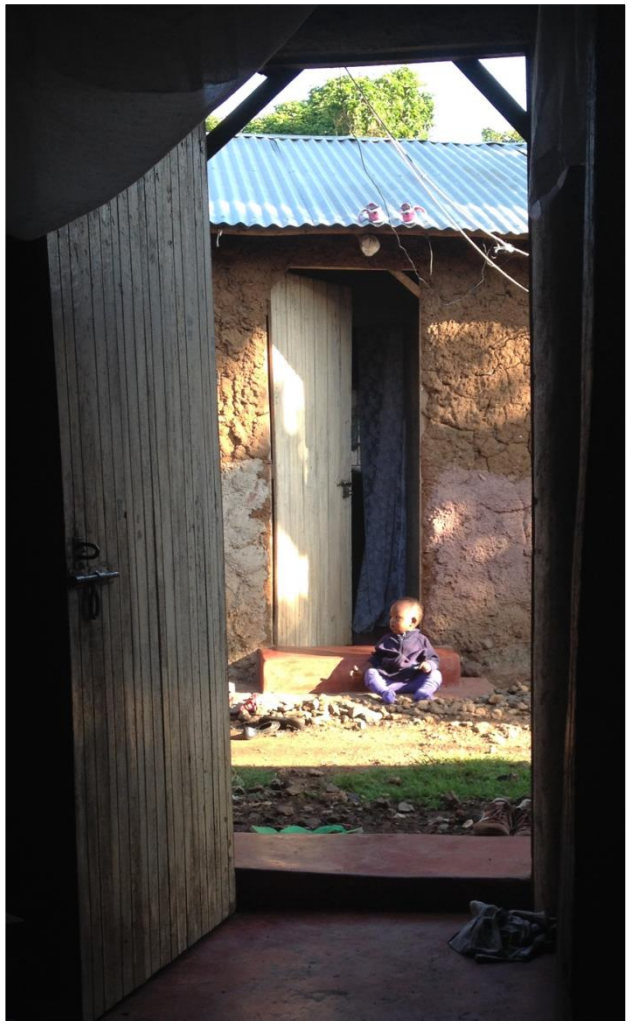
Process of stunting and burden of diarrhoeal disease is concentrated in the first two years of life = **first 1000 days!**

Design & deliver WASH interventions to prevent exposure among young children:

- Safe disposal of child faeces
- Infant food hygiene
- Management of animal waste
- Hygienic play areas

Target WASH services at high burden populations

Listen, learn from and work with the nutrition sector



Conclusions

- Nutrition specific interventions cannot alone adequately address the current deficit in nutritional outcomes.
- That WASH may impact on undernutrition via **multiple biological and social mechanisms.**
- Persistent challenges in **delivering successful WASH interventions**
- Greater focus on the **“window of opportunity”** or first 1000 days of life, from conception to a child’s second birthday, after which the damage is largely irreversible
- Global efforts will require a **more comprehensive and ambitious approach**, including the scale-up of high impact interventions

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Nutrition-WASH Index Analysis

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Nutrition-WASH Index Analysis

Increasing recognition of the need for nutrition-WASH coordination, collaboration & integration

Aim:

Understand the degree to which WASH and nutrition are integrated into each sectors national plans and policies;

Methodology:

Analysis of 13 national nutrition action plans against 10 pre-defined criteria

Keyword search of nutrition related terms in WASH sector plans and strategies in the same 13 countries

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Criteria to assess nutrition plans

Is WASH recognised as an **underlying** and important factor in nutrition?	WASH in background analysis
All **three components** of water, sanitation or hygiene included?	3 components of WASH included
WASH **objective/strategic aim**?	WASH objective
Are **WASH activities or interventions defined**?	VASH activities included
If so, are WASH roles and responsibilities defined?	WASH roles & responsibilities defined
To what degree do interventions include **all three WASH elements**?	Comprehensive WASH interventions
Do any **indicators or targets** relate to WASH?	WASH targets & indicators included
Is there a separate and specific **budget for WASH activities**?	WASH budgeted
What proportion of the total budget is for WASH?	Proportion of budget for WASH
Do the different **structures, coordinating mechanisms, or review groups** include representatives from the ministry responsible for water and sanitation?	nstitutional structures & mechanisms include WASH
	Nutrition referenced
	Integrated activities

Criteria to assess WASH policies and strategies

Keyword search:
Agriculture, anaemia, (breast)feeding, food, micro(nutrient) deficiency, nutrition (which also captures 'malnutrition', 'undernutrition'), stunting, under(weight), and wasting

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Key Findings: Nutrition Plans

Strong recognition that poor WASH is an underlying cause

Degree to which WASH is embedded in plans varies substantially across countries:

- 4 countries prioritise WASH with a WASH-related objective, detailed WASH interventions & indicators (Madagascar, Nepal, Timor Leste & Zambia)
- Majority of plans do not comprehensively address infrastructural & behavioural change aspects together (exceptions are Mozambique, Nepal, Timor Leste, Zambia)
- Most plans recognise all 3 elements of WASH with varying degrees of prioritisation (e.g. Rwanda prioritises hygiene)
- Lack of inclusion of WASH interventions important for nutritional outcomes (food hygiene & safe disposal of child faeces) (exceptions are Nepal, Rwanda, Timor Leste & Zambia

Key Findings: WASH policies & strategies

Majority of plans do not refer to or integrate nutrition

- No reference to nutrition in Madagascar, Mozambique, Tanzania

References to nutrition are generally made with regards to water for agriculture and food production, especially in:

- Bangladesh, Mozambique, Nepal Tanzania, Uganda, Zambia

Plans under the MoH were more likely to make the connections between WASH and undernutrition, for example in Kenya:

- Sanitation & Hygiene Policy (MoH) recognises undernutrition & anaemia as particular issues
- In contrast, Ministry of Water & Irrigation plans make no reference to nutrition

Liberia plan very comprehensive in recognising the links & outlines specific opportunities for incorporating WASH into national health & nutrition programmes and campaigns

Thank you

Read more about the WASH & undernutrition nexus: http://bit.ly/1ZWBD5i and http://bit.ly/1O4ZivE

Sign up to our newsletter: http://bit.ly/WhMMzR

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IFEH WASH and Nutrition session
BICC, Malawi
6th May 2016

MALAWI WASH POLICY AND PRACTICE PERSPECTIVE

Emma Mary Mbalame
Deputy Director Water Supply Services
Ministry of Agriculture, Irrigation & Water Development

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Malawi
Epidemiology and
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PRESENTATION OUTLINE

- INTRODUCTION
- POLICIES GUIDING AND STRATEGIES THE WATER SECTOR
- WASH STATUS IN MALAWI
- PROVISION AND MANAGEMENT OF WATER SERVICES
- SECTOR LINKAGES WITH OTHER SECTORS
- WASH AND NUTRITION CROSS-SECTORAL APPROACH
- CONCLUSION

INTRODUCTION

- The sector's vision is 'Water and Sanitation for All, Always'
- Water and Sanitation sub-sectors in the country endeavor to ensure that every Malawian has equitable access to water and sanitation services for socio-economic development.
- Central Government together with Local Councils, NGO's and DP's and communities have been increasing availability and accessibility of safe water supply for domestic and industrial uses as well as access and use of improved sanitation services.

