LEARNING NOTE FOUR

Stronger systems for inclusive and sustainable WASH

Research contributions to WASH systems strengthening

Summary

Water for Women aims to strengthen national and subnational water, sanitation and hygiene (WASH) systems in Asian and Pacific communities through greater emphasis on gender equality, disability and social inclusion (GEDSI), safely managed WASH and water security.

This learning note highlights how research can contribute to WASH systems strengthening. It also demonstrates how the concept of 'leverage points' supports critical reflection on how research and other interventions influence systems change.

The note is based on insights and case studies from Water for Women research partners and projects across the Asia-Pacific region, shared through a joint workshop and associated participatory process. It is intended for researchers and practitioners working to support improved WASH in low- and-middle-income countries.

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Water For Women | Systems Strengthening | UTS Institute for Sustainable Futures | WaterAid | Australian Aid

Through the experiences and insights of Water for Women research partners we have learnt that:

Research is a key entry point for WASH systems change

- The generation of new evidence can shift perspectives, reveal issues and inequalities, connect actors and underpin interventions and solutions to improve services.
- Researchers can bring convening power, technical expertise, legitimacy and evidence to support advocacy.

Research has increased influence when it involves stakeholders, co-creation and targeted useable outputs

- Systems change is most effective when researchers:
    - Co-create research questions and research processes with relevant WASH actors
    - Define their systems strengthening outcomes explicitly, based on analysis of the socio-political context, and accounting for both an actor-based view of WASH systems and WASH systems strengthening building blocks
    - Prioritise meaningful, sustained and strategically oriented stakeholder engagement as part of research processes, to support local ownership of the findings
    - Provide practical, feasible recommendations for key actors in the WASH system, and tailor outputs to directly support actors in their roles (e.g., guidance, guidelines)
    - Utilise models such as Meadows' (1999)[1] leverage points to identify the most effective and impactful entry points to create change, and to plan and implement the associated activities that utilise these entry points.

Research partnerships between international and local research organisations strengthen WASH systems

- Partnerships between local and international research organisations build the profile, engagement and influence of in-country research organisations in national and subnational WASH systems.
- These partnerships also support international and in-country research organisations to contribute context-based research that can inform the global WASH system.

Research can be usefully drawn on by actors within WASH systems to influence change

- International agencies and civil society organisations (CSOs) can utilise research evidence for leverage points such as changing information flows, creating feedback loops and influencing system goals, structure and mindsets.

Community members in Manggarai, Indonesia participate in a futures visioning activity. Research partners at the University of Technology Sydney's Institute for Sustainable Futures (UTS-ISF) and partner Yayasan Plan International Indonesia facilitated the activity to support community members to share their aspirations for a climate-resilient future
Credit: UTS-ISF / Jeremy Kohlitz

[1] Meadows, D. (1999). *Leverage points: places to intervene in a system*, The Sustainability Institute, Hartland VT. https://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/

Introduction

The Australian Government's Water for Women Fund aims to improve the health, gender equality and wellbeing of Asian and Pacific communities. One of the four end-of-Fund outcomes is "strengthened national and subnational water sanitation and hygiene (WASH) sector systems with greater emphasis on gender equality, social inclusion, safely managed WASH and water security."

Under Water for Women's Learning Agenda, partners are collaborating on a dedicated systems strengthening initiative that aims to deepen partners' and the broader WASH sector's understanding of how strengthening WASH systems can lead to more gender and socially inclusive, sustainable WASH services. Two primary learning questions are being explored:

1. How do partners interpret, frame, understand and engage with WASH systems?

2. What changes are Water for Women contributing to within (local and national) WASH systems, and how do these changes happen?

This learning note highlights how research can contribute to WASH systems strengthening. It also demonstrates how the concept of 'leverage points' supports critical reflection on how research and other interventions influence systems change.

Locating research in the WASH system

WASH systems can be defined and represented in a variety of ways, with two dominant models:

- an 'actor-based' view of a network of actors that interact
- system strengthening building blocks.

