

Reducing Inequalities in Water, Sanitation and Hygiene (WASH)

A synthesis of experiences and lessons discussed in the RWSN Equality, Non-discrimination and Inclusion (ENDI) Group 2015

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Photo: The Africa WASH & Disability Study & The Collaboratory at Messiah College

Summary

Between October and November 2015 the Rural Water Supply Network's Equality, Non-discrimination and Inclusion (ENDI) theme enjoyed lively e-discussions on Reducing Inequalities in WASH. This covered *practical approaches to improve participation of everyone; inclusive infrastructure designs and information, guidance and support* that exist on these. Two webinars were held on these topics, with presentations from World Vision, Messiah College, WaterAid, FCG International, and the University of Technology – Sydney¹. Disability, gender, menstrual hygiene management, rights to water and sanitation and school WASH from Mali, Niger, Tanzania, Nepal, Ghana, Timor-Leste and Vietnam were covered. During the e-discussions independent consultants and staff from the Church of Uganda, TEDDO, WaterAid, WEDC, Mzuzu University, the Honduran Association of Management Boards of Water Systems, Concern Worldwide, Auguaconsult, the University of Denver, the World Bank, Amref Health, Islamic Relief Worldwide, Messiah College and World Vision shared experiences. These were drawn from their or their organisation's work in Uganda, Vietnam, Mali, Madagascar, Zambia, Nepal, Chad, Timor Leste, Tanzania, Niger, Honduras and Pakistan. Throughout the e-discussions and webinars the primary scope was rural water supply, but sanitation and hygiene were considered when relevant.

This report synthesises the online discussions, draws on relevant content from the webinars and highlights experiences and lessons learnt. It is not an extensive literature review, but does draw on existing literature beyond what was discussed during the e-discussions. When done, this is clearly referenced in the text. Key points made during the e-discussions were:

- Often NGOs and local governments understand that some people need physical and financial support to access WASH services, but argue that the community are best placed to identify and assist these people. Community members may be able to support with this process, but leaving it solely to them risks reinforces existing power inequalities.
- Where legislation and policies on tariff setting exist, it might not address equity issues, explicitly state how the tariff should be calculated or who is eligible. Tariff setting should be approached very carefully and with the participation of key stakeholders from outside the community. Tariffs should be set according to the service's life cycle costs, as well as user's ability to pay.
- Discussing barriers related the additional cost of inclusive WASH programmes perpetuates the perception that inclusion is optional. The debate on cost must shift to recognising that access to water and sanitation for everyone can lead to more inclusive societies, where discrimination and stigmatization are addressed for all aspects of an individual's life.
- Equitable and universal access to WASH cannot be achieved without specific gender equality measures in policy and programming. This includes challenging traditional gender roles and ensuring the active and meaningful participation of women and girls throughout WASH programmes.
- Facilitating the space for disabled people to explain the barriers and potential solutions to accessing and using WASH services is a powerful way to raise awareness of the need for inclusive WASH. Training people with disabilities to collect data is a good way to get more nuanced data from people with disabilities. This greater understanding of barriers to WASH use and access faced by people with disabilities can lead to more appropriate programme design.
- It is vitally important to involve disabled members of the community at all levels of inclusive technology and infrastructure design. This not only assures the development of appropriate designs and design standards, but it can also serve to facilitate local designs and the use of locally available material.
- The choice of local material (e.g. wood versus metal) must be weighed against the costs and durability of the technology (or infrastructure). Technologies made of wood, while generally of lower cost, may be subject to premature degradation from termites. The design and fabrication of accessible technologies must also be done in such a way that does not inadvertently create unhygienic conditions (e.g. with latrine chair design). Design standards for inclusive infrastructures are needed, but during implementation, some measure of compromise may also be needed as relative costs (in material and time) for "ideal" design must be weighed against the needs of disabled persons in the community.

¹ Webinars can be downloaded here: <https://vimeo.com/144622070>

- Water user committee members, government health educators and village heads need simple and clear guidance or manuals about how to promote inclusive WASH. Currently this is lacking.

Participants shared resources throughout the whole e-discussion. These focused on setting social tariffs, gender transformation, disability and ageing inclusion.

Acknowledgements

We extend a big thanks to all the RWSN Equality, Non-discrimination and Inclusion members who participated in the webinars and e-discussions. This synthesis is based on two webinars and three e-discussions. Presentations during webinars were made by World Vision, Messiah College, WaterAid, FCG International, and the University of Technology – Sydney². During the e-discussions independent consultants and staff from the Church of Uganda, TEDDO, WaterAid, WEDC, Mzuzu University, the Honduran Association of Management Boards of Water Systems, Concern Worldwide, Auguaconsult, the University of Denver, the World Bank, Amref Health, IR Worldwide, Messiah College and World Vision shared experiences. All the Equality, Non-discrimination and Inclusion theme members who participated in the e-discussions are named in Annex 3.

Acronyms and abbreviations

CoU-TEDDO	Church of Uganda Teso Dioceses Planning and Development Office (Uganda)
DFAT	Department of Foreign Affairs and Trade (Australia)
DFID	Department for International Development (UK)
DPO	Disabled Persons Organisation
ENDI	Equality, Non-discrimination and Inclusion
GESI	Gender Equality and Social Inclusion
LCD	Leonard Cheshire Disability (UK)
LSHTM	London School of Hygiene and Tropical Medicine (UK)
MHM	Menstrual hygiene management
NGO	Non-Government Organisation
ODF	Open defecation free
PFPH	Plateforme Des Federations Des Personnes Handicapees De Madagascar (Madagascar)
RWSN	Rural Water Supply Network
SDGs	Sustainable Development Goals
UNICEF	United Nations International Children’s Emergency Fund (US)
WASH	Water, sanitation and hygiene
WEDC	Water Engineering Development Centre, Loughborough University (UK)

² Webinar can be downloaded here: <https://vimeo.com/144622070>

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Introduction

Three topics fall under the Rural Water Supply Network (RWSN) Equality, Non-discrimination and Inclusion (ENDI) theme: the *Human Right to Water* and *Overcoming barriers to universal access* and *Inclusive Design*. With 560 members across 83 countries and territories in Africa, Asia, Australasia, the Americas and Europe, the ENDI theme has become a successful platform to debate, learn and discuss these issues.

