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Sanitation and Hygiene Applied Research for Equity

REPORT

WASH and Women

A Story of Change

November 2017
Updated January 2019

Building knowledge. Improving the WASH sector.

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Partners

This material has been funded by UK aid from the Department for International Development (DFID). However, the views expressed do not necessarily reflect the Department's official policies.

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Acronyms

DFID: Department for International Development (UK Government)

GBV: Gender based violence

IASC: Inter-Agency Standing Committee

LSHTM: London School of Hygiene and Tropical Medicine

NGO: Non-governmental organisation

MHM: Menstrual Hygiene Management

PNG: Papua New Guinea

SDG: Sustainable Development Goals

SHARE: Sanitation and Hygiene Applied Research for Equity

SoC: Story of Change

USAID: United States Agency for International Development

WASH: Water, Sanitation and Hygiene

WSSCC: Water Supply and Sanitation Collaborative Council

1. Introduction

Stories of Change (SoC) synthesise qualitative monitoring data to investigate how inputs have contributed to achieving specific outcomes through pathways of expected or unexpected change. Through this approach, the Sanitation and Hygiene Applied Research for Equity (SHARE) consortium aims to evaluate its indirect reach and its broader impact in the water, sanitation and hygiene (WASH) sector (Balls, 2016).

This Story of Change focuses on SHARE's contribution to research, policy and practice change related to menstrual hygiene management (MHM) and gender based violence (GBV) as well as the linked theme of psychosocial stress. It has been produced through synthesising monitoring data, undertaking a desk review of resources and conducting 10 interviews with researchers, practitioners and experts. More detail about the approach used is available on page 23 of this report. SHARE-funded research and resources have had broad sectoral uptake and have influenced national policies and emergency responses in Fiji, India and the Solomon Islands.

2. Background

Poor access to and poor quality of water, sanitation and hygiene (WASH) can have disproportionate health impacts on women and girls which include urogenital tract infections, maternal mortality, adverse pregnancy outcomes, violence and psychosocial stress (Esteves Mills and Cumming, 2016). In order to explore and address this topic, WASH and gender has been on SHARE's research agenda since inception. The body of SHARE-funded work on WASH and maternal, newborn and child health (MNCH) is covered in our Story of Change about WASH and Health Care facilities (Balls, 2017b). This SoC will focus specifically on MHM, GBV and psychosocial stress.

Effective and safe MHM is essential for the dignity, health and wellbeing of women and girls. It is an important part of the basic hygiene, sanitation and reproductive health services to which every woman and girl has a right. However, although approximately 52% of the female population are of reproductive age and are likely to menstruate each month, menstrual hygiene management (MHM) remains a taboo topic in many settings, and has often been overlooked in research and policy (House et al., 2012).

The effects of WASH on the rates and nature of gender-based violence is another area that disproportionately affects women and girls. GBV occurs as a result of the differences in power between men and women, and while men can also be victims, a large proportion of GBV is aimed at women and girls (House et al., 2014). Poor access to safe sanitation facilities can increase women's vulnerability to violence and sexual assault (House et al., 2014).

Psychosocial stress is defined as occurring when a perceived threat outweighs an individual's perceived ability to overcome the challenges associated with the outcome. Sources of psychosocial stress can include limited WASH provision for MHM, limited access to WASH facilities, the fear associated with using facilities that expose women to GBV and the coping strategies that women and girls adopt to manage these issues. Psychosocial risks are multiple and cumulative, occurring across the duration of a woman's life and changing according to where a woman is within the life course.

Equitable access to WASH infrastructure and services, noting the particular needs of women and girls, is prioritised within Sustainable Development Goal (SDG) 6 (UNDP, 2017). Understanding and addressing the gendered needs of women and girls in relation to WASH is essential in order to meet these global goals by 2030.

3. Menstrual hygiene management

3.1 SHARE's role

Whilst it is biologically plausible that poor MHM influences the health and social outcomes of women and girls, and that WASH provision and use can improve MHM, the state of the evidence on this topic was poor. SHARE made an important contribution by funding the **first systematic review** to collate, summarise and critically appraise the existing body of peer-reviewed published literature relating to associations of poor MHM and social and health outcomes in low-income settings (Sumpter and Torondel, 2013).

The review concluded that generally 'menstruation is poorly understood and poorly researched' (Sumpter and Torondel, 2013). It pointed to a body of good qualitative evidence on challenges and barriers experienced by women and girls, and educational interventions to improve menstrual hygiene practices and reduce social restrictions other than attendance at school. However, no published quantitative evidence was found that suggested improving menstrual practices improved women's reproductive health or attendance at school. The review advocated for more rigorous quantitative research to build the evidence base.

SHARE has also been central to driving best practice on WASH and MHM using what we currently know. Whilst the systematic review pointed to an acute need for more research on this topic, there was a great deal to be learnt from the existing body of qualitative studies on how MHM may be improved. In 2012 SHARE co-funded the **Menstrual Hygiene Matters manual** with WaterAid which brought together practical examples of good practice in MHM from across the WASH, health, education and gender sectors (House et al., 2012). The manual was co-published with 18 leading WASH agencies. An accompanying training guide for practitioners was also produced as part of this project. The manual aimed to break the silence around MHM and to provide context specific examples to improve MHM practices for women and girls in lower and middle-income countries. The manual includes checklists, examples and other resources for practitioners.

By defining research gaps, the systematic review created opportunities for others to fill these gaps and advance research on the neglected topic of MHM. Two immediate opportunities arose when SHARE funded two London School of Hygiene and Tropical Medicine (LSHTM) MSc students to document **MHM challenges and barriers in** Malawi **and Bangladesh**. Other actors have since further explored the areas highlighted in the systematic review and this is described in section 3.2.

SHARE has also funded innovative studies to measure health impacts of MHM. A case-control study in India looked at linkages between MHM practices and urogenital tract infections; the first study to use both reported symptoms and laboratory diagnosed outcomes. This research project found that re-using pads is likely to have a negative impact on women's health (Das et al., 2015) . It highlighted that interventions should not only focus on absorbents but also on an enabling environment that promotes healthy and comfortable management of menstruation.

In 2017, SHARE wrote a **MHM policy brief** which sought to summarise previous research on the topic (Balls, 2017a). The brief advocates for further research and highlights the importance of integrating MHM in sanitation programming and the need to provide access to absorbent sanitary materials for women and girls in low and middle-income countries.