INTRODUCTION CONT.'

- These efforts are aimed at achieving goals as stated in the MGDS II and SDG's
- The MGDS II aimed at achieving, by 2016, water supply access of 75% and access to improved sanitation of 75% whereas
- The SDG goal number 6 aim at universal sustainable access to safe drinking water and improved sanitation and hygiene services by 2030. This poses a higher level of ambition for the WASH sector as compared to MDGs.

POLICIES AND STRATEGIES GUIDING THE SECTOR

a) International policies and strategies

- the Sustainable Development Goals (SDGs)
- The New Partnership for Africa's Development (NEPAD)
- SADC's Regional Indicative Strategic Development Plan (RISDP)

b) National policies and strategies

- The Vision 2020
- Malawi Growth Development Strategy II (2011 – 2016)
- The Water, Sanitation and Irrigation Sector (WSIS) Strategic Plan (2012/13 to 2016/17)
- The National Water Policy (2005),
- The National Sanitation Policy (2008
- The National Decentralization Policy (1998)

WASH STATUS IN MALAWI

- According to MDG end line survey 2014 report, MES (2014), the rural population with access to safe water supply has grown from 81% in 2011 to 84% in 2014. The major source of safe drinking water supply in rural areas is boreholes. The country met the MDGs (67%) and MGDSII (75%) targets.
- The increase in access largely resulted from an increase in construction of facilities through the NWDP, DP and NGOs.
- The percentage of population, using improved sanitation is at 40.6%, MES (2014).
- The population using hand washing facilities where water and soap and other cleansing agent present is at 4.2%, MES (2014).

PROVISION AND MANAGEMENT OF WATER SERVICES

- The Ministry responsible for Water Development has the overall responsibility to provide potable water to the people of Malawi.
- Urban water supplies in Malawi are managed by 2 main city Water Boards (Blantyre and Lilongwe) and 3 Regional Water Boards (Southern, Central and Northern).
- In line with decentralization policy, at District level, the District Co-ordination Team (DCT),NGOs and DPs spearheads provision and management of water supply and sanitation activities in the district.
- At the lower level, the communities Village Health and Water Committee (VHWC) is the communities representative body.

SECTOR LINKAGES WITH OTHER SECTORS

- The Malawi Government regards water as key to socio-economic development of the country, as it has direct linkages with sectors such as agriculture, industry, natural resources, health, tourism, energy and fisheries.
- Improved water supply and sanitation services also contributes towards public health, nutrition and quality of education as it reduces the disease burden.

WASH AND NUTRITION CROSS-SECTORAL APPROACH

- WASH having a direct linkage with other sectors including nutrition, calls for need for a cross-sectoral approach to programming.
- Thinking multi-sectorally but acting sectorally is key and these include:
  - Utilize the evidence based research for advocacy and to increase understanding of nutrition in WASH.
  - Strengthen the enabling environment for WASH and nutrition integration at various administrative levels and with donors.
  - Allow nutrition evidence to influence WASH targeting.
  - Developing an effective M&E framework so as to be able to track and monitor implementation of nutrition-WASH linkages.

CONCLUSION

- Insufficient attention has been given to cross-sectoral issues, particularly the harmonization of sectoral goals and systemization of decision making, taking into account cross-sectoral dimensions.
- It is critically important for policy makers to understand the linkages between WASH and nutrition nexus when devising sustainable policies & strategies.
- The nexus approach provides a framework for addressing competition for resources, maximization of synergies and enhancing resource use efficiency.
- It is therefore critical to strengthen the nexus perspective in national planning and strengthen the capacity for diagnosing interlinkages among two sectors and bringing them into planning decisions

THANK YOU
FOR
YOUR ATTENTION

IFEH WASH and Nutrition session
BICC, Malawi
6th May 2016

Water, Sanitation and Hygiene related to Malnutrition

Name: Holystone Maumsamatha Kafanikhale
Affiliation: Malawi Environmental Health Association

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BACKGROUND INFORMATION

- Malawi WASH sector has a number of players implementing sanitation and hygiene activities in the community.
- Leading are government sectors: Ministry of Health and departments of Water Supplies (within MAIWD) and Environmental Affairs .....the departments focus on provision of adequate safe water and monitoring /ensuring effluent discharged into water bodies meet minimum standards
- Malawi government provides oversight of sanitation and hygiene activities to ensure that quality of interventions and conformance with the country's legislation on sanitation and hygiene CAP 34:01, CAP 69:01

IMPLEMENTATION ARRANGEMENT

- The country has an overall National Sanitation and Hygiene Coordination Unit
- This unit provides oversight and technical directions to WASH players using existing legal instruments and policy frameworks
- There is also a Technical arm called National Open Defeacation Free Task Force that is multi-sectoral in nature.
- Both committees support the district structures in an effort of promoting sanitation and hygiene
- There is a district coordinating committee(DCT) on WASH at local council level that coordinates sanitation and hygiene activities
- This DCT serves as a technical arm to the council and reports progress of activities quarterly to the Health and Environment committee of the council

FACTS ABOUT WASH VIDA MALNUTRITION

- Diarrhoea, Malaria, pneumonia are the top three killers of children under age 5 in Malawi. Diarrhoea remains a leading cause of malnutrition in under five age group and one-third to one-half of all child mortality cases are linked to malnutrition
- Malawi Health Management Information Systems (HMIS 2015) estimates that more than 85 percent of deaths from diarrheal illnesses in young children could be attributed to unsafe or inadequate water, sanitation, and hygiene (WASH) practices

FACTS ABOUT WASH VIDA MALNUTRITION

- The relationship between water, sanitation, and hygiene (WASH) and nutrition is well-known and well-documented in the literature. Lack of WASH causes diarrheal disease and is associated with environmental enteropathy. Both of these inhibit the absorption and use of calories and nutrients, causing undernutrition. In turn, undernutrition makes children more vulnerable to enteric infections like diarrheal disease.
- If mothers and other caregivers used basic hygiene practices and had better access to safe water and adequate sanitation this could greatly reduce under 5 deaths and improve child nutrition.