During October and November, 2015 the Rural Water Supply Network's ENDI theme enjoyed lively e-discussions and two webinars on Reducing Inequalities in water, sanitation and hygiene (WASH). These covered *practical approaches to improve participation of everyone; inclusive infrastructure designs* and the *information, guidance and support* that exist on these. Before the e-discussions and webinars, members of the ENDI theme defined 'inequalities' by drawing on the Equality Checklist in Table 1 (Satterthwaite et al, 2012). The Equality Checklist is a useful tool which allows for a more nuanced understanding about which groups and individuals may face inequalities. The inequalities captured in the Checklist are not exhaustive and could be added to. The Checklist is a tool for sector specialists and policymakers to formulate and evaluate proposed goals, targets and indicators for WASH. The authors did not intend for each inequality to be addressed in every target and indicator. Rather, it helps actors to assess the most relevant areas where discrimination and inequalities are present in the given context.

Table 1 Equality Checklist (Satterthwaite et al, 2012)

When examined as a whole, do the goals, targets and indicators:
<ul style="list-style-type: none"> ■ Prioritize basic access and focus on progressive realization toward safe and sustainable WASH for all, while reducing inequalities? ■ Address spatial inequalities, such as those experienced by communities in remote and inaccessible rural areas and slum-dwellers in (peri-) urban areas? ■ Focus on inequalities, shining the light on the poorest of the poor? ■ Address group-related inequalities that vary across countries, such as those based on ethnicity, race, nationality, language, religion, and caste? ■ Attend to the impacts of individual-related inequalities that are relevant in every country of the globe, such as those based on sex/gender, age, disability, and health conditions imposing access constraints- experience both inside and outside the household? Do they address menstrual hygiene management?

Two webinars on Reducing Inequalities in WASH were held³. Presentations focused on disability, gender, menstrual hygiene management, rights to water and sanitation and school WASH in Mali, Niger, Tanzania, Nepal, Ghana, Timor-Leste and Vietnam. During the e-discussions participants shared experiences of working in Uganda, Vietnam, Mali, Madagascar, Zambia, Nepal, Chad, Timor Leste, Tanzania, Niger, Honduras and Pakistan⁴. Throughout the e-discussions and webinars the primary scope was rural water supply, but sanitation and hygiene were considered when relevant.

This report summarises key points made and examples shared by RWSN members during the e-discussions and webinars on Reducing Inequalities in WASH. It is not an extensive literature review, but does draw on existing literature beyond what was discussed during the e-discussions. When done, this is clearly referenced in the text.

Practical approaches to improve participation of everyone

Roles and responsibilities (insights from Uganda)

During the first week, the group discussed the roles and responsibilities of the national and local governments, NGOs and communities in reducing inequalities in WASH. Participants recognised that NGOs and local governments implementing WASH programmes are aware that specific groups and individuals are marginalised and socially excluded in the areas they work. NGOs and local governments understand that these people need physical and

³ See Acknowledgements for a list of presenters

⁴ See Annex 2 for a list of participants

financial support to access WASH services, but they argue that the community are best placed to identify and assist these people.

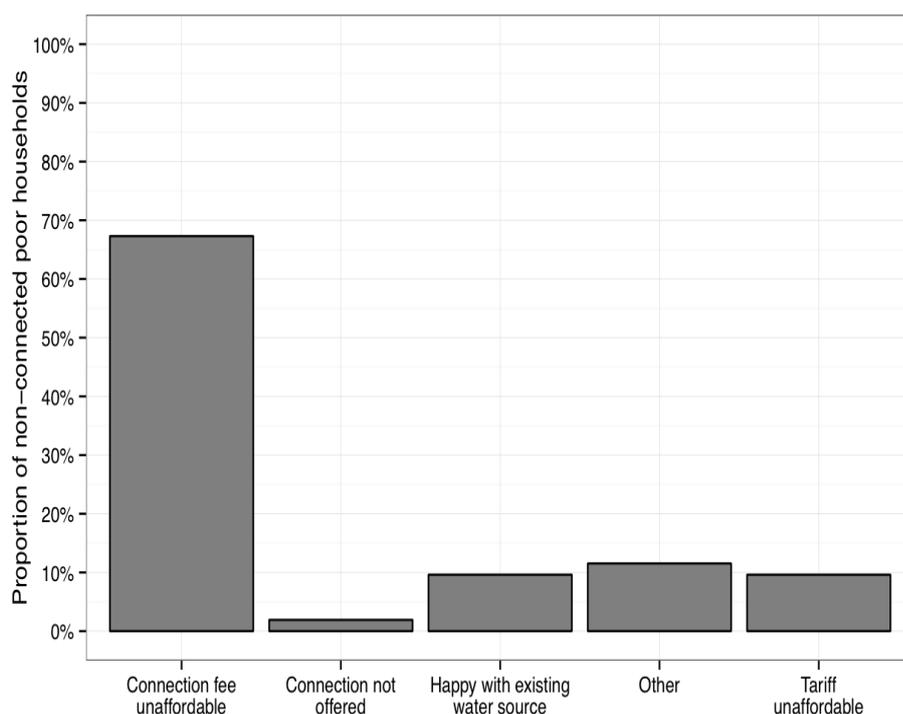
Examples shared from **Uganda** showed that rural community members and particularly extended family members can be well placed to identify, and support people who are disadvantaged. For instance, the Church of Uganda - TEDDO (CoU-TEDDO) explained that following consultations in a rural village, members of the community and the extended family contributed the household rainwater harvesting jar construction materials for a disabled man who could not afford it himself. These consultations were part of the wider CoU-TEDDO WASH programme aimed at improving the active participation of disabled, older and chronically ill people. CoU-TEDDO found that their approach successfully challenged stigma and discrimination against disabled people. However, it was too reliant on volunteers in the community to support households with a vulnerable person to construct their household WASH facilities. This approach worked well for the first two years, but volunteers are now expecting the households they support to pay them for their services⁵.

