



WASH PUBLICATION CATALOGUE 2020

Part I - Knowledge Products

1<sup>st</sup> EDITION

# For every child

Whoever she is.  
Wherever he lives.  
Every child deserves a childhood.  
A future.  
A fair chance.  
That's why UNICEF is there.  
For each and every child.  
Working day in and day out.  
In more than 190 countries and territories.  
Reaching the hardest to reach.  
The furthest from help.  
The most excluded.  
It's why we stay to the end.  
And never give up.



Prepared by the WASH Knowledge Management Team  
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## WHO WE ARE

UNICEF works in over 190 countries and territories to save children's lives, to defend their rights, and to help them fulfil their potential, from early childhood through adolescence. **And we never give up.**

## WASH

Growing up in a clean and safe environment is every child's right. WASH program is designed to improve and implement, through the dissemination of knowledge, information management and investment in development, to ensure the equitable and sustainable use of safe drinking water, basic sanitation and the promotion of improved hygiene.

## THE CATALOG

This catalog lists and summarizes the main purposes of the reports and publications carried out by UNICEF between January and December 2020.

## STAY CONNECTED



## Welcome message from the Director of UNICEF WASH

Every year, UNICEF and partners generate a wealth of evidence on water, sanitation and hygiene (WASH) globally. Knowledge and evidence are essential to learning and change, informing the development, implementation, and monitoring of relevant policies and programmes for the realization of children's rights including the rights to safe drinking-water and sanitation. To this end, as UNICEF Director for WASH, I am pleased to present the 2020 edition of the Knowledge for Children and WASH Publication Catalogue.

The 2020 edition of the catalogue- spread across three parts- features 216 reports and studies including flagship publications related to WASH and COVID-19 globally as well as 172 publications from learning and knowledge sharing events. These publications and knowledge products represent the collective knowledge generated by UNICEF Headquarter, Country and Regional Offices and partners during the year, and capture the work of UNICEF and partners to inform the WASH sector of the latest knowledge and evidence to support the rights and well-being of children and vulnerable communities across the globe.

Many of the publications are, or will be, available online. As evidence plays a critical role in shaping successful initiatives in support of children, women and families to enjoy their WASH rights, we sincerely hope that you will find the publications listed in this catalogue to be a helpful resource for evidence-based decision making and programming in the sector.



Kelly Ann Naylor

Director, WASH  
Programme Group

UNICEF NYHQ



# Other UNICEF 2020 Publications Catalogues







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Global







# Flagships and Joint Agency Reports

Global





## Global Annual Results Report 2019

### Goal Area 4

UNICEF works to safeguard the right of all children to a safe and clean environment both in times of stability and crisis. Under Goal Area 4 of the UNICEF Strategic Plan, 2018-2021, programming is grouped under five output areas: water supply, sanitation, disaster risk reduction, children in urban settings and environmental sustainability. In each of these areas significant progress was made in 2019

This report summarizes how UNICEF and its partners contributed to Goal Area 4 in 2019 and reviews the impact of these accomplishments on children and the communities where they live.

**Author**  
UNICEF

**Publication Date**  
JUNE 2020

**Language**  
English



## State of the World's Sanitation

The world is alarmingly off-track to deliver sanitation for all by 2030. Despite progress in global sanitation coverage in recent years, over half the world's population, 4.2 billion people, use sanitation services that leave human waste untreated, threatening human and environmental health. This report presents the state of sanitation in the world today and is intended to increase awareness of progress made towards achieving the Sustainable Development Goal targets for sanitation, and to identify opportunities to meet the challenges that remain. It calls on the Member States of the United Nations system and partners to urgently meet these challenges as part of the Global Acceleration Framework (SDG 6).