EPIDEMIOLOGY OF WASH VIDA MALNUTRITION

- HMIS Reports, (2015) indicate that 52% of all out patient's attendances in all health facilities and 25% of morbidity were due to sanitation and hygiene related diseases of which 37% accounts for Diarrhoea, 47% malaria, 41% Hookworms infections, 83% Ascariasis.
- 11% of underfive children deaths are due to Diarrhoea, 7% due to Malaria while 18% is due to Pneumonia and 24% as a result of other conditions .
- Most of these conditions are due to WASH related factors and may be avoided if implemented of WASH interventions is at scale

EPIDEMIOLOGY CONTINUED

- WASH reduces the incidence of diarrheal disease. A recent study using the latest burden of disease data estimates that almost 60 percent of diarrhea is caused by unsafe water, lack of sanitation, and poor hygiene behaviors, and is thus preventable (Prüss-Üstun et al., 2014). Extensive evidence supports the hypothesis that a higher cumulative burden of diarrhea increases the risk of undernutrition.
- A vicious cycle exists between diarrhea and undernutrition, as children with diarrhea eat less and are less able to absorb the nutrients from their food. At the same time, they need additional calories to recover from the infection. Malnourished children have weakened immunity and are more susceptible to diarrhea when exposed to fecal material from their environment.
- The World Health Organization (WHO) estimates 1.7 billion cases of diarrheal disease annually which leads to 9 percent of child deaths (CHERG, 2013).

EPIDEMIOLOGY CONTINUED

- A second effect of poor WASH conditions is intestinal worm infection. Severe whipworm and roundworm infections are negatively associated with growth, and intestinal worms may result in poor absorption of nutrients, thus affecting nutritional status.
- Finally, WASH interventions are able to reduce the pathogen load observed in environments with poor WASH conditions. Some causes of undernutrition are not directly associated with diarrhea, but instead are associated with high pathogen environments and poor WASH conditions (see Figure 1). Although this cause of undernutrition is not well understood, its association with high pathogen environments suggests that it may be caused by recurring infections in the gut that limit the proper absorption of calories and nutrients. This hypothesis is often referred to as environmental enteropathy or environmental enteric dysfunction.

HOW ENVIRONMENT HEALTH FITS INTO STRATEGIC CONTROL

- Environmental Health is the hub for management of WASH activities in Malawi
- Implementation of WASH greatly contributes to reduction of the disease burden and mortality as study findings reveal
- This finding therefore calls for commitment from government to mobilise resources for environmental health programme delivery at community levels

RECOMMENDATIONS FOR BETTER IMPROVEMENT

INTEGRATING WASH INTO NUTRITION COUNSELING AND PROMOTION

- Make hand washing an “essential nutrition action” and incorporate the practice into all counseling and promotional materials

INTEGRATING WASH INTO A NUTRITION ASSESSMENT

- **OTP and SFP sesssions**

INTEGRATING WASH INTO COMMUNITY SERVICES

INTEGRATING WASH INTO MATERNAL AND NEONATAL PROGRAMS

- Use MCH services a platform for engaging mothers and care givers on relationship between WASH and malnutrition

WASH and NUTRITION INTEGRATION IN USAID- Lessons from WASHplus

Presented by Lucy Jubeki Mungoni

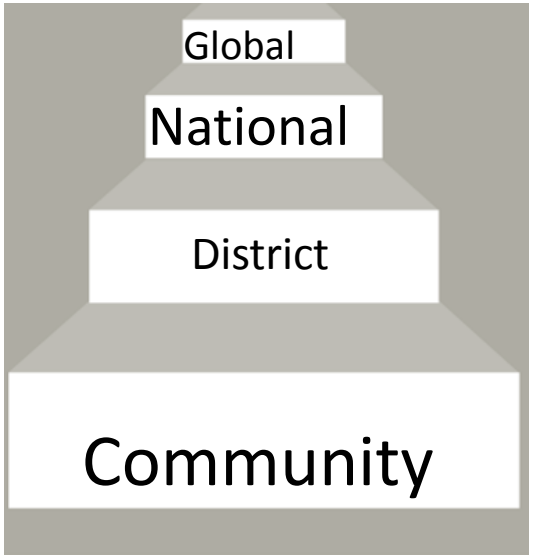
Definition -integration of WASH and Nutrition

- Integration of WASH into nutrition is defined broadly as including one or more WASH interventions within a nutrition policy or programmatic effort.
- It may require minimal integration through the co-location of nutrition and WASH efforts or involve a complete integrated package of nutrition and WASH action

How do we Integrate?

- Integration on a continuum

- Across levels of the system
  - In a country
  - Globally



Why Integration Matters to USAID

- Integration creates synergy
- Improves financing opportunities
- Beneficiaries do not live isolated, vertical lives...integration can improve lives

Why integrate WASH and Nutrition

50% of malnutrition is associated with repeated episodes of diarrhea or intestinal worm infestation as a result of unsafe water, inadequate sanitation or insufficient hygiene (WHO)

Diarrhea is 2nd leading cause of death in children u5 and 80% of deaths related to diarrhea are due to poor WASH environments (WHO)

Undernutrition is directly caused by inadequate dietary intake and/or disease and indirectly related to many factors, including contaminated drinking-water and poor sanitation and hygiene.

Guiding policies and documents

USAID has put in place:

- *Country Development Cooperation Strategy Malawi 2013-2018, development hypothesis is through 3Cs,*

  -co-locating interventions

  - coordinating better within USAID, other DPs, government, amongst USAID partners

  - collaborating to foster linkages among implementing partners and the DPs to improve results

- Global Multi-sectoral Nutrition Strategy-2014-2025,
- Global Water and Development strategy 2013-2018
- Global Strategy on EPMCD which is a priority for USAID's health programs.