3.2 Global and national change

This section describes uptake or application of the resources and knowledge generated by SHARE and its partners on MHM.

Influencing policy

The MHM manual has informed WASH in Schools and MHM policies in several countries:

- **India:** In 2014, SHARE produced a technical briefing note on performance indicators for MHM on request of the Principal Secretary for Drinking Water and Sanitation of India. The request came from an ambition to measure the performance of their Clean India programme (Swachh Bharat Abhiyan) from a MHM perspective, following on from the spotlight that SHARE helped create on MHM in India, through its national research and its engagement with decision-makers. Additionally, the MHM manual has been referenced in the Government of India's MHM guidelines (Government of India, 2015). With support from UNICEF, the guidelines are currently being implemented in Maharashtra state, which has made MHM education mandatory in schools.
- **Malawi:** Research findings were shared in Lilongwe in November 2014 at a SHARE convened event attended by government of Malawi officials, researchers, policy makers, practitioners and members of the public. Formulation of a national policy on MHM in school was recommended at this event. The study findings were also presented at several dissemination events across Malawi in January 2015, most notably in Lilongwe where the Ministry of Agriculture, Irrigation and Drinking Water stated that the findings would assist in their efforts to ensure that the government meets its target of achieving 'Sanitation for All' (Piper Pillitteri, 2011). SHARE's Phase II partner MEIRU are implementing a study on current interventions on menstrual products nationally and their success rate; the results of this will feed into the Government of Malawi's national guidance for MHM.

- **Macedonia:** Women in Europe for a Common Future have worked with the Government of Macedonia to produce updated guidance on developing a Water and Sanitation Safety Plan for Rural Communities (2017), which makes multiple references to the MHM manual and highlights the importance of MHM (WECF, 2017). The Compendium is targeted at Southern European contexts and has been translated into English, Romanian, Macedonian, Albanian and Bulgarian.
- **Papua New Guinea (PNG):** The MHM manual and SHARE funded research have helped shape the investment choices of one of the main bilateral donors in the region, as well as the programmes of one of the largest implementing agencies. UNICEF manage WASH in Schools (WinS) programmes on behalf of the PNG Government and the manual has informed their guidance document. In addition, the 2016 literature review 'The Last Taboo' commissioned by the Australian Government to examine determinants and impacts of MHM and effective interventions in the Pacific, has drawn on findings from the systematic review and both the MHM and WASH and GBV manuals (WaterAid et al., 2016). The aim of this review was to identify opportunities for Australian Government programming in the region and it will inform UNICEF's programming in PNG.
- **Solomon Islands:** The MHM manual informed the Government of the Solomon Islands' decision to incorporate MHM into its national minimum standards for WASH in Schools. Their publication on Technical requirements for school WASH projects makes frequent reference to MHM needs and they have also produced a specific note on MHM in schools (UNICEF, 2014) and (SolomonIslandsGovernment, 2015). The guidance is based on the MHM manual as well as interviews and discussions with school girls in the Solomon Islands. Where it is adopted, it will promote privacy, security and convenience for all users, ensure age and sex-separate facilities, and incorporate well-managed waste disposal systems.

At a global level, UNICEF have built MHM into their draft 2018 – 2021 strategic plan as a targeted priority for every child to live in a safe and clean environment. This includes a draft output indicator measuring the 'number of schools with Menstrual Hygiene Management services'. While the plan is currently in draft (to be signed off at Board level by the end of 2017), this strategic decision will commit UNICEF to mainstreaming MHM across WASH, education and other sectors. The MHM manual has been broadly referenced across UNICEF documentation including their East Asia & Pacific regional synthesis of MHM and associated guidance note (2016) and the MHM policy brief has also been used internally to share the current evidence base (UNICEF, 2016b).

The Menstrual Hygiene Matters manual has informed and is referenced within multiple guidance notes from influential international agencies. This includes UNESCO's guidance on MHM, the United States Agency for International Development (USAID) funded SPLASH project's MHM toolkit, EAWAG's Safe Water in Schools training manual and a review funded by the Department for International Development (DFID) on the needs of women and girls in emergencies. Both the MHM and GBV manual have influenced the Inter-Agency Standing Committee (IASC) guidelines for Integrating Gender-Based Violence Interventions in Humanitarian Action. USAID have included the MHM manual and policy brief as key reading in an internal bibliography of key WASH studies and reports (2017).

The MHM manual findings also informed global agendas, including the first ever MHM in 10 meeting in October 2014 (Phillips-Howard et al 2016). This sought to map out a ten year agenda for MHM in schools and has since been followed by two further MHM meetings. These meetings are organised and hosted by UNICEF and Colombia University.

Menstrual Hygiene Matters remains such a comprehensive resource as does Sarah House's more recent East Asia Pacific report. -

Brooke Yamakoshi, WASH Specialist (Sanitation and Hygiene), UNICEF, 2017.

Influencing practitioners

The Menstrual Hygiene Matters manual and guidelines have had broad sectoral uptake in many countries, with regular reports coming to light of where it has and continues to be used. Some examples include the following:

- WaterAid have used the MHM manual for training at country and regional level. The manual has helped to inform programmes in Bangladesh and India as well as to inform research tools for MHM in schools in Tanzania (2013-15).
- Save the Children USA used the resource to develop detailed MHM implementation guidelines which were tested in Bangladesh, Bolivia, China, El Salvador, Kenya and the Philippines (Haver and Long, 2015). They have now been used in 15 country offices and taken up by other actors including Jesuit Refugee Services, International Rescue Committee, the Government of the Philippines, the German Toilet Organisation, Concern Somalia and Oxfam Nigeria. The MHM matters manual is included as a resource in a file of attachments shared with the guidelines.
- Following Cyclone Winston in Fiji in 2016, UNICEF used the MHM manual to develop a rapid checklist for MHM in emergencies for the national WASH cluster. The MHM manual was the ‘key resource’ used to create this tool and described as ‘immensely helpful’ by UNICEF staff. The checklist helped to harmonise the contents of dignity kits distributed by the WASH cluster and ensure that private bathing facilities for women were prioritised in the response.
- The International Rescue Committee and the University of Columbia have used the MHM manual to inform a project funded by Elrha’s Research for Health in Humanitarian Crises Programme (R2HC) to develop an inter-agency toolkit for MHM in emergencies, launched in 2017.