**Author**  
UNICEF and WHO

**Publication Date**  
November 2020

**Language**  
English

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GLOBAL PROGRESS REPORT ON  
WASH IN HEALTH CARE FACILITIES

Fundamentals first



#### Author

UNICEF and WHO

#### Publication Date

December 2020

#### Language

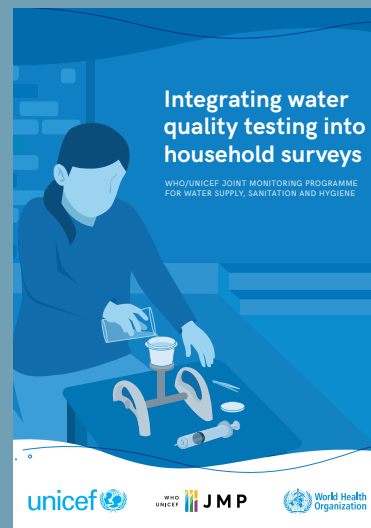
English

#### Contact

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## Global Progress Report on Water, Sanitation and Hygiene in Health-Care Facilities: Fundamentals First

This report provides a comprehensive summary of global progress on improving water, sanitation, hygiene, waste management and environmental cleaning (WASH) in health-care facilities and is intended to stimulate solution-driven country and partner actions to further address major gaps. It illustrates how stakeholders in the WASH and health sectors are increasingly working together in specific countries, with the ultimate aim of delivering safe, quality essential health services.



#### Author

UNICEF and WHO

#### Publication Date

2020

#### Language

English

## Integrating Water Quality Testing Into Household Surveys

Access to safe drinking water is a basic human right and an essential foundation of public health. Obtaining reliable information on the safety of drinking water supplies has historically been a major challenge for national and global monitoring. Since 2017, the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) reports on progress towards Sustainable Development Goal (SDG) target 6.1 have included estimates on the quality of drinking water supplies<sup>1</sup>. This represents a significant advance in global monitoring of drinking water services.

This thematic report presents the experience of using the water quality module in representative household surveys.



## UNICEF's Water Game Plan: Universal Safe and Sustainable Water Services for All by 2030

The Water Game Plan has been developed incorporating the key principles of the UNICEF's Global WASH Strategy 2016-2030, and the SDG agenda. Its objectives are:

1. To set the level of ambition for water services towards 2030.
2. To identify a set of priority countries and expected regional contributions.
3. To define and prioritise the most appropriate programmatic pathways, based on context, that country offices can choose to follow, to progressively increase water service levels.
4. To provide UNICEF country offices with a set of up-to-date, evidence-based guidance and resources available.



## Global Framework for Urban Water, Sanitation and Hygiene

UNICEF's Global Framework for Urban WASH creates a common vision for UNICEF's approach to urban WASH programming; it will enable country, regional and global WASH teams to have a clear and shared sense of direction and purpose, as the organisation increases its engagement supporting the most marginalised urban children and their families.

The Framework is based on UNICEF's experiences in urban WASH programming in over 50 countries. It is structured around three areas of support: sector-level, service-level and user-level support, with suggested entry points and activities for engagement in urban WASH. The Framework also considers three different urban contexts: urban slums, small towns and urban areas in humanitarian and protracted crisis settings, focusing on areas where UNICEF can add value, in line with the organisation's equity agenda.

**Author**  
UNICEF

**Publication Date**  
January 2020

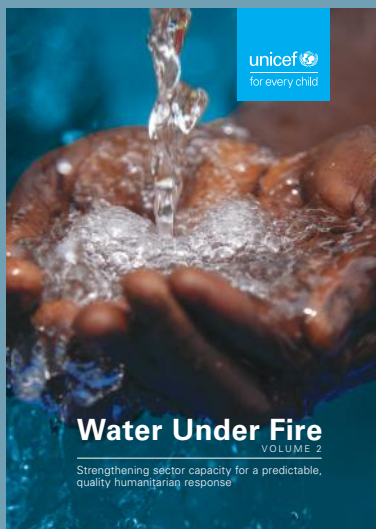
**Languages**  
English, French, Spanish and Arabic

**Author**  
UNICEF

**Publication Date**  
March 2020

**Languages**  
English and French





## Water Under Fire Volume 2

As the world faces an unprecedented level of complex and protracted humanitarian crises, the humanitarian community cannot currently meet WASH needs wherever and whenever they arise. Too often, WASH responses are inadequate and meeting humanitarian or sectoral standards can be a challenge because of capacity limitations, lack of preparedness and insufficient funding. As a result, emergency WASH services and assistance do not meet the critical needs of the people who depend on them. This second volume of the Water Under Fire report series is dedicated to the WASH sector's capacity to deliver a predictable, quality humanitarian WASH response, and provides a change agenda and road map towards strengthening this capacity.