The Nutrition strategy

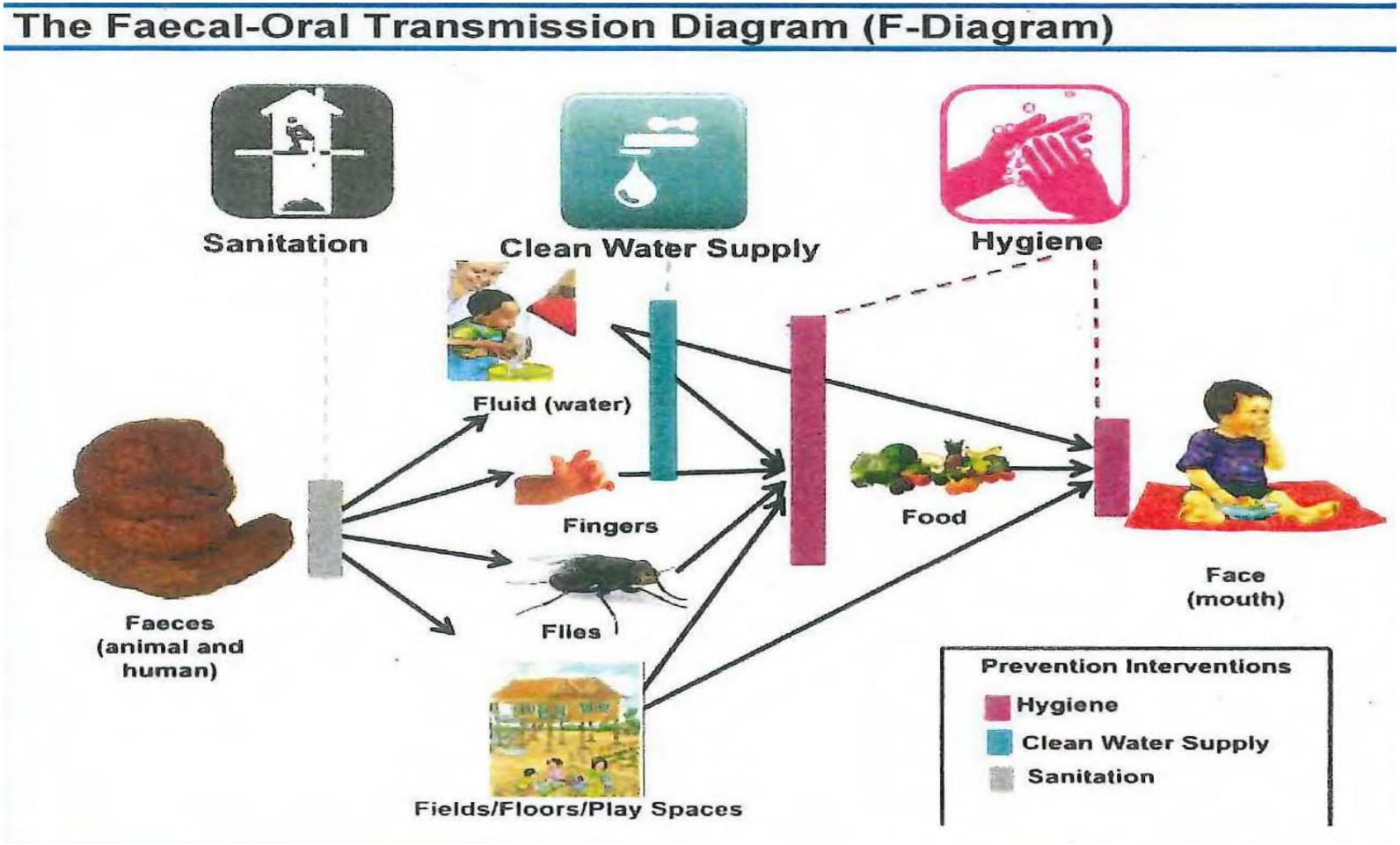
- Highlights the importance of WASH for improvements in nutrition and calls for increased coordination of WASH and nutrition activities.
- Integrates key hygiene actions (safe drinking water, handwashing with soap, safe disposal of excreta and food hygiene) in all targeted nutrition programs
- Strategy aims at decreasing chronic malnutrition , measured by stunting by 20%

Water and Development strategy

The goal is to save lives and advance development through improvements in water supply, sanitation and hygiene programs and the sound management and use of water for food security and good nutrition

Home environments

The F- diagram



Source: Guyon A. et al, Essential Nutrition Actions and Essential Hygiene Actions Reference Manual: Health Workers and Nutrition managers. 2015. CORE Group: Washington, DC.

Eating dirt (and whatever is in it)

Ngure F. et al, American Society of Tropical Medicine and Hygiene September 3, 2013

One year old infant consuming:

- 1 gram of chicken feces per day = 4-23 million *E. coli*
- 20 grams of soil from a laundry area per day = 440-4,240 *E. coli*
- Both??

5 hour observation, Save the Children, The ENGINE Project in Ethiopia:

- Mother's clothes, neighbors clothes
- Own fingers, sister's fingers
- Piece of wood, stick, leaves (at least 7 times)
- Kitten's tail

USAID Malawi Projects

- WALA- Though there was no deliberate effort to collect data on the impact of integration.

- Existing project focusing on WASH and Nutrition: NJIRA , UBALE, Tiwalere, and IMPACT
- Upcoming project: ONSE

USAID projects WASHplus -Principal Activities

USAID
FROM THE AMERICAN PEOPLE

Sanitation – CLTS, ODF and post-ODF

Sanitation marketing

Screening & referral of malnourished children

Negotiating improved practices with mothers, including handwashing at critical moments

Rehabilitation/ protection of water points

Promotion of POU water treatment

Nutrition & breastfeeding demonstrations

Promoting WASH-nutrition during world days (WTD, WHWD, WBF, WWD)

Results

- villages certified open defecation free (ODF); 81% of target villages

Water Supply

- Non functioning water points rehabilitated/repaired
- sessions on treating water
- communities have self-funding plan to repair & maintain water points in future