Building capacity

Both the MHM and GBV manuals have formed the basis of capacity development activities around the world, including the following:

Table 1: Capacity development activities based on MHM and GBV manuals

Year	Target audience	Country	Focus
2013	Non-governmental organisation (NGO) staff	Lebanon	Hygiene promotion in complex emergencies (Syria)
	WaterAid and other local NGOs	Nepal and Pakistan	Training on MHM manual
	MSF-public health team	Netherlands	Building MHM into MSF emergency WASH including MHM and GBV
	Training of trainers-REDR, WaterAid and SHARE	UK	Training on MHM manual which led to IRC MHM working group
	International Rescue Committee	Morocco	Training on MHM manual and GBV toolkit
2014	Academic and WASH practitioners	Australia, UK and UK and USA at key WASH conferences	Training on MHM manual and GBV toolkit
	NGOs, UN agencies, Inter-Agency Standing Committee staff	India, Lebanon, South Sudan, Somalia, Sierra Leone, DRC, Zimbabwe, Vietnam, Switzerland and the UK	Training on WASH and GBV using toolkit
	DFID staff	UK	Presentation of GBV toolkit to WASH and RED teams
2015-2016	Government staff and officials	Indonesia	MHM sensitisation
	School girls (Eau Laos Solidaries)	Laos	MHM sensitisation
	Public health engineers and emergency response staff (Oxfam)	Liberia and Nepal	Incorporating MHM into the Ebola response and earthquake response
	International Medical Corps (IMC) staff	Zimbabwe, Yemen and Ethiopia	Training on WASH and GBV toolkit
	Malteser International/German WASH Network staff and partners	Thailand, Uganda, Nepal and India	Regional training on emergency WASH and country level training using GBV toolkit

Influencing research

SHARE's research on MHM has informed several research studies and interventions.

- At LSHTM, findings were fed into the design of the MENISCUS trial, on menstrual hygiene and safe male circumcision promotion in Ugandan schools. The MENISCUS trial is led by Dr Helen Weiss at LSHTM. Dr Belen Torondel, co-author of SHARE's systematic review on MHM, provides guidance. Phase I of the trial has now closed, with a feasibility study paper published, and Phase II is in process (Miiro et al 2018).
- Dr Belen Torondel is also leading on a MRC funded LSHTM menstrual hygiene in schools study in the Gambia seeking to pilot interventions to reduce school absenteeism.
- LSHTM has built MHM into the Tropical Environmental Health MSc module drawing upon research funded by SHARE, with a specific lecture dedicated to MHM, influencing the next generation of researchers and practitioners.
- WSSCC funded LSHTM to conduct a follow up study on MHM, reusable materials and infections in India (Torondel et al 2018). This study was influenced by practitioner demand; SHARE's systematic review raised questions about guidance for safe use of reusable materials. This study sought to understand what good MHM with reusable materials might look like, through characterising the different factors relating to reusing materials. It included a qualitative study to define practices and uses laboratory diagnostics to measure health outcomes. This research team also investigated the relationship of different MHM practices with specific urogenital infections, finding a strong and consistent association between poor menstrual hygiene practices and higher prevalence of lower reproductive tract infections (Torondel et al 2018).
- WaterAid and the LSHTM International Centre for Evidence in Disability/Environmental Health Group are currently conducting some innovative work linking MHM with disability in Nepal. This builds upon SHARE and WaterAid's Undoing Inequity project which found that MHM was a gap for people with disabilities (Wilbur, 2014). The MHM manual and WaterAid's related training materials were used to inform the research tools and another planned output is a systematic review on MHM and disability. The project aims to develop a MHM behaviour change intervention that enables people with intellectual impairments to manage their menstruation more independently and to identify strategies to improve MHM of people with intellectual impairments in Nepal.

Online engagement

There has been online uptake of SHARE's work on MHM and WASH and GBV. Altmetric tracks online discussions of research outputs on Twitter, news websites, media sites, blogs and other social media. The MHM systematic review was cited in news outlets, blogs and policy documents and received an Altmetric score of 48 (Sumpter and Torondel, 2013). The paper on MHM and urogenital infections has been picked up in six news articles and in blogs, with an Altmetric score of 89 (Das et al., 2015). A journal article exploring violence, gender and WASH was cited in 10 news articles in May 2017 and received an Altmetric score of 116. All three papers are ranked within the top 5% of outputs published on Altmetric, suggested they have had a significant impact beyond academia.

4. WASH, gender based violence and psychosocial stress

4.1 SHARE's role

SHARE has contributed to this area of research through synthesising existing information and making recommendations for practitioners. In 2013 SHARE and 28 development and humanitarian organisations co-published the '**Violence, Gender and WASH Practitioner's Toolkit**' (House et al., 2014). The toolkit presents best practice for responding to and protecting people against WASH-related violence throughout all aspects of policy and programming.

SHARE has also furthered the evidence base by commissioning a set of innovative studies in this area. In 2013, SHARE collaborated with WSSCC to co-fund **four research studies in India exploring the negative impact of WASH on psychosocial stress** of women and girls through the life-cycle. One of these studies, **WASH and CLEAN**, which focused on the child-bearing life-stage, is explored in more detail on our SoC on WASH in Health Care Facilities (Balls, 2017b).

One study on the psychosocial effect of limited access to WASH found that women encountered environmental, social and sexual stressors during sanitation activities, the intensity of which were modified by the woman's life stage, living environment and access to sanitation facilities (Sahoo et al., 2015) . One output was an innovative tool to quantify sanitation-related psychosocial stress and the resulting paper identified privacy as a major factor in psychosocial stress and WASH (Hulland et al., 2015). This included an analysis of sanitation-related psychosocial stresses across the life stage and identified MHM was a high stress activity. MHM was likely to be ranked as most stressful among women in rural and traditional tribal areas and for newly married and pregnant women (Hulland et al., 2015).

Another study focused on WASH coping strategies in Maharashtra. It found that 9% percent of study households and most seasonal migrant women workers lacked access to toilet facilities at household level, and that public places such as markets and transportation hubs often lacked adequate sanitation facilities (Steinmann et al., 2015).

A further research project focused on women's sanitation vulnerabilities in Maharashtra and Rajasthan. The study found that women had very few choices regarding where to relieve themselves. Women's experiences of psychosocial stress varied across caste, class, age, sanitation facility and location, with caste being the most prominent determining factor. The paper noted the importance of considering gendered power relations when developing sanitation (O'Reilly et al., 2015).