### Author

Global WASH Cluster Partners and the Inter-Agency WASH Group, with funding from UNICEF

### Publication Date

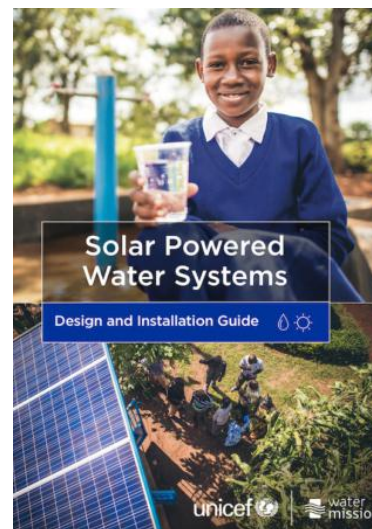
2020

### Languages

English, French, Spanish and Arabic

### Contact

[pubdoc@unicef.org](mailto:pubdoc@unicef.org)



## Solar Powered Water Systems: Design and Installation Guide

This document gives detailed guidance on all technical topics pertinent to the design and installation of solar powered water systems within the rural water supply context. The motivation for this document is to provide guidance that is based upon internationally recognized technical standards and to provide instruction for fulfilling those standards.

### Author

UNICEF and Water Mission

### Publication Date

2020

### Languages

English, French and Spanish

The technical basis for this guidance document is the International Electrotechnical Commission (IEC) International Standard 62253, Photovoltaic pumping systems - Design qualification and performance measurements.



## Global Handwashing Day 2020 Infographic: Hand Hygiene for All

This year's theme reminds us that we must work toward universal access and practice of handwashing with soap for now and for a healthy future. Read this infographic to learn more about the theme and what you can do for Global Handwashing Day!

### Author

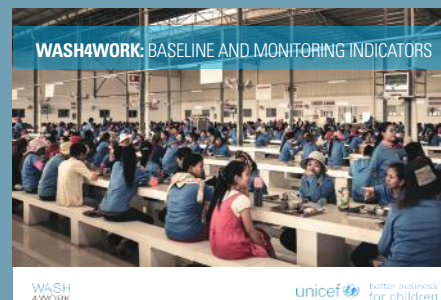
Global Handwashing Partnership

### Publication Date

AUGUST 2020

### Languages

English, French and Spanish



## WASH4WORK: Baseline and Monitoring Indicators

### Author

Kay Mattson, Guy Hutton and Chris Kip, with WASH co-work partners

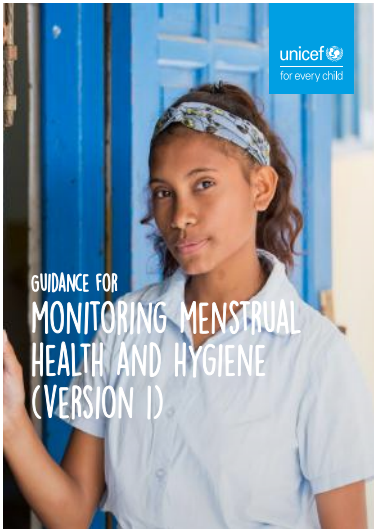
### Publication Date

AUGUST 2020

### Languages

English

This guide provides a menu of indicators that can be incorporated into surveys, key informant interviews and focus group discussion (FGD) for various respondents (e.g. managers, workers, community members). Unless otherwise indicated, all questions have been developed for application to different workplace settings - e.g. manufacturing, agriculture, large and small sites, etc. The document includes a broad range of indicators for workplace settings, with core indicators indicated in green. The green indicators are recommended to be used as core indicators to provide a basic overview of all WASH conditions. The remaining indicators are identified as supplementary, or optional indicators, for businesses and partners that desire to go deeper in their understanding of WASH conditions in their workplaces and surrounding communities.