Other participants highlighted that relying on family and community members to identify and support people who are vulnerable to exclusion and discrimination could further entrench existing power inequalities. People who are socially excluded may be invisible within the household and the community; unwilling to engage after years or a life time of exclusion, so relying on them to 'speak up' or on others to prioritise assistance for them carries significant risks. Findings from research in Uganda and Zambia show that older people often face the most discrimination in their own household and the wider community due to decreased mobility and ill health (Wilbur and Danquah 2015). People who have additional access requirements and have to rely on others to collect water, such as older, disabled and chronically ill people are less able to wash themselves. This can perpetuate the perception that disabled people are 'dirty', which can lead to their exclusion from community life, including eating with other people. Family members may also hide these people for fear that they will face abuse (Groce et al, 2010).

Affordability and Social Tariffs (insights from Vietnam)

In **Vietnam**, experience of private rural water enterprises shared by the Institute for Sustainable Futures⁶ showed how poverty is a barrier to accessing piped water. Almost 70% of poor people without a connection said that it was as a result of the connection fee not being affordable.

Figure 1 Reasons for non-connection for poor households (Grant, 2015)



⁵ A short video of Francis Ediau (CoU-TEDDO) explaining the approach can be viewed here: <https://www.youtube.com/watch?v=z4IUwSfUizQ>

⁶ The Institute for Sustainable Futures is part of the University of Technology, Sydney, Australia

E-discussants shared that even where legislation and policies on tariff setting exist, these may not address equity issues (i.e. contain provisions for a social tariff⁷), or explicitly state how the tariff should be calculated or who is eligible. Tariff setting should be approached very carefully and with the participation of key stakeholders from outside the community. It should involve the local government, as the state is often responsible for covering the operation and maintenance costs. Ideally the process is transparent; done through existing governance and regulatory structures where they exist and sanctioned by the appropriate authority.

Participants felt that determining user contributions or tariff structures should not only be made on ability or willingness to pay; it must also incorporate the life-cycle costs of the service. If the life-cycle costs of the service are not incorporated, the service will decrease. This invariably impacts people who are marginalised or excluded first and more severely. Any dialogue on user contributions at the community level should incorporate the broader context and factors which will likely impact the long term sustainability of services. In addition, stakeholders should enable community members to have a basic understanding of the actual operation and maintenance costs of their systems. One participant shared the 'At What Cost' tool, developed by Water for People (see Box 1).

Box 1 At What Cost?

At What Cost, an educational tool for ensuring finance is available to extend services to those unserved and meet the life cycle costs of the existing systems. It was developed and is applied by Water for People. *At What Cost* supports communities to understand the implications of different tariff scenarios, including the introduction of social tariffs. This process is facilitated by representatives from the District or Municipal government and is supported by Water for People staff. The tool and the outputs of the community dialogue link with the District financial model, through a separate set of tools, which is then used for strategic planning and budgeting. Though not prescriptive about how a social tariff is established, this tool provides a promising process that can be replicated.

More information can be found by watching the RWSN webinar:

From building infrastructure to creating support mechanisms for rural water supplies

(<http://rural-water-supply.net/en/projekts/details/79>).

Sector planning (insights from Mali)

WaterAid shared how they engage with authorities during the development of the sectoral plans for more equitable resource allocation in **Mali**. WaterAid developed poverty profiles for the geographic areas they work in and fed these into the government's sector development plans. WaterAid also involved authorities in inclusive WASH implementation activities to raise awareness about the barriers different people face when accessing and using WASH services. For instance, during the development of the government's Menstrual Hygiene Management in School Plans, the group visited accessible school WASH services with menstrual hygiene management facilities. Though this process was positive, the use of Sector Development Plans by municipalities and other stakeholders have been very limited. Local authorities have not committed to providing services to the poorest and most marginalised people. Service providers cited the additional cost of accessible and inclusive water and sanitation technologies as the barrier.

WASH for more inclusive societies (insights from Madagascar, Uganda and Zambia)

The additional cost of working in inclusive ways and constructing inclusive infrastructure designs is often cited by practitioners, policy and decision makers as a barrier to delivering this at scale.

Experience from WaterAid's research in **Uganda** and **Zambia** measured the additional time staff took to ensure community mobilization activities were inclusive. They found that most tasks did not need extra staff and that inclusive activities did not take a lot of additional time (Wapling, 2014). With experience the time required may reduce and become the norm. World Vision's findings from a desk review supported this (World Vision, 2014). Their review recommendations include:

⁷ A 'social tariff' is support available to certain vulnerable or low income households and designed to help them pay for their services.

1. Identify and engage potential donors to cover the relatively minor additional cost to make all WASH projects inclusive
2. Develop guidelines to ensure that disability inclusion is included in funding proposals
3. Ensure grant acquisition teams are aware and accountable for including allowable cost allocations for disability inclusion from donors

However, discussions on costs perpetuate the perception that inclusion is optional. To realise SDG 6, *Ensure access to water and sanitation for all*, WASH services must have inclusion at its core. Otherwise marginalised groups or individuals will continue to be 'left behind'. There is no two ways about it.