The actor-based view of WASH systems emphasises that systems are made of and exist to benefit people. Relationships between people and institutions are central to the system and how it functions. Researchers form part of the WASH system, and as they engage with other actors in that system, they can shape and change these relationships.

WASH systems strengthening building blocks have been conceptualised in various ways. In this learning note, we draw on the five Sanitation and Water for All (SWA) building blocks[2] that Water for Women has adapted for systems strengthening reporting and knowledge exchange. These SWA building blocks are sector policy and strategy, institutional arrangements, sector financing, planning, monitoring and review, and capacity development.

An actor-based view combined with the building blocks of a strong WASH sector can identify key actors, relationships and bottlenecks to inclusion and sustainability. To further help researchers to conceptualise how they can influence systems change, later in this learning note we introduce the concept of 'leverage points' for influencing the WASH system. First, however, we show how Water for Women research projects can be considered through the lens of an actor-based view of the WASH system, and in relation to WASH building blocks. Both views provide insight into how research is positioned in WASH systems.

[2] Sanitation and Water for All. (2022). *Building Blocks*. https://www.sanitationandwaterforall.org/about/our-work/priority-areas/building-blocks

Actor-based view of the WASH system

Water for Women research partners engage with networks of WASH actors (such as national and local governments, and local CSOs) and gender equality, disability and social inclusion (GEDSI) actors in multiple ways to exert influence. Some examples are outlined below.

Connecting actors that do not usually interact

By conducting research involving multiple stakeholder groups, researchers helped establish new links between actors that were previously disconnected. For example, International WaterCentre/Griffith University (IWC) research on WASH in tourist destinations connected public and private tourism actors with WASH public health and utility actors.

Co-creating research processes with key actors

To ensure research relevance, many Water for Women partners co-created research questions; for example UTS-ISF and in-country partner CSOs did so in relation to research on gender in WASH. Other researchers co-created research designs. London School of Hygiene and Tropical Medicine (LSHTM) worked with organisations of people with disabilities (OPDs) in Cambodia to define topic guides, identify participants, and design data collection, analysis and engagement. Such co-creation can increase WASH actors' ownership of research and its legitimacy.

Identifying and influencing influential actors

Leveraging change effectively requires identification of the key actors. UTS-ISF researchers used tools such as stakeholder power and influence mapping in their research on self-supplied water in urban Indonesia. This mapping informed subsequent stakeholder engagement, and has resulted in relevant ministries moving to better integrate non-piped water services into their policy and planning. LSHTM researchers interacted with multiple levels of government institutions in Cambodia (national ministries, subnational agencies and local health care facilities) to find ways to improve midwifery hygiene practices.

Generating outputs for key WASH actors

Outputs targeted at WASH actors were key drivers of change. For instance:

- International Water Management Institute (IWMI) produced a gender manual and conducted multistakeholder dialogue with local leaders and communities in Nepal
- The University of Technology Sydney's Institute for Sustainable Futures produced sectoral guidance and database on strategies to improve gender and inclusion in water and sanitation workplaces
- London School of Hygiene and Tropical Medicine produced guidelines and practical tools for government.

Bridging local, national and global WASH systems

The University of Technology Sydney's Institute for Sustainable Futures engaged in research on impact measurement in gender equality and WASH at multiple levels. This included supporting practitioner capacity and tools, and contributing to global processes such as recent work on how to better integrate gender equality considerations in the World Health Organisation/UNICEF Joint Monitoring Programme (JMP).

System strengthening building blocks

Water for Women research projects engage directly with the five WASH systems strengthening building blocks (Figure 1). Some examples are outlined below.

Sector policy and strategy

The International WaterCentre aimed to shift policy in both WASH and tourism sectors to support the embedding of each sector's priorities in the policy of the other. LSHTM's research focused on the policies, practices and protocols for cleaning and hygiene in health care facilities, aiming to influence ministerial guidelines. LSHTM also analysed how Bangladesh and Cambodia's WASH policies addressed disability and gender, with the aim of supporting greater inclusion.