## Guidance for Monitoring Menstrual Health and Hygiene

There has been significant increased attention to menstrual health and hygiene (MHH) in the WASH sector over the past decade, but it has not been accompanied by robust or consistent monitoring. While there is not yet sufficient evidence to recommend a comprehensive set of validated indicators and questions to support MHH monitoring, there are simple steps that can be taken now by governments and programme managers to strengthen monitoring efforts. The purpose of this guide is to support the development and/or improvement of MHH monitoring, by highlighting basic principles (including ethical considerations) and example questions to monitor the various elements of MHH. The questions and the wider guidance are not intended to be comprehensive or prescriptive; rather, they represent practical suggestions for monitoring MHH, based on sector experiences and the best available information at the time of publication.

**Author**  
UNICEF

**Publication Date**  
September 2020

**Language**  
English



## Global WASH Cluster Annual Report, 2019

Summarizes the key results achieved over the year, the key challenges faced in implementing the GWC Strategic Plan (SP) and recommends activities to overcome the challenges. The 2019 Annual Report follows the model established in the 2018 Annual Report. The priority activities are identified and listed in line with the new Result Framework defined by the GWC partners in 2019, defined by the Mid-Term Review (MTR) (see Annex 1). The report is divided into four main sections:

1. Update on the governance of the GWC;
2. Progress on the GWC SP implementation, with a summary of the key achievements, main constraints in 2019 and priorities for 2020;
3. Update on the progress and main priorities of the GWC's Technical Working Groups (TWiGs);
4. An analysis of the Funding Trends for the humanitarian WASH sector and WASH operational responses in priority countries.

**Author**  
Global WASH Cluster

**Publication Date**  
March 2020

**Language**  
English



## Delivering Humanitarian WASH at scale, Anywhere and Any Time

Road Map for 2020 – 2025



### Acknowledgements

This strategy was developed by the Cluster Advisory and Support Team (CAST) of the Global WASH Cluster (GWC) with input and support from the following partners: Action Centre la Fam (ACF), International Committee of the Red Cross (ICRC), International Federation of the Red Cross (IFRC), International Organization for Migration (IOM), Oxfam GB, Médecins Sans Frontières (MSF), Norwegian Church Aid (NCA), RedR UK, Save the Children UK, Societas International (SI), United Nations High Commissioner for Refugees (UNHCR), United Nations International Children's Fund (UNICEF), and Welthungerhilfe (WHH). The GWC CAST would like to thank and express appreciation for the efforts of the WASH partners who contributed to this strategy.

1 | P a g e

# Delivering Humanitarian WASH at Scale, Anywhere and Anytime: Global WASH Cluster

## Road Map for 2020 – 2025

In 2019, humanitarian assistance reached a global peak of people in need, with the WASH sector at the core of the response to emergencies.

Through strengthened collective commitments and strategic engagement by all stakeholders active in the WASH sector, the implementation of the Roadmap 2020 - 2025 will put into practice new and innovative approaches to save lives, reach public and environmental health outcomes and build synergies between acute and complex emergencies, humanitarian crises and long-term development. By 2025, the WASH sector will have the capacity and resources to deliver in emergencies at scale, anywhere and at any time. This will be achieved through three strategic axes and three prerequisite pillars that integrate and mainstream the core principles of humanitarian assistance.

### Author

Cluster Advisory and Support Team (CAST)

### Publication Date

2020

### Language

English



# WASH Accountability in Fragile Context, UNICEF and SIWI

This Concept Note is the fifth document of a series on Accountability in WASH service delivery that the Stockholm International Water Institute, UNDP and UNICEF have jointly published under the Accountability for Sustainability programme. It deepens the analysis of accountability actors and relations around WASH service provision in fragile contexts. It does so by using the analytical frameworks of the Accountability Mapping Tools4 presented in previous publications. It is intended to give a framework for WASH practitioners and government partners to analyze and improve their interventions in fragile contexts through an approach based on reinforcing the government leadership role and improving accountability within the WASH service delivery framework.