The debate must be widened from money or how much time should be spent on making activities inclusive, to seeing that access to water and sanitation for everyone can lead to more inclusive societies, where discrimination and stigmatization are addressed for all aspects of an individual's life. This is aim of WaterAid and the Plateforme Des Federations Des Personnes Handicapees De Madagascar's human rights based approach action learning project in **Madagascar**. Though there has not been a significant impact on access to water and sanitation by people with disabilities yet, disabled people have gained more access to microfinance and education, as well as increased engagement with the local authorities. Arguably applying the rights based approach in this context has had a positive impact on attitudes towards people with disabilities.

Human rights (insights from Nepal)

The Government of **Nepal** has ratified the International Right to Water and Sanitation and the Convention on the Rights of Persons with Disabilities. They also have gender equality and social inclusion (GESI) policies, strategies and action plans at national level. But these are not implemented by the local government. The webinar presented by the Finnish consulting company, FCG International demonstrated how they implemented the GESI Strategy and the human rights based approach through action research in Nepal⁸. FCG International found that people living with a disability (including the older people) and menstruating women faced the biggest barriers in progressively realising their rights to water and sanitation. Their intervention aimed to address these. Early indications of trends show an improved understanding by community members of the importance of everyone (including menstruating women and disadvantaged castes) realising the rights to water and sanitation. Changing deeply held traditional beliefs is a long process but more positive attitudes towards Dalit caste members are emerging.

Striving for gender equality

Gendered roles in WASH programmes (insights from Chad)

In **Chad**, Concern Worldwide promoted quotas of women on the water point management committee and their appointment into key positions. Women's roles within these committees were generally assigned along existing gender norms: men were handpump mechanics and women were committee treasurers⁹ and 'hygiénistes', which include cleaning duties. Men were involved in household hygiene and water management, which led to men taking on a greater role in this area and an increased awareness of hygiene practices. Activities carried out by men included providing money for soap and constructing hygiene facilities, such as tippy taps and women continued to be responsible for all the cleaning and hygiene activities in the household. Overall, women's unpaid labour appeared to have increased through this process.

Traditional gender roles were not challenged as programme staff did not feel it was problematic. Having more women on the WASH management committee was a good first step as their voices were heard for the first time, but the Concern Worldwide e-discussant recognised that it must be seen as a step on a longer journey towards active participation, ownership and control.

⁸ Webinars are available here: <https://vimeo.com/144622070>

⁹ Adhering to the traditional belief that women are more 'trustworthy' and 'detail oriented'.

Exploring the unintended consequences (insights from Mozambique)

Research shared from the University of Denver highlighted how women met at a traditional water source in **Mozambique** to collect water, socialize, bathe and get away from conflicts at home (Van Houweling, 2014). They had a high degree of control over this space and could restrict the presence of men. With a communal water point installed and without their meaningful participation in its design and siting, women lost this space and control. Instead of using the protected water point they continued to use the traditional one as it was more socially valuable to them. Similar findings from other research also reveal the consequences of not ensuring the active and meaningful participation of women and girls throughout the total programme cycle (Carrard et al, 2014).

Gendered outcomes in WASH programming (insights from Timor Leste)

In **Timor-Leste**, WaterAid carried out participatory research to assess gendered outcomes of CLTS programmes¹⁰ (Kilsby, 2012). Outcomes related to women's 'practical gender needs'¹¹ included greater ease of performing duties and that with water closer to home and men taking a greater share in water-related domestic tasks. Changes in women's strategic gender interests¹² included increased diversity of roles for women including gaining higher status roles, increased participation in community life, involvement in decision-making, voice and influence. Recognition of women's rights, improved family relations and greater harmony in the households were also reported.

As a result of this work, WaterAid and the implementing partners integrated practical gender dialogue activities into community mobilisation processes. By applying these tools, the team aimed to implement more gender transformative programmes which aim to address the root causes of gender inequality. Within the household and community the tools:

1. Record how paid and unpaid work is shared between women and men
2. Build a greater appreciation of workload and a consideration about how tasks might be shared more fairly
3. Facilitate a discussion about how women and men will be engaged in the WASH programme

Box 2 Practical tools for gender transformative programmes

The 24 hour clock: Two facilitators lead women and men in separate groups to discuss the different tasks they commonly carry out in one day. The length of time each task takes to complete and when these are done in the day is recorded. Activities include WASH and non-WASH related tasks. The facilitator brings the groups back together and respectfully leads a discussion to explore the differences between daily life and work of women and men and how tasks could be distributed more fairly and equally. This exercise has been adapted from the 24-hour clock activity (Halcrow et al, 2010).

Who does; who decides is a card sorting activity in which community members identify different ways that women and men are involved in and affected by WASH issues, workload and decision-making. Participants also think about how WASH responsibilities can be distributed in a fairer, more equitable and effective way. The WASH-related categories cover: daily household WASH tasks; family caring; family decision-making and community decision-making. The participations go through two steps of card sorting by firstly laying out cards for *who* does most of each task and then secondly, *changes* people want to see in relation to who does that task. Finally, participants discuss actions for change together (adapted from Halcrow et al, 2010).

¹⁰ This was presented on the Inclusive approaches and designs webinar 2. Recordings are in English: <https://vimeo.com/144622070> and French: <https://vimeo.com/144720747>

¹¹ Practical gender needs are the needs that women identify in their socially accepted roles in society. Practical needs do not challenge the gender division of labour or women's subordinate position in society.

¹² Strategic interests involve greater decision-making power or control over resources. Addressing strategic gender interests assists women and men to achieve greater equality and to change existing gender roles and stereotypes.