SHARE also funded MSc students to carry out **qualitative research in Uganda and India**; a study in Kampala exploring whether women are exposed to humiliation, violence and rape as a result of inadequate toilet facilities and a study on lack of access to water and sanitation

We have also been working with WaterAid, through the SHARE Research Consortium, to produce a toolkit for water, sanitation and hygiene practitioners to reduce the risks to women and girls of harassment and vulnerability to sexual attack when collecting water, using public toilets or when they are forced to defecate in the open (often in the dark) because there is no household latrine.
- Lynne Featherstone, former Parliamentary Under Secretary of State for International Development

facilities and sexual violence against women in urban slums in Delhi. In both contexts, women reported intense feelings of shame and stigma associated with going to the toilet, and expressed fear of rape and violence when using sanitation facilities or defecating in the open.

In 2016, SHARE began funding a study to explore **women and girls' sanitation vulnerabilities in Tanzania.** This mixed methods study examined the gender-specific WASH needs of women and girls though specific life stages and explored linkages with psychosocial stress and violence. It utilised an existing tool to quantify vulnerabilities, ensuring that data will compliment emerging research on WASH insecurity and that findings will be generalisable. Three journal papers will be submitted in 2019.

4.2 Global and national change

This section describes uptake or application of the resources and knowledge generated by SHARE and its partners on WASH and GBV.

Influencing policy

The GBV manual has influenced UK international development policy. Lynne Featherstone, the then Parliamentary Under-Secretary of State referenced the toolkit at the Preventing Sexual Violence in Conflict Global Summit in London, June 2014. The toolkit was also mentioned during the debate on the report on the UK Government Inquiry related to Violence Against Women and Girls in January 2014.

Both the MHM and GBV manual have influenced the IASC guidelines for Integrating Gender-Based Violence Interventions in Humanitarian Action. The GBV toolkit authors collaborated with IASC to develop advice from the toolkit and build it into the guidelines.

The GBV manual has also informed and been referenced within the UN Secretary-General's 2015 'Girl Child' report and the Global WASH Cluster's 'WASH Minimum Commitments for the Safety and Dignity of Affected People'. The GBV toolkit authors contributed to the development of the '*WASH Minimum Commitments for the Safety and Dignity of Affected People*' and members of the Global WASH cluster have referred to the toolkit as a useful resource.

"We will use and promote the "Violence, gender and WASH" toolkit you developed as this resource will be useful in spelling out the "why" and the "how" of the 5 commitments"
- Franck Bouvet, Global WASH Cluster

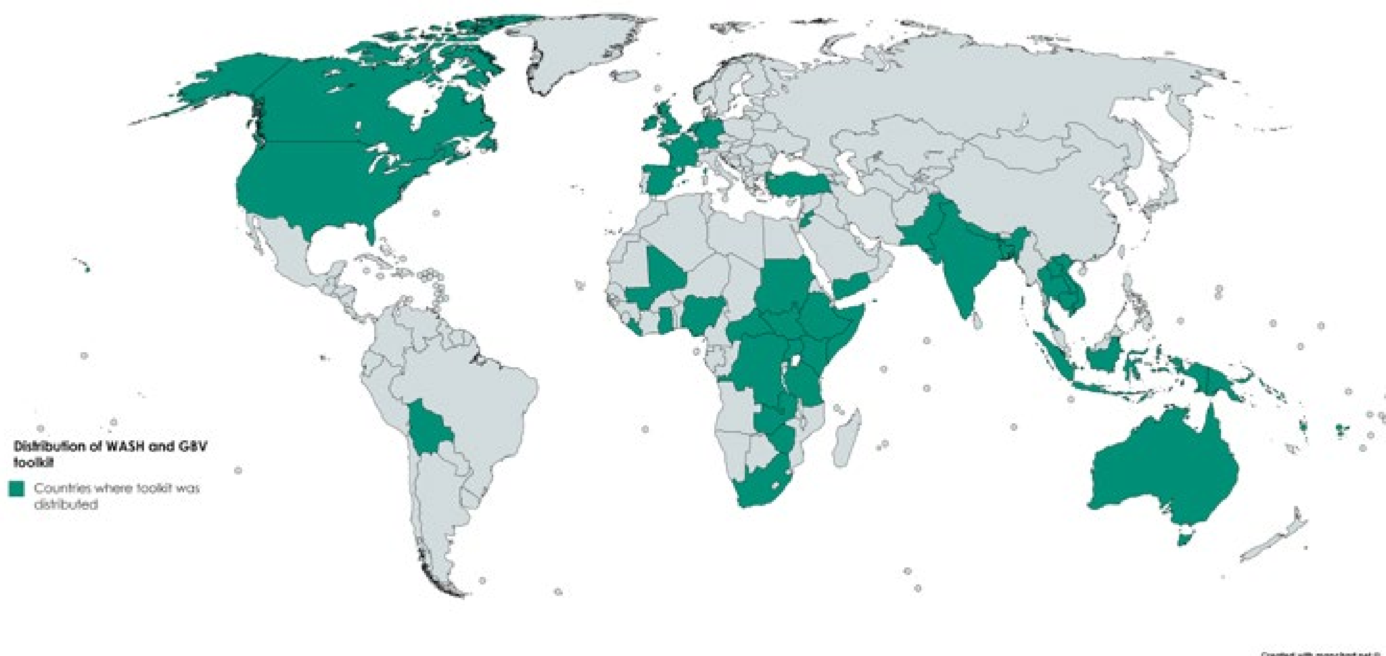
The toolkit has also been referenced in the 2017 UNHCR Manual, Tools and Guidelines for Refugee Settings, UNHCR's WASH and Protection briefing note (2017), in UNICEF's 2016 annual report and within UNICEF's report on MHM in the East Asia Pacific Region.

The toolkit has also been referenced in the 2017 UNHCR Manual, Tools and Guidelines for Refugee Settings, UNHCR's WASH and Protection briefing note (2017), in UNICEF's 2016 annual report and within UNICEF's report on MHM in the East Asia Pacific Region.

Influencing practitioners

The *Violence, Gender and WASH: Practitioner's Toolkit* and associated USB has been distributed to practitioners in over 40 countries as well as being freely available and downloadable online.