### Author

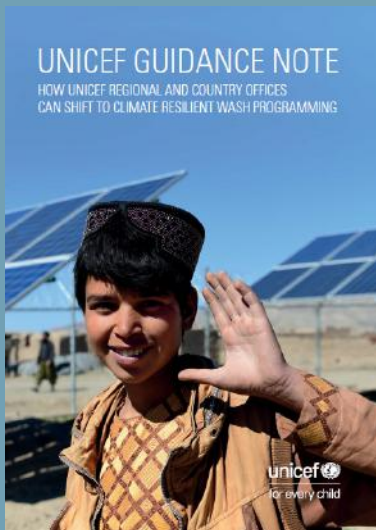
UNICEF and SIWI

### Publication Date

2020

### Languages

English, French, Spanish,  
Arabic



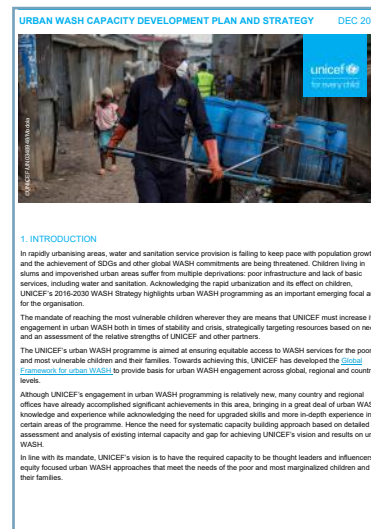
## Guidance Note on How UNICEF Regional and Country Offices Can Shift to Climate Resilient WASH Programming

This Note provides UNICEF WASH staff with entry points and guidance for the design and implementation of programmes that are grounded in a comprehensive understanding of climate risks, and that set clear climate-based rationales as a central element. This guidance is intended to be used for UNICEF programming in all contexts, including protracted conflicts, fragile or humanitarian settings, as well as development contexts. It will also hopefully inspire and be useful for those developing WASH programming for other WASH actors.

**Author**  
UNICEF

**Publication Date**  
May 2020

**Language**  
English



**Author**  
UNICEF

**Publication Date**  
December 2020

**Language**  
English

## Urban WASH Capacity Development Plan and Strategy

In rapidly urbanising areas, water and sanitation service provision is failing to keep pace with population growth and the achievement of SDGs and other global WASH commitments are being threatened. Children living in slums and impoverished urban areas suffer from multiple deprivations: poor infrastructure and lack of basic services, including water and sanitation. Acknowledging the rapid urbanization and its effect on children, UNICEF's 2016-2030 WASH Strategy highlights urban WASH programming as an important emerging focal area for the organisation.

The mandate of reaching the most vulnerable children wherever they are means that UNICEF must increase its engagement in urban WASH both in times of stability and crisis, strategically targeting resources based on need and an assessment of the relative strengths of UNICEF and other partners.



## Core Commitments for Children, with revised WASH commitments and benchmarks

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English

Since the Core Commitments for Children in Humanitarian Action (CCCs) were introduced in 1998 and revised in 2010, the global humanitarian context has changed significantly. Humanitarian crises are increasingly protracted. Rising disregard for international humanitarian and human rights law and humanitarian principles characterises conflicts, disproportionately affecting children and women. Population growth, urbanization, environmental degradation and climate change, large-scale migration, forced displacements, as well as public health emergencies increasingly compound the threats that children face. The CCCs have been revised to equip UNICEF and its partners to deliver principled, timely, quality and child-centred humanitarian response and advocacy in any crises with humanitarian consequences