Institutional arrangements

International Water Management Institute is engaging with local Nepalese leaders of municipalities, who are now responsible for WASH, in support of the new institutional arrangements. UTS-ISF is working with women in the WASH workforce to influence the WASH system, government, private and non-government organisations to embrace greater workplace gender equality and diversity.

Sector financing

In UTS-ISF research on self-supply, researchers identified the extent of household investment in private water systems. They examined the implications of this largely invisible investment for extending piped services and ensuring safely managed services.

Planning, monitoring and review

University of Technology Sydney's Institute for Sustainable Futures research developed new methods to measure and explore gender equality outcomes of WASH interventions — the WASH-Gender Equality Measure (WASH-GEM) and qualKit, a website offering tools to support use of qualitative methods. LSHTM developed an inclusive WASH checklist for government officials and service providers to support disability inclusion in WASH policies and programs.

Capacity development

The International WaterCentre worked with local research partners to study community water management and build research capacity. By understanding the community committees and their engagement with community at grassroots level, IWC contributed to making water safety plans and their implementation more effective.

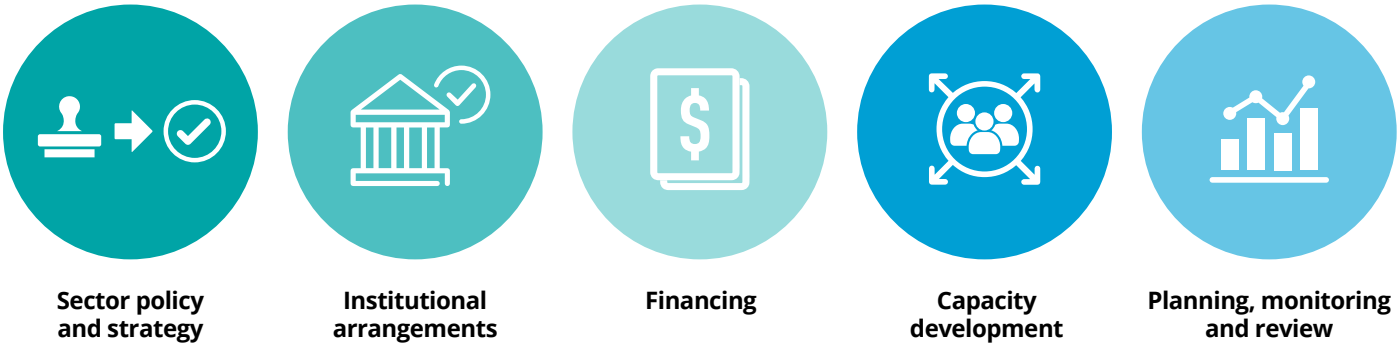

Figure 1. Building blocks of a well-functioning WASH sector

Source: Adapted from Sanitation and Water for All (2022)

Using leverage points to identify systems strengthening strategies

When engaging in complex systems, such as those that deliver equitable, resilient and sustainable WASH services, there are many entry points. These entry points shape how researchers can influence actors in the WASH system and the structures and processes that define how they interact.

Donella Meadows (1999) outlined a set of leverage points, which she defines as 'places within a complex system where a small shift in one thing can produce big changes in everything.' These leverage points are ranked in order of their effectiveness for influencing change (see Figure 2), with the higher points requiring a smaller shift to deliver a larger change in the system. Annex A lists Meadows' leverage points and relevant examples from WASH systems strengthening.