Figure 1: Global distribution of WASH and GBV toolkits



The GBV toolkit has also had broad sectoral uptake:

- In South Sudan, the Child Protection and WASH sections, along with the WASH Cluster have mainstreamed GBV concerns into minimum latrine standards, which led to significant changes to improve the privacy and safety of latrines.
- An assessment of GBV in the Typhoon Haiyan response led by the IRC referenced the GBV toolkit as a good example of developing capacity in the WASH sector globally around considering GBV.
- SNV have distributed the toolkit to all staff including specifically to teams in Asia to inform a series of gender and social inclusion analyses in preparation for a new phase of rural sanitation programming.
- Malteser International have incorporated the toolkit into their international WASH guidelines, used it to inform programming in the Democratic Republic of the Congo and for regional and national training through the German WASH network.
- WaterAid have used it to inform the development of their Equity and Inclusion Toolkit (to be published in 2018) and to develop programme proposals. WaterAid India have used the toolkit to help integrate gender across their national work.

Lessons learnt

1

Collaboration for shared ownership
A key learning from both the MHM and GBV toolkit was to collaborate and engage with others. Taking a collaborative approach takes more time but it enables a sense of joint ownership This ultimately led to strong uptake for both pieces of work, resulting in higher quality final outputs with buy in from the WASH sector.

2

Contextual relevance
One challenge of creating toolkits is the relevance of content and images across diverse cultural contexts. Selecting relevant components to use or adapting content to fit settings can help to address this challenge.

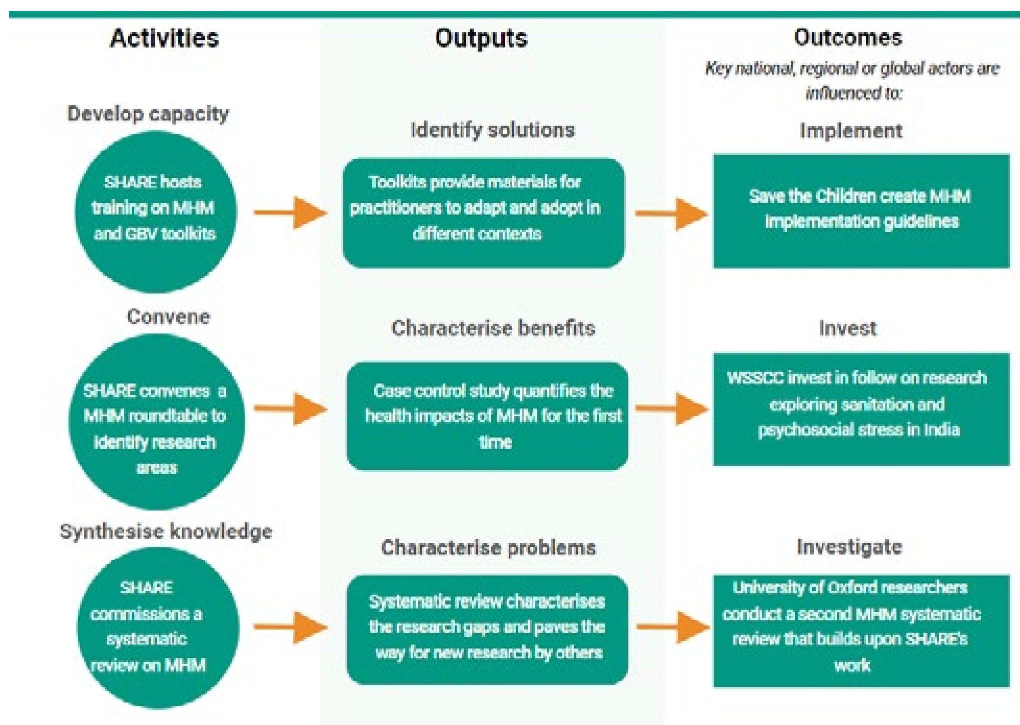
5. Contribution to change

In line with our Theory of Change SHARE has supported research, knowledge synthesis, convening, translation/communication and capacity development in the area of WASH and Women. SHARE strategically invested in research when these topics were emerging themes for the WASH sector, helping to both define and strengthen the evidence base, including funding the first systematic review on MHM. SHARE funded robust research that has generated new evidence while complementing this with programming guidance and tools for practitioners. SHARE also highlighted issues about safe sanitation and the possible linkages with gender based violence at leading WASH sector conferences, catalysing discussion.

SHARE funded a first of its kind case control study using both reported symptoms and laboratory-diagnosed outcomes to explore the relationship between MHM and urogenital disease (Das et al., 2015) This paper provided figures on the health impacts of MHM for the first time which helps to address the previous lack of evidence around MHM and health outcomes identified in the systematic review.

SHARE's MHM and GBV manuals brought practitioners together to co-publish documents with broad sectoral buy-in. SHARE also built cross-sectoral collaboration through learning from and engaging humanitarian protection experts on the GBV manual. SHARE played a convening role by hosting roundtables to generate research questions; inviting a broad range of people and dedicating time to characterise the problem was an important contribution.

Figure 2: Pathways of Change
This figure applies SHARE's Theory of Change to demonstrate some of the pathways of change through which SHARE has contributed to impact in the area of WASH and women.



Other advocacy contributors

Importantly, SHARE worked in close partnership with other institutions and individuals, particularly our Phase I and Phase II partner WaterAid. WaterAid played an important role through advocacy, integrating GBV and MHM into country level programmes, inputting into the manuals and building their staff capacity. They have since worked to influence policymakers around MHM in several contexts including India, Nepal and Pakistan. WaterAid have continued to focus on MHM with activities planned or implemented in 11 countries across South Asia, West Africa and Southern Africa. These activities include programme implementation, capacity building of internal and external actors and research.

Sarah House and Sue Cavill played a critical role in driving the agenda and engaging the broader sector to take up guidance on GBV and MHM. They led on the MHM and GBV toolkits for SHARE and advocated for GBV and MHM to be part of global agendas, fostering strong sectoral engagement which led to broad uptake.

The Water Supply and Sanitation Collaborative Council (WSSCC) played an important role in driving forward the agenda of WASH, women and psychosocial stress in India and co-funded research with SHARE. WSSCC have played an advocacy role around WASH and GBV in India, including undertaking community consultations to inform gender guidance for Swachh Bharat Abhiyan and advocating for consideration of WASH challenges for transgender people. They also worked closely with the Government of India to integrate MHM into Swachh Bharat Abhiyan guidelines as well as delivering training of trainers and workshops on MHM.