Opportunities for women's economic empowerment (resources shared by the World Bank)

A contributor from the World Bank gave examples of WASH projects and research which have demonstrated opportunities for women's economic empowerment (see Annex 3 for a list of these publications). In **Nepal**, establishing credit facilities enabled women to invest their free time in income generating activities. Research from **Senegal** explored the significance of productive water use in the livelihood diversification strategies of rural women. It found that access to water for productive purposes is a critical asset for expanding and diversifying rural livelihoods. In **Vietnam**, the World Bank's sanitation program had utilised provincial women's union to support the construction or renovation of large scale household latrines or bathroom facilities. In **India**, female masons carried out roles in the business of the water sector.

Raising awareness (initiatives by DFID, WaterAid, UNICEF, SNV, Messiah College, Handicap International in Tanzania, Niger, Mali and Pakistan)

Throughout the e-discussions there was a call for WASH actors to influence donors to prioritise inclusion issues. The tide is turning with the SDGs. In 2014 DFID launched its first Disability Framework (revised and relaunched in 2015) in response to calls from disabled people to be mainstreamed in development (DFID, 2015). The framework includes WASH as a stand-alone work-stream and a call to all its development partners to mainstream disability inclusion. The Department of Foreign Affairs and Trade (DFAT) in Australia, has a strategy for strengthening disability inclusive development in its aid programmes and is seen as a leading donor in disability inclusion (DFAT, 2015).

In **Tanzania**, WaterAid, UNICEF and SNV shared successful experiences of using school WASH initiatives raise awareness of the Government about the need for accessible school WASH services. Their experience led to a commitment to improving school WASH for everyone and the development of a Tanzania's National School WASH Guidelines (United Republic of Tanzania, 2015)¹³. The organisations are now working with the Government to implement and enforce them.

In Niger and Mali, the Africa WASH & Disability Study shared positive examples of awareness raising and research activities. In **Niger**, in collaboration with the Messiah College they utilised the half-time break of a football match, to host an exposé of the disability inclusive WASH and the various infrastructure modifications and assistive technologies (see photo¹⁴).



It successfully engaged the audience and raised awareness of disability inclusive WASH. In **Mali** Messiah Collage partnered with Handicap International to conduct a baseline survey on the prevalence rates of disabilities and WASH access. As people with disabilities conducted the survey this challenged the typical view that disabled people are helpless and always dependent on others. It also led to community members with disabilities to speak much more candidly about their WASH situation during interviews. This approach helped to open doors for increased communication and information.

Inclusive infrastructure designs (insights from Uganda and Niger)

WaterAid **Uganda** shared their experience with the CoU-TEDDO in developing accessible designs. Their experience demonstrates that the development of accessible low-cost technologies (through local innovations using local materials) is facilitated by equipping communities, and especially disabled persons in the community with the right information. Especially in the case of sanitation facilities, the use of local materials can enhance the adaptability of local designs and it encourages adoption and ownership of those designs by the local community. Challenges encountered are most commonly with the need to rebuild and reconstruct because of termite infestations in wood and other organic material used¹⁵.

¹³ Experiences were presented during the first webinar, which can be watched here: <https://vimeo.com/143141144>

¹⁴ Photo: The Africa WASH & Disability Study & The Collaboratory at Messiah College

¹⁵ For more on WaterAid Uganda's experience, see: <https://youtu.be/z4UwSfUjzQ>

Contributions from Messiah College and World Vision suggested that in the design of latrine seats and chairs for disabled persons, care must be taken to assure a design that reduces unnecessary soiling, and facilitates hand access for cleaning and washing following defecation. Portable and movable latrine seats should be constructed in such a way that seat support (i.e., legs or supporting walls) should be sufficiently spaced so as to avoid soiling during defecation. With hand access, consideration must also be given to user preference for cleaning from the front and/or behind. Ideally latrine seats should be designed in such a way that allow for unhindered access from both directions.

Experience from World Vision and Samaritan's Purse in **Niger** indicates success with both low-cost portable latrine seats and bucket/jerry-can tippers.

However, both access to wood material and the termite threat make metal versions of these technologies more desirable. At the same time, consideration must be given to the trade-offs between the *costs* of locally fabricated metal technologies and locally fabricated wood technologies, and long-term *durability*. For instance, in the Sahel region of **West Africa**, metal versions of these technologies can be up to 5-10 times more expensive – often beyond the means of many persons with disabilities. Also, Messiah College indicated the need for the development of appropriate technical standards for low-cost, locally-fabricated technologies – such as the (culturally appropriate) height of latrine chairs and the pivot point for bucket and jerry-can tippers¹⁶ (see photo¹⁷).



Lessons from World Vision and Messiah College in accessible handpump superstructure design indicated that design consistency can be a concern. Care is needed in the development of appropriate technical standards. Examples of ramp design, especially concerning slope and the required, additional cost of materials for construction, should be given adequate consideration. During the course of project implementation in **West Africa**, it became difficult to maintain such standards across several different regions and countries. For example, the costs associated with appropriate ramp access (notably the cost, length and time needed to construct) were notable deterrents. To overcome this, increased artisan and builder interaction with persons with disabilities in the community was needed. Often, some sort of mutually-satisfactory compromise was needed among the “competing” parties involved.

In **Niger** World Vision noted the importance of providing a pedestal at handpump sites to facilitate the lifting of water receptacles (from floor to head) by those with mobility impairments. These should normally be constructed at a height roughly half the distance from floor to head level. Adaptations to protection walls around the handpump were also necessary. Normally, short, thick concrete walls around handpumps not only protect the handpump from roaming livestock, but also can serve the same purpose as a pedestal. However, due to the need to protect the handpump from blowing sand accumulation, walls were narrowed and heightened, and a pedestal replaced the shorter wall to facilitate the lifting of receptacles to the head for those carrying water.

In **Niger**, World Vision has had positive experience with the provision of locally fabricated, portable latrine chairs (designed by Messiah College) to health centres and schools. Indications are that this design facilitates use by both mobility-impaired and visually impaired individuals.