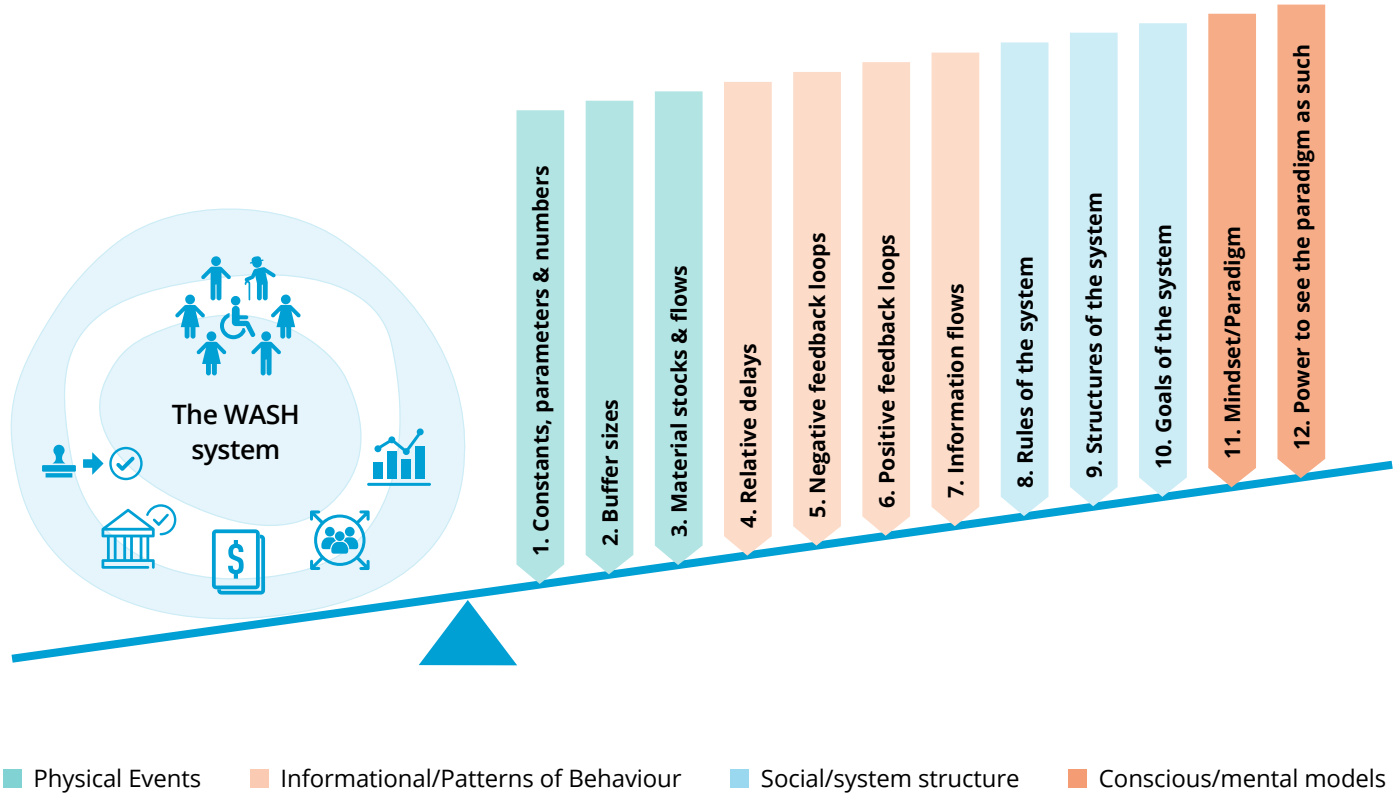

Figure 2. Donella Meadows' leverage points

Source: Adapted from Meadows (1999) by authors UTS-ISF / Jess MacArthur

Considering leverage points to support systems strengthening

As part of a workshop process, Water for Women research partners used leverage points to reflect on their research questions, methodology, communications, engagement, and system strengthening outcomes. They identified several key insights on the value of using leverage points to conceptualise how research strengthens WASH systems. Some examples are outlined below.

Encourages big picture thinking

Considering leverage points challenges researchers to think about the most effective and extensive change they can influence, such as shifting the mindsets and attitudes that influence behaviours. For example, shifting stakeholder thinking about sanitation from that of an individual good to a public good has transformational potential. It also helps researchers to be conscious of their role in the wider system, and it emphasises not only the policy level but the mindsets of people and organisations, thus differing from the focus of WASH system building blocks.