UNICEF have contributed significant funding to MHM as well as working with Emory University and the Canadian Government across 14 different countries on MHM formative research in schools (UNICEF, 2015b). Humanitarian protection staff from UNICEF also assisted with peer reviewing SHARE's GBV toolkit. UNICEF have played a broader role by showing sectoral leadership through mainstreaming of WASH and GBV and MHM across their work, particularly reflected in their focus on MHM and violence against women in their new draft strategy.

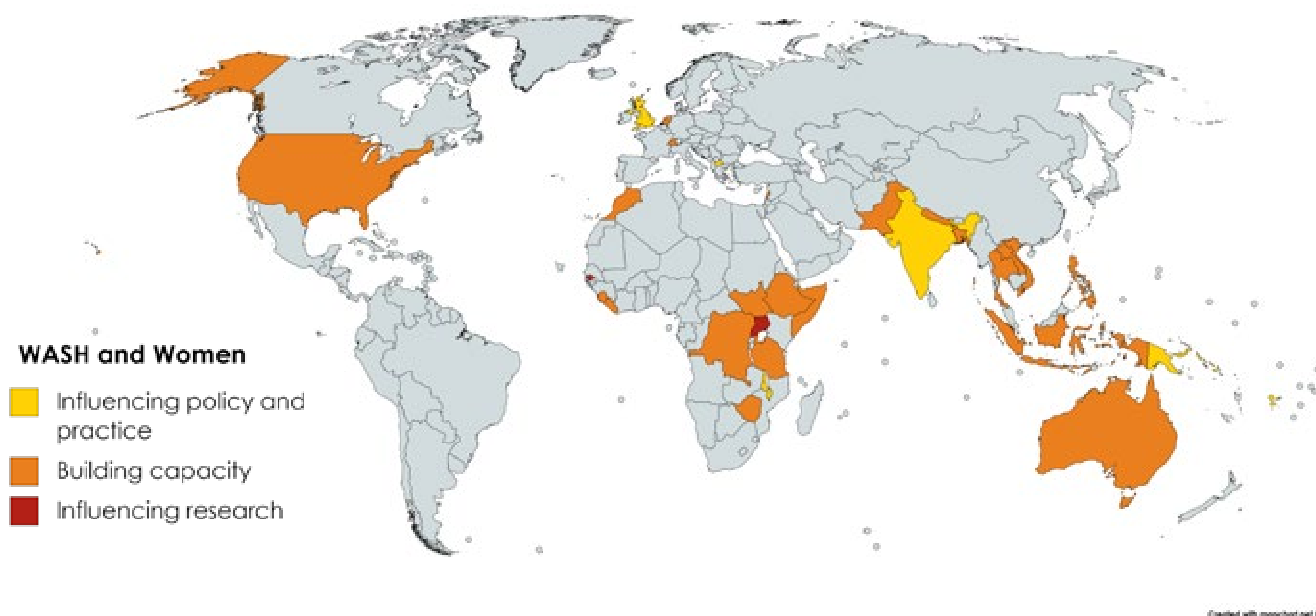
Various other NGOs have engaged with MHM including ActionAid, Care International, IRC, Irise International and Plan International, IRC have focused specifically on MHM in humanitarian contexts, publishing a cross-sectoral toolkit with Colombia University on integration of MHM into emergency response. WASH United launched the first Menstrual Hygiene Day on 28 May 2014; this has since become an annual awareness day with engagement from many development actors that has contributed towards breaking down taboos around MHM.

Other academic contributors

SHARE has also drawn on the expertise of academics within LSHTM and these individuals have gone on to explore research topics initially funded by SHARE. Dr Belen Torondel (LSHTM) has contributed to the MHM in 10 agenda and is continuing research on MHM in the Gambia, India and Uganda.

Other key academic contributors include Dr Penny Phillips-Howard (University of Liverpool) who wrote a paper setting out the research priorities for MHM (Phillips-Howard et al., 2016), Dr Bethany Caruso (Emory University) and Dr Marni Sommer (Colombia University, New York) who has focused largely on school settings and has co-convened the MHM in 10 meetings with UNICEF (Sommer et al., 2016). At Oxford University, Dr Paul Montgomery and Dr Julie Hennegan built on SHARE's systematic review to publish a second systematic review on MHM in 2016 focusing on educational and social outcomes (Hennegan and Montgomery, 2016). The Humanitarian Innovation Fund and UNHCR are currently funding research into sanitation, gender based violence and lighting in refugee camps.

Figure 3: Influence of SHARE's WASH and Gender work globally
This map shows the influence of SHARE's MHM and GBV work globally, visually representing the examples of uptake captured in this Story of Change.



6. Value for money and estimated reach

SHARE invested **£508,378** into WASH and women, with the majority of funding going on research (70%) as well as investment into research into use (30%). This was **5% of the total SHARE Phase I budget** and does not include Phase II funding. Over £560,000 has been invested in follow on work to SHARE projects including research in India and the Gambia led by organisations including WSSCC and LSHTM.

Table 2 suggests the reach of SHARE's work on WASH and gender; this is indicative and represents complex social change which SHARE's work may have contributed towards.[1] It only includes global or national changes where enough data was available to make assumptions.

Uptake	Direct reach	Indirect reach	Practitioners /donors	Assumptions
City-wide sanitation project in East Africa	27, 267 people (11, 741 in Tanzania, 14, 094 in Malawi, 907 in Zambia, 525 in Zimbabwe)			This captures the number of people who gained access to sanitation as part of the project.
Pit emptying in Dar es Salaam	662 people			This captures the number of people who participated in the research project.
SHARE's research on MHM, GBV and psychosocial stress in India, Malawi and Uganda.	1,064 people			Assumption that peer-reviewed publications accurately reflect the number of research participants (300, 486, 60, 42, 32, 144).
WSSCC follow up study to SHARE MHM research in India		800 people		Assumption that the planned sample size estimate will be accurate – this trial is still in progress.
Dissemination of GBV toolkit			8,475 people	This figure is based on the number of hard copies disseminated (1000), the number of unique webpage views on the tool-kit page (5175) between May 2014 till June 2017, the number of views on YouTube (700 between June 2014 – August 2017) and the number of practitioners who received it through SNV's mailing list (1600). (SHARE, 2014).
WASH, GBV and MHM knowledge sharing or capacity building events			1,129 people	This figure is based on the average number of attendees per SHARE event multiplied by the number of actual events on this them. Detailed event attendance data is not available for each event.