¹⁶ For more information on the design of latrine seats (wood, metal and baked clay) refer to the Messiah College report “Water, Sanitation and Disability in Rural West Africa: Enhancing Access and Use of WASH Facilities”: <http://www.africawashdisability.org/wp-content/uploads/2014/08/phase1finalreport.pdf>

¹⁷ Photo: The Africa WASH & Disability Study & The Collaboratory at Messiah College

Information, Guidance and Support

An Annotated Bibliography was shared which captures resources on reducing inequalities in WASH. It is a live document, so materials can be added continuously¹⁸. A five-minute film from WaterAid and CoU–TEDDO provided an overview of information, guidance and support for inclusive approaches to WASH in Uganda. Two practical inclusive WASH resources were shared:

1. The [Compendium of Accessible WASH Technologies](#): A collection of accessible technology design information, which helps communities to see accessibility options made from locally available materials. Available here: www.wateraid.org/accessibleWASHtechnologies.
2. A Practical Guide for Inclusive WASH at Household and Community levels in Uganda¹⁹. This resource provides technical design dimensions for contractors to apply in designing accessible infrastructure.

In the video, CoU–TEDDO explained they have standardised accessible infrastructure design across the **Ugandan** ministry of education and the ministry of water and environment in partnership with WaterAid and the Appropriate Technology Centre (ATC)²⁰. They have also produced guidance for applying these standards and are advocating for inclusive WASH to be taken to scale by others. One challenge highlighted by CoU–TEDDO was the high costs of inclusive designs for public WASH services. Another was the limited simple and clear guidance or manuals for promoting inclusive WASH for water user committee members, government health educators and village heads to use.

WaterAid, WEDC, Leonard Cheshire Disability and the LSHTM shared a selection of data collection tools²¹:

- Nine mixed-method data collection tools focus on WASH access and use, disability, ageing, chronic illness, menstrual hygiene management, safety and security.
- Eight process monitoring tools designed to collect data throughout an inclusive WASH programme to assess progress in capacity of implementing staff, levels of participation of different people at the community level, and the effectiveness of inputs and activities. These tools are designed to be administered by WASH implementers and INGO staff.

IR Worldwide shared the *Minimum Standards for Age and Disability Inclusion in Humanitarian Action* (Age and Disability Consortium, 2015). These are developed by seven agencies working to promote age and disability inclusive humanitarian assistance²². They are also relevant for the development sector and include a section on WASH.

In **Cambodia**, WaterAid conducted a review of accessible WASH. WaterAid explained that they found the key barriers to inclusive WASH were a lack of communication and partnership between the WASH, disability and ageing sectors. In partnership with the Ministry of Rural Development and representatives from these sectors, WaterAid then led the development of National Guidelines on WASH for people with disabilities and older people. Activities included identifying a gap, understanding each other's visions, seeing synergies and collaborating to produce the guidelines. The process led to greater understanding, collaboration and commitment to working across the sectors more effectively.

Conclusion

A vast amount of learning was shared between ENDI theme members during the e-discussions and webinars. Drawing on the Equality Checklist (see Annex 1), this mainly focused on spatial, individual related inequalities and touched on the progressive realisation toward safe and sustainable WASH for all. No substantive discussion was held on group related inequalities such as ethnicity, tribe, race, nationality, language, religion and caste. This demonstrates limited knowledge, understanding and approaches to addressing these in WASH and is something that the ENDI theme should consider developing.

¹⁸ The bibliography is currently on the WaterAid website at <http://www.wateraid.org/policy-practice-and-advocacy/equality-and-non-discrimination/resources>.

¹⁹ Unfortunately only a hard copy of this guide can be found

²⁰ The video can be viewed here: https://www.youtube.com/watch?v=vtLO_wym6uE&nohtml5=False

²¹ These tools and other resources related to ageing, disability, chronic illness and WASH is available at www.wateraid.org/uk/undoinginequity.

²² CBM, DisasterReady.org, Handicap International, HelpAge International, IFRC, Oxford Brookes University and RedR UK

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Annex 1 Glossary

Disability: Disability is a long-term physical, mental, intellectual or sensory impairment which, in interaction with environmental, attitudinal and institutional barriers, prevents full and effective participation in society. This is a rights-based approach to disability (Wapling, 2016).

Equity: The moral imperative to dismantle unjust differences, based on principles of fairness and justice. It requires a focus on the most disadvantaged and the poorest individuals and groups. From a human rights perspective, relying on equity carries risks because its definition is malleable and not legally binding. Equity may dilute rights claims if considered separately from equality and non-discrimination (de Albuquerque, 2014).

Equality: This refers to the legally-binding obligation to ensure that everyone can enjoy his or her rights equally. Human rights law requires equal access to basic services, but it does not mean that everyone should have the same type of service, such as flush toilets. Equality does not imply treating people who are unequal equally; it does not indicate identical treatment in all cases (de Albuquerque, 2014).

Inclusion: (ensuring that all are able to participate fully) Inclusion is not just about improving access to services. This is about getting better access to services and supporting people, including those who are discriminated against and marginalised, to actively take part in decision-making to make sure their rights and needs are recognised (*A handbook by the UN Special Rapporteur Catarina de Albuquerque*²³).

Non-Discrimination: The legal principle that prohibits any distinction, exclusion or restriction that results in individuals or groups not being able to enjoy, or recognise their human rights on an equal basis with others based on "prohibited grounds". These include race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, disability, age, health status, economic and social situation (de Albuquerque, 2014).