Informs purposeful stakeholder engagement

Considering leverage points highlights the breadth of stakeholders with whom researchers may need to interact (for example, staff within local agencies as well as national government staff). Considering which stakeholder(s) have influence to shift mindsets can help research have wider impact. It also helps identify how project goals differ from stakeholder priorities. For example, a project might aim to change mindsets but stakeholders are focused on information sharing. And it supports critical reflection on actors within, on the edges of, and outside the main WASH system, because all might be important in effecting change. An example is GEDSI-focused CSOs, which might not be assumed to be part of a WASH system but can be important and influential actors for certain types of changes.

Provides ideas for new – possibly multiple – entry points

Considering leverage points can reveal new entry points, including those that could be addressed concurrently and how different leverage points can support one another to create broader systems change. For example, working on evidence generation and policy advocacy. It encourages thinking about how scientific information collected in relation to lower-order leverage points could be used to influence higher-order leverage points. For example, evidence about changes in a material flow (e.g., reduced water flows) can be drawn upon to develop feedback loops, to shift information flows or to change mindsets. It also reinforces that research is itself a form of negative or positive feedback loop; it can motivate and catalyse further change or provide evidence for the sector to change course.

Potential limitations with the use of leverage points

Water for Women research partners also identified some potential limitations associated with the use of leverage points.

An assumed hierarchy of leverage points may not reflect stakeholder priorities

In particular, higher-order leverage points may be political, requiring researchers to navigate differences in views among stakeholders and avoid dilution of intent if views are not aligned.

Categories and typologies of leverage point can be limiting

This can lead to siloed thinking or categorisation, and 'not seeing the forest for the trees.'

A multi-level perspective is needed

Researchers may need to apply leverage points at local, national and global scales because the actors and leverage points differ.

Higher-order leverage points may be more difficult to change

While higher-order leverage points such as shifting mindsets can create significant change, researchers may find tackling these areas to be challenging and resource-intensive, with lower likelihood of success than other leverage points.

Paradigmatic change is likely to take time

Expectations of research project impact must be realistic.

The following four case studies illustrate how Water for Women research projects are utilising a range of leverage points (see Figure 2) to influence systems change.

Case study 1. Gender in WASH partnerships, workforce and impact assessment

Partner: University of Technology Sydney – Institute for Sustainable Futures

Co-partners: Universitas Indonesia, Universidade Nacional Timor Lorosa'e, SNV, iDE, WaterAid, Plan International, Thrive Networks/East Meets West, International Women's Development Agency, CBM and Edge Effect

Countries: Cambodia, Indonesia, Nepal and Timor-Leste

Envisaged WASH systems strengthening outcomes:

- **strengthened partnerships** between WASH and rights holder organisations so that advocacy influence can be strengthened, gender norms shifted, organisational and community capacity built, and duty bearers held to account for inclusive WASH services
- **more inclusive workforce recruitment and management policies and practices** by WASH-related ministries, selected local governments (in project locations, through CSO partner) and other water and sanitation organisations globally
- **improved civil society program staff capacity** to monitor, and therefore reflect, on gender outcomes in WASH programs, with a goal of improving programming.

Leverage points and how the research intervened:

5 & 6	Negative and positive feedback loops	Development and deployment of a monitoring tool (WASH Gender Equality Measure – WASH-GEM) helped identify and reinforce positive outcomes and alert CSO program staff to negative outcomes (or lack of change)
8	Rules of the system	Exposing inequalities in workplace gender dynamics, policies and practices contributed to shifting the rules by which the workplace functions
9	Structure of the system	The research considered what was and wasn't working in WASH and rights holder organisations' partnerships and collaborations. This helped to strengthen this part of the system structure, as well as provide important feedback loops (#7 and 8)
10	Goals of the system	The research outputs of guidance and a database on gender equality, disability and inclusion in the WASH workforce are tools for promoting a more inclusive and diverse WASH system
11	Mindset/paradigm	The research in Cambodia and Indonesia on women in the WASH workforce revealed who has power, how and why. The focus on gender norms, and how these norms affect women and diverse groups in the WASH workforce, is an example of examining and challenging existing paradigms Use of WASH-GEM supported staff engagement and learning to shift practitioners' mindsets about gender equality and inclusion. This was facilitated by the tool's inclusion of a focus on women and men's critical consciousness with respect to gender equality and relative equality in societal structures