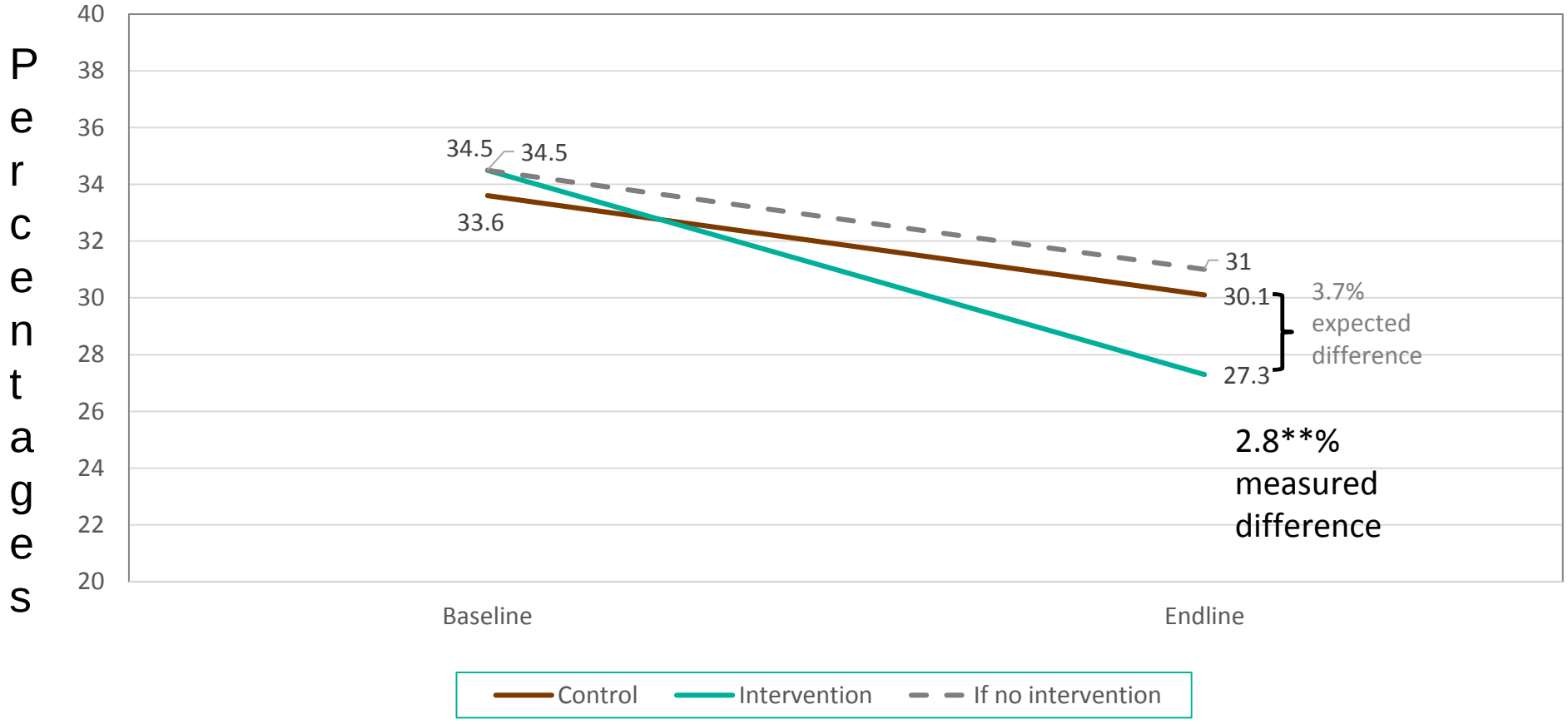
Hygiene

- tippy taps installed - toilet/kitchen

Nutrition

- sessions on how to breastfeed & prepare enriched complementary food
- **children under 2 regularly tested for undernutrition**
  - Decrease in referrals (Apr-Jun 14→Apr-Jun 15)
    - Moderate: 2,050 → 334
    - Severe with complications: 269 → 38

Reported Diarrhea Prevalence 2 Weeks Prior to Survey



** Measured difference at endline marginally significant, p =.072

Lessons Learned

Developing a coherent BC strategy–with long-term focus–maximizes results & can foster innovations

Integrating WASH & nutrition in communities reinforces adoption of preventive practices

Mobilizing community participation can be fostered by:

- Tailoring approaches to local environments
- Collaboratively involving stakeholders at all levels
- Featuring “champions” as messengers via media
- Stimulating healthy competition between communities, mayors, etc.
- Recognizing successes & increased self-efficacy → increased engagement at all levels

END OF PRESENTATION

- ZIKOMO KWAMBIRI
- THANK YOU

IFEH 2016
BICC, Malawi
6th May 2016

University of Malawi, MEIRU and SHARE's research proposal 2015-2018

Kondwani Chidziwisano
University of Malawi - Polytechnic

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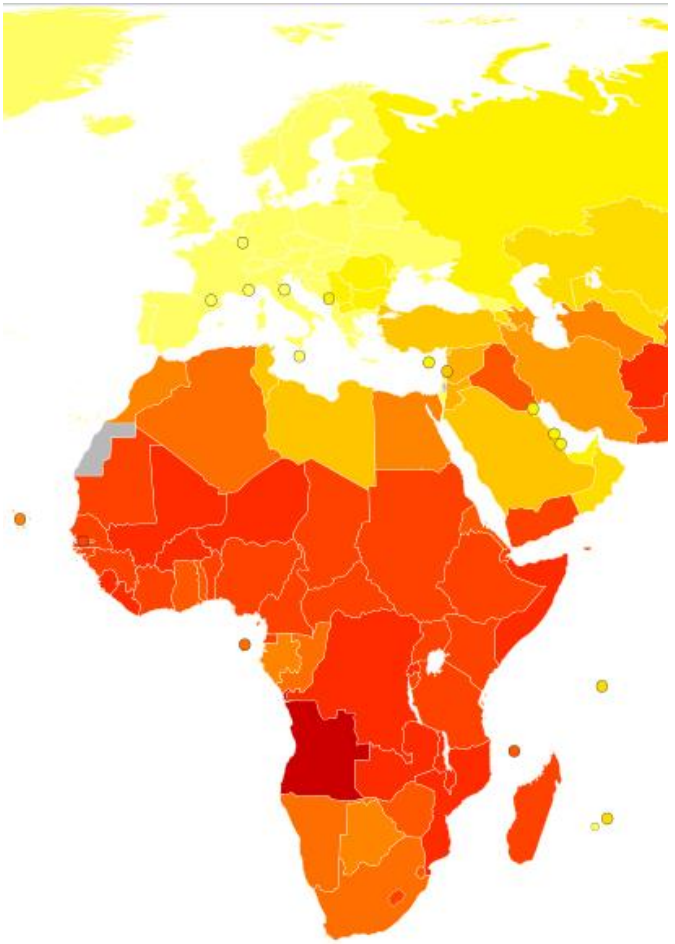
Sanitation and Hygiene Applied Research for Equity