Rights based approach: A rights-based approach puts the 'right' to certain services at the heart of social and economic development. The rights-based approach focuses on the relationship between two key groups: the rights holders (who may not experience full rights) and the duty bearers (the institutions obligated to fulfil the holders' rights). It aims to strengthen the **capacity** of duty bearers to fulfil people's rights and **empower** the rights holders to claim their rights. **Meaningful participation** is pivotal.²⁴

The **normative content categories** of the rights to water and sanitation serve to describe the issues that states need to take into account in realising the rights to water and sanitation. These categories are:

- **Availability:** The human right to water entitles everyone to sufficient and continuous water for personal and domestic use. Likewise, a sufficient number of sanitation facilities has to be available.
- **Quality:** Water has to be safe for consumption and other personal uses, so that it presents no threat to human health. Sanitation facilities must be hygienically and technically safe to use. To ensure hygiene, access to water for cleansing and hand washing critical times is essential.
- **Acceptability:** Sanitation facilities, in particular, have to be culturally acceptable. This will often require gender-specific facilities, constructed in a way that ensures privacy and dignity.
- **Accessibility:** Water and sanitation services must be accessible to everyone within, or in the immediate vicinity, of household, health and educational institution, public institutions and places and workplace. Physical security must not be threatened when accessing facilities.
- **Affordability:** The price of sanitation and water services must be affordable for all without compromising the ability to pay for other essential necessities guaranteed by human rights such as food, housing and health care.

²³ UN (2014), *Realising the human rights to water and sanitation: A handbook by the UN Special Rapporteur Catarina de Albuquerque*. Available at <http://www.righttowater.info/handbook/>

²⁴ For more info see <http://www.righttowater.info/why-the-right-to-water-and-sanitation/the-right-to-water-a-legal-obligation/the-content-of-the-rights-explained/>

Universal Design²⁵ Universal Design makes things *safer, easier* and *more convenient* for everyone. It involves designing products and spaces so that they can be used by the widest range of people possible. Universal Design evolved from Accessible Design, a design process that addresses the needs of people with disabilities. Universal Design goes further by recognizing that there is a wide spectrum of human abilities. Everyone, even the most able-bodied person, passes through childhood, periods of temporary illness, injury and old age. By designing for this human diversity, we can create things that will be easier for **all people** to use.

Environmental barriers: Physical barriers in the natural environment such as distance to water sources, difficult parts to latrines; built infrastructure; and artificial barriers such as toilets too small for a wheelchair user to enter and turn inside or well with sides too high of pump handles too heavy for individuals who have difficulty moving or lifting. Also barriers to communication imposed on people with visual impairments, hearing impairments and intellectual impairments through lack of accessible formats and language

Attitudinal barriers: Prejudice, discrimination and stigma based on false assumptions on impairments, their causes and their consequences – including being incapable/inadequate, low intelligence, in need of a 'cure', cursed/punished, carrying 'bad luck' for other community members if they associate with them. People who make these judgements treat the disabled person as superfluous or superhuman and often respond to disabled people with fear, pity, repulsion, or a sense of superiority.

Institutional barriers: These are policies, laws and systems that exclude or segregate disabled people, examples include legal system, employment laws, electoral system, education policies, health service provisions, social services, belief systems and religion, humanitarian/development agency policies.

Practical gender needs are the needs that women identify in their socially accepted roles in society. Practical needs do not challenge the gender division of labour or women's subordinate position in society.

Strategic gender interests involve greater decision-making power or control over resources. Addressing strategic gender interests assists women and men to achieve greater equality and to change existing gender roles and stereotypes

Gender transformative approaches (GTA) are programmes and interventions that create opportunities for individuals to actively challenge gender norms, promote positions of social and political influence for women in communities, and address power inequalities between persons of different genders. GTA create an enabling environment for gender transformation by going beyond just including women as participants. GTA are part of a continuum of gender mainstreaming, or the integration of gender issues into all aspects of programme and policy conceptualization, development, implementation and evaluation.

²⁵ <http://www.universaldesign.com/about-universal-design.html>

Annex 2 Contributions to the RWSN Reducing Inequalities in WASH E-discussion 2015

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Munawar Hassan	WaterAid Pakistan
James Kiyimba	WaterAid, Uganda
Ray Norman	World Vision, US
Hamissou Maliki	World Vision, Niger

Annex 3 Publications on women's economic empowerment shared by the World Bank

Title	South Africa: Women in Sanitation and Brick Making Project, Mabule Village
Abstract	The Mabule Sanitation Project in South Africa is a joint initiative between the Department of Water Affairs and Forestry (DWAF) and the community, with funding from Mvula Trust. The DWAF provides funding for sanitation projects in communities where there is gender-balanced decision-making. The initiative established a brick-making project for latrine construction that employs mainly women, generates cash, and provides the community with affordable bricks. Mabule village now has safe and attractive toilets and improved health and hygiene. There is increased acceptance of women's leadership roles by community members, as well as an increased collaboration between women and men.
Available at	http://www.sswm.info/sites/default/files/reference_attachments/MASONDO%20ny%20Wo men%20in%20Sanitation%20and%20Brick%20Making%20Project.pdf
Title	Vietnam Red River Delta rural water supply and sanitation project
Abstract	A Vietnam sanitation example shows the implementation of the water supply and household sanitation revolving fund through the Provincial Women's Union to assist the construction or renovation of approximately 46,000 household latrines or bathroom facilities.
Available at	http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/12/27/000442464_20131227104416/Rendered/PDF/ICR27520P0772800disclosed0120240130.pdf
Title	Empowerment through entrepreneurship in water and sanitation
Abstract	Although women are the primary stakeholders in the water and sanitation sector, their participation in India has often been restricted to a representative capacity; that is, it has simply meant membership of the village water and sanitation committee. Far too often they are excluded from key decision-making roles, and their economic empowerment has remained crucially lacking. Can women earn a living, or supplement their income through water and sanitation related work? Can they successfully challenge male bastions, by playing active roles in the sector? The note answers these questions, namely by explaining what the Women's Mela is about. The Mela is a women's empowerment group, providing women entrepreneurs with a unique opportunity to share their experiences, and examine the factors contributing to the success, and failure of programs in villages all over the country.
Available at	http://documents.worldbank.org/curated/en/145121468268813743/Empowerment-through-entrepreneurship-in-water-and-sanitation
Title	Nepal - Second Rural Water Supply and Sanitation Project (RWSSP)
Abstract	Ratings for the Second Rural Water Supply and Sanitation Project (RWSSP) for Nepal were as follows: outcomes were satisfactory, risk to development outcome was low or negligible, Bank performance was satisfactory, and Borrower performance was satisfactory. Some lessons learned include: the demand-driven community based model implemented by the Fund Board was able to withstand the implementation challenges of operating in a conflict environment. The RWSSP II, was able not only to address the implementation issues which affected the first project, but also to experiment and pilot innovations. These innovations allowed the RWSS program to grow and evolve, and could not have been introduced under the first project, which focused on developing the foundations of the Fund Boards delivery model. The project had a remarkable gender impact by freeing women and girls of the time previously spent fetching water to distant locations. The Fund Board would need to reorient to address the emerging trends of growing demand for improved service levels in rural areas development phase of the Fund Boards delivery model, during which communities are mobilized, and community decisions are made, is a unique feature and an important investment that assures ownership, successful implementation, and sustainability of the schemes.
Available at	http://documents.worldbank.org/curated/en/2013/02/17410554/nepal-second-rural-water-supply-sanitation-project-rwssp