Case study 2. Community-based water management

Partner: International WaterCentre – Griffith University

Co-partners: Solomon Islands National University, the University of the South Pacific, Plan International Australia, Live and Learn Solomon Islands, Habitat for Humanity Australia and Habitat for Humanity Fiji

Countries: Fiji and Solomon Islands

Envisaged WASH systems strengthening outcomes:

- **modified plans and guidelines** to improve effectiveness of community engagement approaches in Solomon Islands and Fiji governments to improve sustainable water management
- **strengthened capability** within Solomon Islands National University and University of the South Pacific in Fiji to conduct applied research, manage international research partnerships and develop careers
- **improvements in practice** based on lessons from existing successfully managed community water systems.

Leverage points and how the research intervened:

7	Information flows	The project used new media (e.g., videos, stories and zone-level participatory strategies) to change information flows and shift entrenched mindsets about social inclusion.
9	Structure of the system	The research project piloted community engagement tools to influence the structure, performance, role and position of water committees in villages. A key strategy was working at low levels of social organisation (e.g., extant village zones), where social cohesion and collective action is stronger than 'village wide'.
11	Mindset/paradigm	The key goal was to alter existing mindsets using a strength-based strategy and a combined educational and motivation model of change (e.g., stories of 'successful' water committee and village water systems). These were intended to change dominant mindsets about the importance of water management to support WASH, the importance of collective action, and social inclusion in relation to gender, age, tribe and geographic representation in water committees.

Community-based water security planning in Solomon Islands
Credit: Plan International / Live and Learn Environmental Education

Case study 3. Improving WASH access for women and girls with disabilities

Partner: London School of Hygiene and Tropical Medicine

Co-partners: WaterAid Australia, WaterAid Cambodia, WaterAid Bangladesh, Cambodian Disabled People's Organisation, Royal University of Phnom Penh and Identity Inclusion

Countries: Bangladesh and Cambodia

Envisaged WASH systems strengthening outcomes:

- **increased commitment by policymakers** in Cambodia and Bangladesh to progressively realising the rights to water and sanitation for everyone, explicitly including people with disabilities
- **improved capacity of policymakers** to understand how to integrate the core concepts of human rights for people with disabilities in policies relevant to WASH, and can measure their quality of commitment to these core concepts
- **improved capacity of WASH implementers** (e.g., district government officials, private sector, non-governmental organisations) in both countries in how to integrate the core concepts of human rights for people with disabilities in their WASH interventions, and can measure their quality of commitment to these core concepts.

Leverage points and how the research intervened:

10	Goal of the system	The project developed practical guidance for policymakers and implementers about how to implement disability inclusive WASH at scale. This guidance aims to strengthen government and implementer commitment to the progressive realisation of the rights to water and sanitation for everyone, explicitly including people with disabilities.
11	Mindset/paradigm	The project aimed to influence mindsets by generating evidence on how current WASH policies affect people with disabilities and their caregivers, enablers and common challenges for delivering inclusive WASH at scale, and how to build upon it. Data was disseminated by people with and without disabilities to embody the principle of 'nothing about us without us.'
12	Power to see the paradigm as such	The project aimed to influence mindsets and motivate policymakers and implementers to try new approaches to ensure people with disabilities benefit from WASH efforts. It encouraged them to see and reflect on their current and potential future paradigms.

Navy from Kampong Chhnang Province; one of 16 people with disability interviewed as part of the research project in Cambodia
Credit: WaterAid / Sokmeng You

Case study 4. Self-supplied water services

Partner: University of Technology Sydney – Institute for Sustainable Futures

Co-partners: Universitas Indonesia, University of the South Pacific, UNICEF Indonesia and Vanuatu, Bappenas Indonesia, the Department of Water Resources in Vanuatu, SNV in Indonesia and local government in all study sites

Countries: Indonesia and Vanuatu

Envisaged WASH systems strengthening outcomes:

- **improved recognition of self-supply in water policies, strategies and regulation** to ensure such WASH services achieve the 'safely managed' sustainable development goal criteria as these services, invested in and managed by households, are commonly overlooked
- **increased government and research institutional capacity** in analysis and monitoring of safely managed self-supplied water services.