Malawi Epidemiology and Intervention Research Unit

UNIVERSITY OF MALAWI

Background

- Diarrhoeal disease
  - Still one of the biggest killers in the world claiming over 1.5 million children a year.
  - In Malawi 135 cases per 1000 under five population being treated for diarrhoea with 3 deaths per 1000 new cases in 2009/10



Background

- **Known causes of diarrhoeal disease isolated in Malawi to date include:**

- *Salmonella* sp.
- *Clostridium perfringens*
- *Bacillus cereus*
- *E coli*
- Staphylococci
- Rotavirus and enteroviruses
- *Cryptosporidium*
- *Giardia*
- *Shigella*
- *Vibrio cholerae*
- Schistosomiasis

Pavone et al 1990; Cunliffe *et al.,* 2002; 2001; 1999; Gatei *et al.,* 2003; Cranendonk *et al.,* 2003; Peng *et al.,* 2003; Morse *et al.,* 2007 Gordon *et al.,* 2001; Roberts *et al.,* 2001; Swerdlow *et al .,*1997. Pitman *et al.,* 1997; Bowie et al 2002; Taulo et al., 2008)

Justification

- Poor food hygiene practices might be causing more diarrhoeal disease than exposure to contaminated water (Lanata, 2003).
- Exposure to poor water, sanitation and hygiene conditions are compounded by early weaning, lack of exclusive breastfeeding and feeding with water at an early age.
- We have no conclusive data for contamination of food at domestic level.
- International evidence shows a high level of contamination of weaning foods

Kung'u, et al., 2009; Toure, et al., 2011; Ghuliani, et al., 1995; Sajilata, et al., 2002; Taulo, et al., 2008; Henry, et al., 1990; Imong, et al., 1995

SHARE I: Complementary Food Hygiene

SHARE 1

- Bangladesh
- Nepal
- Gambia

Demonstrated that simple, scalable behavioural interventions can significantly reduce exposure to sanitation and hygiene related pathogens transmitted through complementary foods

National research priorities

Diarrhoeal diseases

- Assessment of burden and aetiology of diarrhoeal diseases in the community
- Strategies to improve coverage of hygiene and sanitation interventions
- Assessment of models for community and social mobilization towards diarrhoea disease control, especially in the rural and high density urban areas
- Efficacy, effectiveness and feasibility of preventive interventions against diarrhoeal disease

Nutrition

Extent of and barriers in the infant and young child feeding practices

Environmental Health

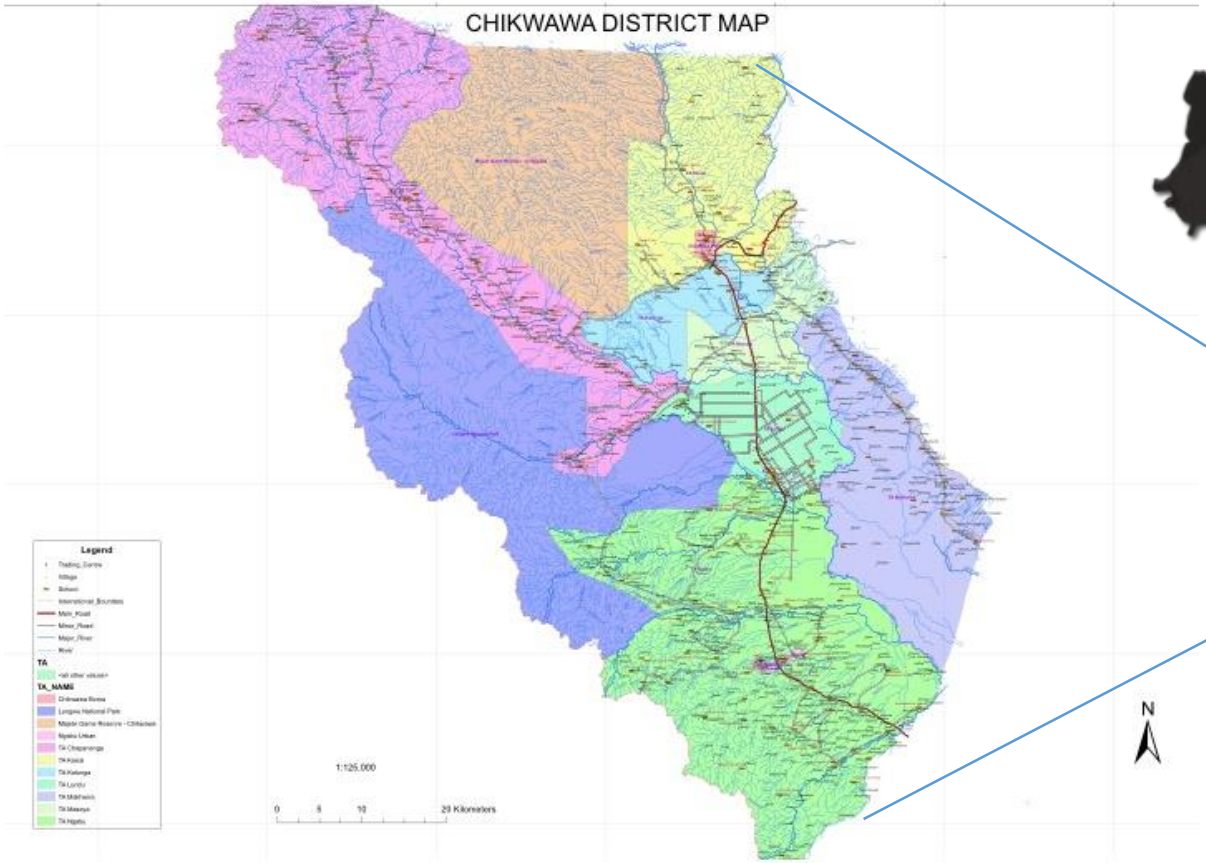
Assess the safety of food in terms of microbiological and chemical contamination

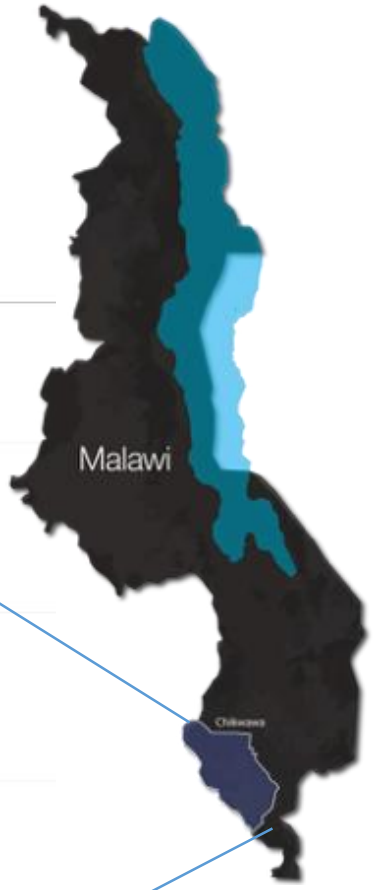
Proposed Outline

Measure the relative impact of WASH and food hygiene interventions on diarrhoeal disease in children under 5 in Chikwawa District, Southern Malawi.