Direct reach is defined as people who participated in SHARE funded research. Indirect reach refers to those people who may benefit from changes that SHARE's work has contributed towards; i.e. the uptake and application of findings from SHARE research at a national level or research building upon SHARE's work. Practitioners/donors is defined as those who have attended events convened by SHARE, accessed resources created by SHARE or gained new knowledge due to uptake of SHARE's work within an organisation.

Uptake	Direct reach	Indirect reach	Practitioners/ Donors	Assumptions
MHM policy in the Solomon Islands		70,000 people		The Solomon Islands has a population of just over 600,000 people of which approximately 23% are adolescents (ages 10 – 19); assuming that around 50% of these are girls, this means there are approximately 70,000 girls who would benefit from menstrual hygiene policies (UNICEF, 2015a), (Index Mundi, 2017).Assumption that the policy is rolled out across the country, that it is inclusive of out of school girls, and that all girls gain access to appropriate MHM education and infrastructure.
Inclusion of MHM in sanitation and hygiene kits in Cyclone Winston response, Fiji.		70,727 people		The Solomon Islands has a population of just over 600,000 people of which approximately 23% are adolescents (ages 10 – 19); assuming that around 50% of these are girls, this means there are approximately 70,000 girls who would benefit from menstrual hygiene policies (UNICEF, 2015a), (Index Mundi, 2017). Assumption that the policy is rolled out across the country, that it is inclusive of out of school girls, and that all girls gain access to appropriate MHM education and infrastructure.
MHM policy in India		7.4 million people		Maharashtra State has a population of approximately 123 million people of which approximately 19% are adolescents (ages 10 – 19); with a sex ratio of 1.08 this means there are approximately 7.4 million girls who would benefit from menstrual hygiene policies (DevInfo, 2015), (Census of India, 2017). Assumption that the policy is rolled out across the country, that it is inclusive of out of school girls, and that all girls gain access to appropriate MHM education and infrastructure.
UNICEF strategic focus on GBV and MHM			UNICEF has adopted MHM targets in 30 countries for WASH in Schools and are currently supporting MHM work across 46 country offices.	Assumption that MHM and GBV manuals have contributed towards influencing programming based on their reference in several UNICEF documents and discussions with UNICEF staff. While it is not possible to estimate the number of practitioners reached at this macro-level, we assume that UNICEF's global influence, role as a donor and partnership with governments and NGOs around the world will lead to significant impact.
Total estimated reach	1,064 people reached	7.5 million people indirectly reached.	9,604 practitioners/ donors reached.	

Approach

SHARE's 2016 Impact paper defined impact for SHARE and analysed possible approaches to measure SHARE's outcome level impact (Balls, 2016). Stories of Change investigate how an intervention contributes to specific outcomes through looking at the pathways of expected or unexpected change. This process is usually precipitated by a success or failure gathered through qualitative M&E data. The approach includes gathering evidence and then writing a narrative story about the change (Young et al, 2014).

While Stories of Change have been used by other organisations, calculating indirect beneficiaries is a less common practice. This is particularly challenging for programmes such as SHARE that do not deliver direct services but work in less tangible spheres such as policy, research uptake and advocacy. INTRAC note that it is possible to give examples about how policy changes are filtering down to beneficiaries but caution that 'these cases remain illustrations, and it is rarely possible to perform any sensible degree of aggregation at beneficiary level' (Simister, 2016). Further details on the rationale and challenges relating to developing this approach are captured in SHARE's Impact Paper (Balls, 2016).

The SoC approach was used by SHARE between 2016 –2019. The SHARE Monitoring and Evaluation Officer reviewed existing documentation and conducted interviews with Phase I Principal Investigators (PIs) and SHARE colleagues. The process also involved interviewing staff outside of SHARE with expertise in the topic to ensure that the role of other contributors was represented. SHARE SoC build significantly upon the success stories published in previous annual reports but take a systematic approach, integrate learning and quantify change.

Key principles have informed the estimated indirect reach figures included in this document. These include the use of robust data from credible data sources (such as WHO), conservative estimates where several options are available, clear assumptions and transparency about any calculations made. It is important to communicate these figures with the assumptions attached, and ideally as part of the entire Story of Change.

References

BALLS, E. 2016. Defining SHARE's Impact. SHARE.

BALLS, E. 2017a. Menstrual Hygiene Management Policy Brief. SHARE.

BALLS, E. 2017b. Stories of Change: Reflections from SHARE Phase I. SHARE.

CENSUS OF INDIA. 2017. Population of Maharashtra [Online]. Available: http://www.indiaonlinepages.com/population/population-of-maharashtra.html 2017].

DAS, P., BAKER, K. K., DUTTA, A., SWAIN, T., SAHOO, S., DAS, B. S., PANDA, B., NAYAK, A., BARA, M., BILUNG, B., MISHRA, P. R., PANIGRAHI, P., CAIRNCROSS, S. & TORONDEL, B. 2015. Menstrual Hygiene Practices, WASH Access and the Risk of Urogenital Infection in Women from Odisha, India. PLoS ONE, 10, e0130777.

DEVINFO. 2015. DevInfo - Population Data from UNICEF on India [Online]. Available: http://www.devinfo.org 2017].

ESTEVES MILLS, J. & CUMMING, O. 2016. The Impact of WASH on Key Social and Health Outcomes. New York: Unicef.

HAVER, J. & LONG, J. 2015. Menstrual Hygiene Management: Operational Guidelines. Save the Children.

HENNEGAN, J. & MONTGOMERY, P. 2016. Do Menstrual Hygiene Management Interventions Improve Education and Psychosocial Outcomes for Women and Girls in Low and Middle Income Countries? A Systematic Review. PLoS ONE, 11, e0146985.

HOUSE, S., FERRON, S., SOMMER, M. & CAVILL, S. 2014. Violence, Gender and WASH: A Practitioner's Toolkit. SHARE.

HOUSE, S., MAHON, T. & CAVILL, S. 2012. Menstrual Hygiene Matters: a resource for improving menstrual hygiene around the world 1ed.: WaterAid.