Leverage points and how the research intervened:

1	Constants, parameters & numbers	Identification of factors that influence self-supply water quality in Indonesia and Vanuatu, to inform construction standards and regulation.
7	Information flows	Implementation of remote, real-time monitoring of rainwater tanks systems in Vanuatu and well as in Indonesia to support monitoring of safely managed water services. Measuring faecal contamination of household self-supply water sources.
8	Rules of the system	Supporting countries in Asia and the Pacific to adjust policy, monitoring and regulation to ensure self-supply services are applied and supported in appropriate contexts (e.g., through subsidies and construction standards), and deterred and avoided in other contexts where they are likely to be unsafe or unreliable.
10	Goals of the system	Supporting the Government of Indonesia to develop realistic and appropriate targets for non-piped (self-supply) system within a national safely managed water supply roadmap.

A woman accesses water from a self supply source in Nepal
Credit: UTS-ISF / Tim Foster

How research can strengthen WASH systems: implications for practice

This learning note outlines how Water for Women research projects engaged with WASH systems as networks of actors and WASH systems strengthening building blocks, using leverage points as a way to articulate entry points for change. Key implications for practice are outlined below.

Designing research to strengthen WASH systems

- Prioritise co-creation of research aims and questions with actors in the WASH system, placing importance on local views of gaps and needs, based on partnerships that encourage research users' agency and ownership of research.
- Critically reflect on research organisations' positioning and role in the WASH system. Select research partners or stakeholders to provide either networks or legitimacy to support the most effective contribution to systems change.
- Consider both an actor-based view of the WASH system and WASH systems strengthening building blocks to identify intended systems strengthening outcomes and pathways to achieve them. Clarify the boundaries of the WASH system, which in some cases might include intersectoral actors.
- Embed and allocate resources to specific activities designed to strengthen WASH systems into and alongside the research process.
- Define the most appropriate leverage points, based on their feasibility and likely effectiveness in the given socio-political context, considering if and how higher-order leverage points such as changing mindsets might be tackled.
- Strategically align engagement of stakeholders and production of research outputs with the most relevant and feasible leverage points.
- Define research outputs in relation to their utility for actors in the WASH system, or other intersectoral actors.

Implementing research to strengthen WASH systems

- Engage regularly with key stakeholders who influence system goals and structures and may be amenable to mindset change. In such efforts, aim to increase the rights and voice of disadvantaged groups, and do not inadvertently strengthen existing power relations and positions.
- Consciously and deliberately engage stakeholders in the research process to foster new relationships, and to carefully and sensitively open up spaces that may encourage shifts in mindsets and norms.
- Explicitly use the research process to enable WASH and/or GEDSI actors in the system to contribute their expertise and develop their capacity.
- Ensure socialisation of any recommendations, tools or guidance produced to maximise their uptake and use by relevant WASH actors and other broader groups.

Acting upon research to strengthen WASH systems

- Other actors (for example, CSOs and international agencies) can and should use WASH research to influence change and to ensure integrity of their own work. Other actors can prioritise partnering with research organisations to strengthen the evidence base for their work to improve its effectiveness.
- Consider how to combine academic research-based evidence with traditional and indigenous knowledge to maximise benefits.
- Use research evidence and outputs to influence the system via multiple leverage points – they can change information flows, create feedback loops to reinforce positive outcomes and identify and respond to negative outcomes, and influence the goals of system actors and the rules or behaviours that guide their engagement.