Title	Yemen - Irrigation Improvement Project documentation
Abstract	The Irrigation Improvement Project is the first phase of the country's programme to ensure sustainable water resources management in seven main spate irrigation schemes in Yemen, and improve agriculture productivity, and small-holder income in those areas. The project components are 1) to support the rehabilitation, improvement and protection of spate irrigation infrastructure, namely Tuban and Zabid schemes, topographical surveys, with detailed design, and hydraulic models testing will be implemented, with supervision on improvements of irrigation systems at the canal level, including wadi levels. This includes construction of flood protection and road rehabilitation works. 2) To enhance irrigation, and environment management, a participation irrigation management approach [to involve women in project design and implementation processes] will be established. Operation and maintenance equipment will be provided to be leased to water user associations. 3) An intensive agriculture demonstration programme. 4) Institutional strengthening and capacity building. The project accomplishments confirmed through a sample survey, suggested that 66 percent of women had reasonably benefited from the increased agriculture income, had acquired new assets and made investments in their respective households in Wadi Tuban and Wadi Zabid areas.
Available at	Documents related to this project are available at http://www.worldbank.org/projects/P062714/irrigation-improvement-project?lang=en&tab=documents&subTab=projectDocuments
Title	Rainwater harvesting by women groups in Rakai and Masaka districts – Uganda
Abstract	Rakai district is situated in the South-western region of Uganda. The main cash activity is subsistence agriculture. The area is one of worst affected by the HIV/AIDS pandemic and has one of the highest percentages of orphans per household in the country. Rakai was among the districts benefiting from the South-West Integrated Project (SWIP) whose objective was to provide safe drinking water to rural communities. However, the potable use of ground water was highly constrained by poor water quality exhibited by high concentration of iron and possibly high levels of trace elements. This meant that the only option for provision of safe water was rainwater harvesting. Rakai receives about 800 mm of rain annually, which made it conducive to promote domestic rainwater at household level. As a result the Rakai district administration looked around for partners to assist solving this problem. Many of the families in this district are child/widow headed households with orphans due to the AIDS epidemic in the area. The provision of safe water would pay a major role in the reduction of the burden for collecting water especially for the children and women. SIDA Nairobi was one of the partners that accepted to work with the Rakai administration to promote domestic rainwater harvesting. SIDA sponsored six Kenyan women experienced in water tank construction in early 1997 as consultants together with a technician to assist Ugandan women groups in Rakai to construct their own water jars and tanks. Two groups benefited from the training: "Katuntu Twekambe Women's Group" and "Bakyala Kwekulakulanya women's group." The women groups had one common problem and a shared vision for clean and safe water. This was all it took to get the women moving! The groups were taught how to make 2 water tanks: a jar and a ferrocement tank, which costs Uganda shillings 160,000 (US\$ 106) and 240,000 (US\$ 159) respectively. The training lasted two weeks. After the training the two women groups embarked on the construction of tanks. The District Water Officer was very instrumental in the promotion of these groups. He introduced them to various donors and NGOs in the district for support with materials like cement, wire mesh etc. The district pledged to assist the groups on technical issues, mobilization, and promotion. With the technical issues and roles and responsibilities set the groups went to work.
Available at	http://eng.warwick.ac.uk/ircsa/pdf/10th/5_05.pdf
Title	The Role of Productive Water Use in Women's Livelihoods: Evidence from Rural Senegal
Abstract	Enhancing livelihoods and promoting gender equity are primary goals of rural development programmes in Africa. This article explores the role of productive water use in relation to these goals based on 1860 household surveys and 15 women's focus groups conducted in four regions of Senegal with small-scale piped water systems. The piped

systems can be considered 'domestic plus' systems because they were designed primarily for domestic use, and also to accommodate small-scale productive uses including livestock-raising and community-gardening. This research focuses on the significance of productive water use in the livelihood diversification strategies of rural women. In Senegal, we find that access to water for productive purposes is a critical asset for expanding and diversifying rural livelihoods. The time savings associated with small piped systems and the increased water available allowed women to enhance existing activities and initiate new enterprises. Women's livelihoods were found to depend on productive use activities, namely livestock-raising and gardening, and it is estimated that one half of women's incomes is linked to productive water use. While these findings are largely positive, we find that water service and affordability constraints limit the potential benefits of productive water use for women and the poorest groups. Implications for targeting women and the poorest groups within the domestic plus approach are discussed.

Available at <http://www.water-alternatives.org/index.php/allabs/191-a5-3-7/file>