- Identify sources and causes of diarrhoeal disease in sample population of under 5 children
- Identify specifically, how many and what type of pathogens are present in weaning foods, water source, stored water, mothers hands, food preparation surfaces, and latrine surfaces before and after the intervention
- Identify the key intervention points and target behaviours that can be targeted by either a WASH or a WASH+food hygiene community-based intervention
- Develop an intervention based on the quantitative and qualitative formative and baseline results

Chikwawa District, Malawi





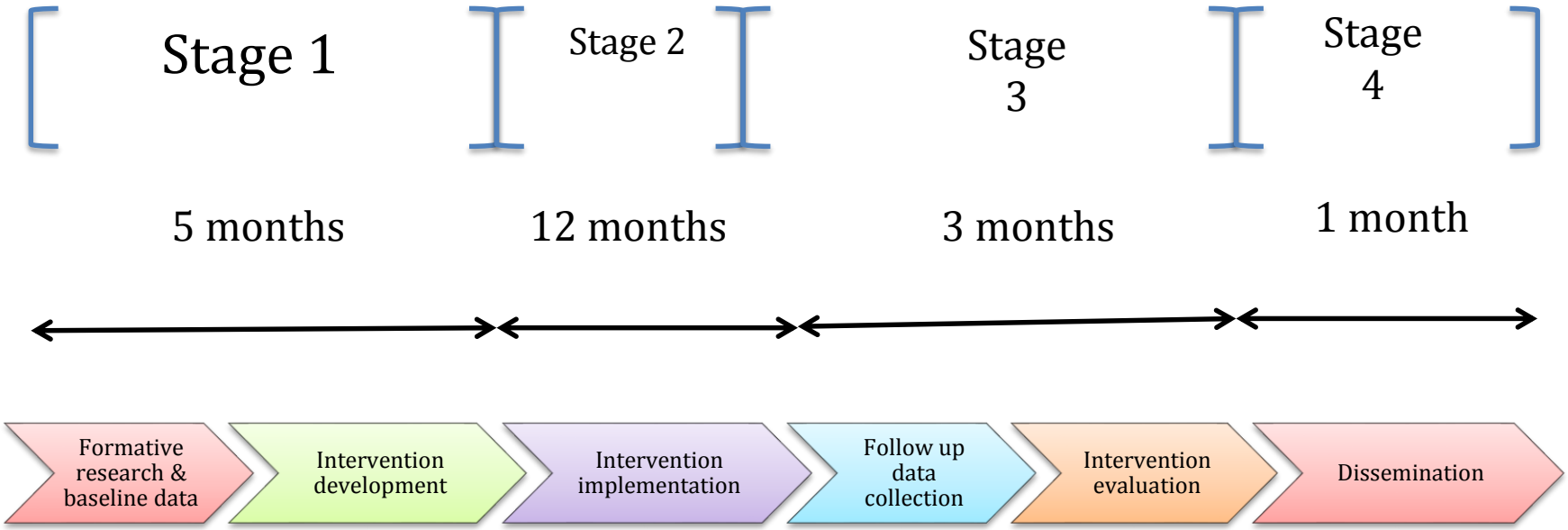
Research Team

- Malawi Epidemiology Intervention Research Unit (Lead)
- University of Malawi – Polytechnic (Implementation)
- University of Malawi – College of Medicine (Microbiology)
- icddr,b (laboratory support)

Other collaborators (added value)

- University of Strathclyde
- Malawi Liverpool Wellcome Trust

Proposed process



Formative Research & intervention development

(0 – 5 months)

- ***Formative research:*** desk review, interviews – behavior factors, microbe exposure points
- ***Baseline data:*** demographic, health status, attitude & practice, microbe analysis, anthropometric measurement
- ***Develop intervention:*** theory of behavioural change – RANAS model, Identify CCP in exposure pathways

Intervention implementation

(12 months)

The impact of each intervention
The relative impact of each intervention compared to the Control Group
The relative impact of the WASH intervention to the WASH+ Food Intervention

Follow up data collection and Evaluation (3 months)

End of intervention: Final round of data using the same tools used during baseline and formative period
Face to face interview –behaviour change, intervention check, Demographics, microbe samples