Annex A. Meadows' leverage points[3] and relevant examples from WASH systems strengthening

Category	Leverage point	Explanation	Examples that may be relevant to the WASH sector
Physical events	1. Constants, parameters & numbers	Key numbers that determine flows of materials and resources, and set trigger points for actions and responses	• Water tariffs • Water quality standards and testing parameters • Government-endorsed subsidy criteria • Scale of fines/punishment for non-compliance
	2. Buffer sizes, relative to their flows	The size of stocks of materials and resources, relative to their inflows and outflows. Systems can become more stable with large buffers but can also become inert	• Climate resilience of large vs small water reservoirs (relative to water demand) • Tree planting for water source stability and erosion control • Number of staff relative to recruitment rate
	3. Materials, stocks & flows	The (physical/material) structure of the system. What material and stock moves where and how	• WASH infrastructure • Public WASH budgets and financial flows
Informational / patterns of behaviour	4. Relative delays	The time delay that occurs between actioning a change in the system and seeing its results	• Time between pollutant dumping and infiltration to groundwater • Time between budget approval and expenditure • Time between creation of a public utility by decree and a fully functioning utility
	5. Negative feedback loops	Correcting loops that change one aspect of the system in response to a change in another, to try to counterbalance it	• Monitoring-planning loops that prioritise areas of low service access • Complaints mechanisms that incentive improvements in service quality • Penalties for providers that don't meet minimum standards
	6. Positive feedback loops	Amplifying loops that change one aspect of the system in response to change in another, to try to reinforce it	• Rewarding communities that become open defecation free, spurring other communities to follow suit • Noticing reduced diarrhea supports ongoing positive hygiene behaviour
	7. Information flows	How information flows through the system, who has access to it, and when	• Public forums and citizen budget review mechanisms making information available to end users • WASH management information systems • Community identification of who does/does not have latrine access

[3] Meadows, D. (1999). *Leverage points: places to intervene in a system*, The Sustainability Institute, Hartland VT. https://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/

Social / system structure	8. Rules of the system	The rules about how the system operates and which influence how actors engage with each other	• Who has a seat at the decision-making table • Enforcement strategies for water quality/safe waste disposal • Which forms of corruption are acceptable/unacceptable
	9. Structure of the system	The (social) structure of the system and its ability to self-organise by adding, changing or evolving any of the leverage points above	• Decision-making hierarchies and centralisation/decentralisation • Individual leaders or collective cross-sector working groups shifting aspects of how the system functions (e.g. WASH & Climate working group)
	10. Goals of the system	The direction of the system as a whole; the goal it is working towards	• Human rights to water and sanitation • National/local goals such as maximising efficiency, optimising climate resilience or privatising WASH services for maximum profit • Maintaining water resources for human and ecosystem health
Conscious/ mental models	11. Mindset/paradigm	The shared ideas in the minds of the people in the system	• Ideas around equity, inclusion and who should have power • Public/private ownership and assumed responsibilities for WASH • Social and cultural norms (such as the Wantok System)
	12.Power to see the paradigm as such	The ability of individuals or groups to understand that the idea of paradigms is itself a paradigm and that working outside of that may bring radical change	• Willingness to try new approaches to WASH • Transformative and iterative learning

Source: Meadows (1999) drawing on Grant and Willetts (2019)[4] and authors' additions

[4] Some of these examples draw on Grant, M. and Willetts, J. (2019). Learning for adaptive management: using systems thinking tools to inform knowledge and learning approaches, in Neely, K. (ed) *Systems thinking and WASH tools and case studies for a sustainable water supply*, Practical Action Publishing, Rugby https://practicalactionpublishing.com/book/2139/systems-thinking-and-wash

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About Water for Women

Water for Women supports improved health, gender equality and wellbeing in Asian and Pacific communities through socially inclusive and climate-resilient water, sanitation and hygiene (WASH) projects and research. It is the Australian Government's flagship WASH program, investing AUD154.9 million over seven years. Water for Women is partnering with civil society organisations, research organisations and local partners to deliver 40 projects in 16 countries from 2018 to 2024. Knowledge and learning are central to Water for Women, positioning the Fund as an important contributor to global knowledge development and sharing in inclusive and climate-resilient WASH. Water for Women's Learning Agenda promotes collaborative learning, knowledge development and sharing to support long-term transformative change to WASH policy and practice globally.

Find out more at
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waterforwomenfund.org