HULLAND, K. R. S., CHASE, R. P., CARUSO, B. A., SWAIN, R., BISWAL, B., SAHOO, K. C., PANIGRAHI, P. & DREIBELBIS, R. 2015. Sanitation, Stress, and Life Stage: A Systematic Data Collection Study among Women in Odisha, India. PLoS ONE, 10, e0141883.

GOVERNMENT OF INDIA, G. O. 2015. Menstrual Hygiene Management: National Guidelines. Ministry of Drinking Water and Sanitation, Government of India.

INDEX MUNDI. 2017. Solomon Islands Demographics Profile 2017 [Online]. Available: http://www.indexmundi.com/solomon_islands/demographics_profile.html 2017].

MIIRO, G; RUTAKUMWA, R; NAKIYINGI-MIIRO, J; NAKUYA, K; MUSOKE, S; NAMAKULA, J; FRANCIS, S; TORONDEL, B; GIBSON, LJ; ROSS, DA; WEISS, HA. 2018. Menstrual health and school absenteeism among adolescent girls in Uganda (MENISCUS): a feasibility study. BMC women's health, 18 (1). p. 4. ISSN 1472-6874 DOI: https://doi.org/10.1186/s12905-017-0502-z

O'REILLY, K., DREIBELBIS, R., KULKARNI, S., BHAT, S., CHAKRABORTY, P. & GROVER, E. 2015. Understanding Gendered Sanitation Vulnerabilities: A Study in Uttar Pradesh. SHARE.

PHILLIPS-HOWARD, P. A., CARUSO, B., TORONDEL, B., ZULAIKA, G., SAHIN, M.

& SOMMER, M. 2016. Menstrual hygiene management among adolescent schoolgirls in low- and middle-income countries: research priorities. Global Health Action, 9, 10.3402/gha.v9.33032.

PIPER PILLITTERI, S. 2011. School menstrual hygiene management in Malawi: More than toilets. WaterAif.

SAHOO, K. C., HULLAND, K. R. S., CARUSO, B. A., SWAIN, R., FREEMAN, M. C., PANIGRAHI, P. & DREIBELBIS, R. 2015. Sanitation-related psychosocial stress: A grounded theory study of women across the life-course in Odisha, India. Social Science & Medicine, 139, 80-89.

SHARE. 2014. As Safe as Toilets [Online]. YouTube. Available: https://www.youtube.com/watch?v=Hsbc8i5mtas 2017].

SIMISTER, N. 2016. Summarising portfolio change: results frameworks at organisational level, INTRAC M&E Paper 10, Available: http://intrac.org/resources.php?action=resource&id=888

SOLOMONISLANDSGOVERNMENT 2015. Water Supply, Sanitation & Hygiene for Education Facilities in the Solomon Islands: Technical requirements for school WASH projects Solomon Islands Government, Ministry of Education and Human Resources Development.

SOMMER, M., CARUSO, B. A., SAHIN, M., CALDERON, T., CAVILL, S., MAHON, T. & PHILLIPS-HOWARD, P. A. 2016. A Time for Global Action: Addressing Girls' Menstrual Hygiene Management Needs in Schools. PLoS Med, 13, e1001962.

STEINMANN, P., BRATSCHI, M. W., LELE, P., CHAVAN, U., SUNDARAM, N., WEISS, M. G., JUVEKAR, S. & HIRVE, S. 2015. Availability and satisfactoriness of latrines and hand washing stations in health facilities, and role in health seeking behavior of women: evidence from rural Pune district, India. Journal of Water Sanitation and Hygiene for Development, 5, 474-482.

SUMPTER, C. & TORONDEL, B. 2013. A Systematic Review of the Health and Social Effects of Menstrual Hygiene Management. PLoS ONE, 8, e62004.

TORONDEL, B; SINHA, S; MOHANTY, JR; SWAIN, T; SAHOO, P; PANDA, B; NAYAK, A; BARA, M; BILUNG, B; CUMMING, O; PANIGRAHI, P; DAS, P. 2018. Association between unhygienic menstrual management practices and prevalence of lower reproductive tract infections: a hospital-based cross-sectional study in Odisha, India. BMC infectious diseases, 18 (1). p. 473. ISSN 1471-2334 DOI: https://doi.org/10.1186/s12879-018-3384-2

UNDP. 2017. GOAL 6 TARGETS [Online]. Available: http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-6-clean-water-and-sanitation/targets/.

UNICEF 2014. Guidance Note on MHM in Schools: Solomon Islands.

UNICEF. 2015a. Solomon Islands Statistics [Online]. Available: https://www.unicef.org/infobycountry/solomonislands_statistics.html 2017].

UNICEF 2015b. WASH in Schools for Girls: Voices from the field. Advocacy and capacity building for menstrual hygiene management through WASH in schools programmes. UNICEF.

UNICEF. 2016a. Partner Update: Cyclone Winston in Fiji & News from the Pacific Reporting Period 1 July - 31 August 2016.

UNICEF 2016b. Supporting the Rights of Girls and Women through Menstrual Hygiene Management (MHM) in the East Asia and Pacific Region: Good practice guidance note.

WATERAID, INSTITUTE, B. & AGENCY, I. W. S. D. 2016. The Last Taboo: Research on managing menstruation in the Pacific. Australia: DFAT.

WECF 2017. Compendium to develop a Water and Sanitation Safety Plan in a Rural Community.

WILBUR, J. 2014. Undoing Inequity: WASH programmes that deliver for all in Uganda and Zambia (conference poster). WaterAid.

WILBUR, J, BRIGHT, T, MAHON, T, HAMEED, S, TORONDEL, B, MULWAFU, W, KUPER, H, POLACK, S. 2018. Developing Behaviour Change Interventions for Improving Access to Health and Hygiene for People with Disabilities: Two Case Studies from Nepal and Malawi. International Journal of Environmental Research and Public Health 15(12):2746.

YOUNG, J, SHAXSON, L, JONES, H, HEARN, S, DATTA, A and CASSIDY, C. 2014. ROMA: A Guide to Policy Engagement and Influence, Overseas Development Institute [Online] Available: http://roma.odi.org/index.html [Accessed May 2016]

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This material has been funded by UK aid from the Department for International Development (DFID). However, the views expressed do not necessarily reflect the Department's official policies.