Dissemination

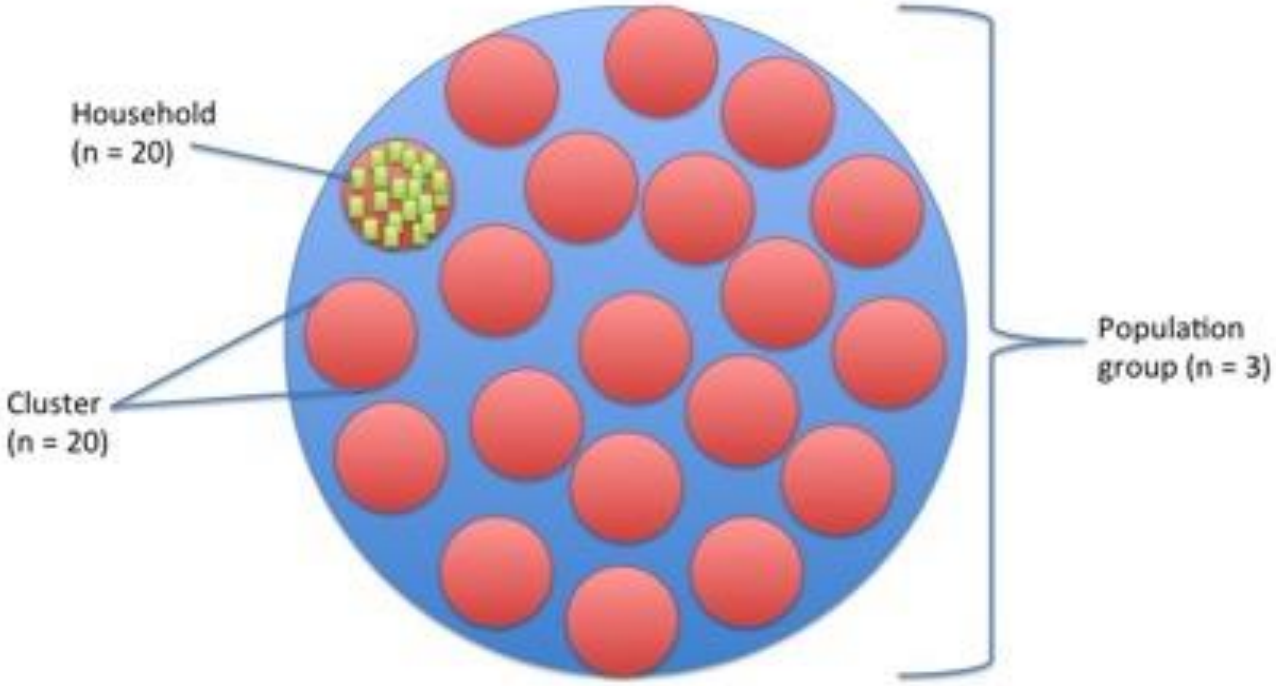
(1 month)

- be conducted in line with the "Research Into Use" strategy and the "Outcomes Mapping" exercise
- National stakeholder meetings
- Policy briefs: research summary for policy makers and program developers
- Publications and presentations

This dissemination strategy aims to increase the opportunities for uptake of research outputs into national strategies and programmes

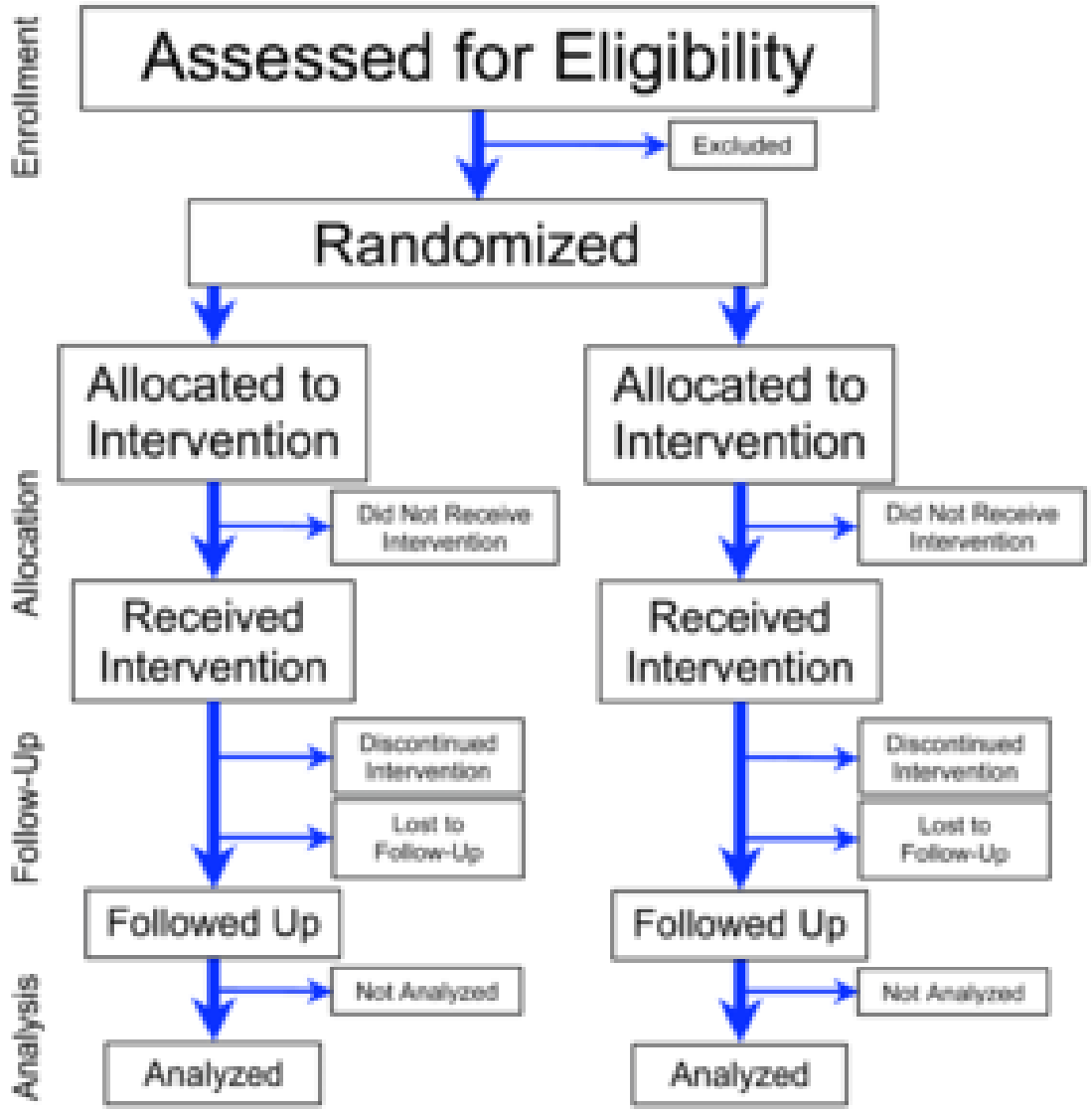
Treatment groups

Randomized control trial



Treatment group 1 = 400
Treatment group 2 = 400
Control group = 200

Flow diagram of treatment groups



Outcomes

- The individual and combined impact of food hygiene and WASH interventions on diarrhoeal disease incidence in children under 5 years,
- The impact of food hygiene and WASH interventions on the levels of targeted enteric pathogens measured at key exposure points.
- Correlation between any changes in contamination levels and reduction of diarrhoeal disease incidence in children under 5 years.

Key areas for discussion

- Current linkage between WASH and Nutrition in Malawi
- Lessons from other countries
- Gaps in between WASH and nutrition in Malawi
  - Any possible solutions to the gaps!!!

THANK YOU

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