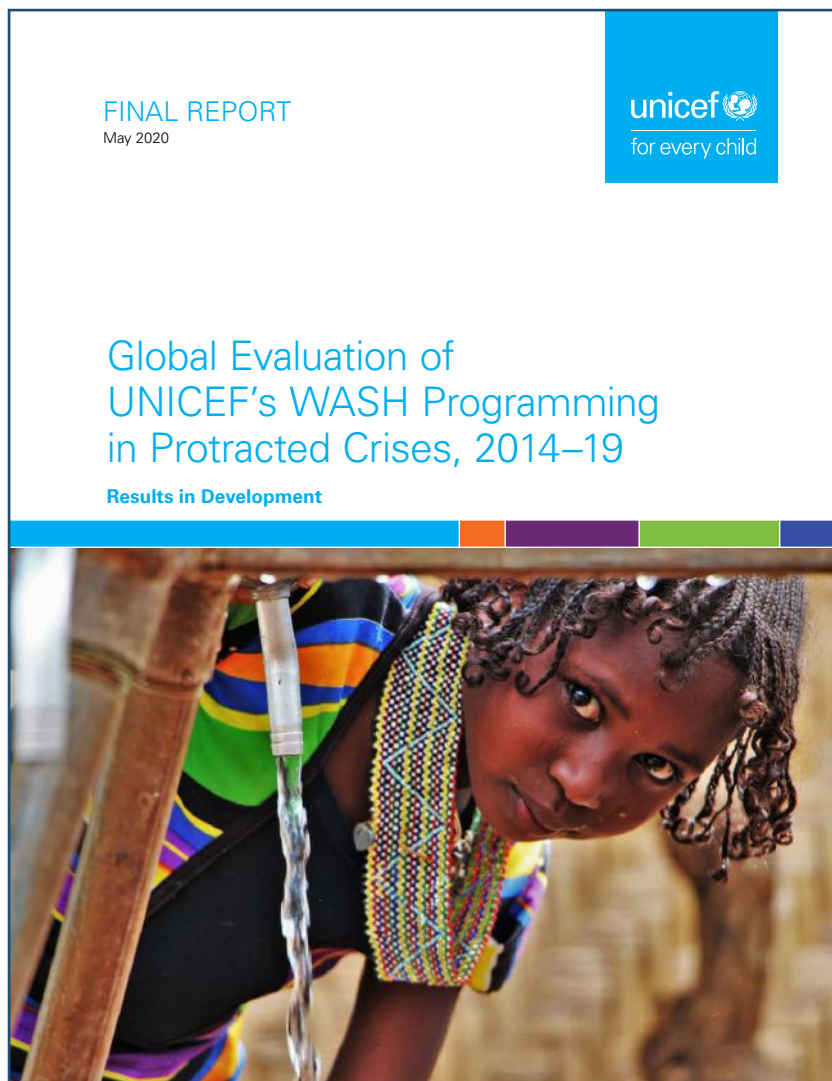






## Evaluation Report

# Global Evaluation of UNICEF WASH Programming in Protracted Crises, 2014-2019



This Global Evaluation of UNICEF's WASH Programming in Protracted Crises (WiPC) is the first UNICEF global thematic evaluation focusing specifically on protracted crisis contexts. This evaluation provides both accountability for UNICEF's performance as well as learning and practical solutions for adapting WASH programming and ways of working to better meet the unique challenges of providing appropriate and sustainable WASH services in protracted crises.

WASH needs in protracted crises have increased considerably over the evaluation period. So has the UNICEF response. The evaluation explores the extent to which UNICEF has been able to meet corporate commitments for WiPC and whether tools and approaches designed largely for rapid-onset emergencies have been effective in protracted crises. It looks at whether UNICEF has been able to adapt and innovate programming as a crisis endures and evolves. The evaluation also looks at UNICEF's experience implementing linking humanitarian and development (LHD) for WiPC, and how well-placed the organization is to adapt its work to fully achieve its ambitions for LHD in WiPC.

**Author**  
UNICEF

**Publication Date**  
May 2020

**Language**  
English





Global

Study Reports

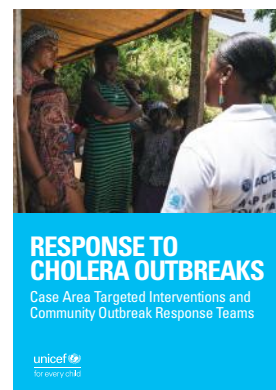
## Review of the WASH Bottleneck Analysis Tool (BAT): Improving the WASH BAT as a Tool for Planning and Partnering for Sustainability

The Water, Sanitation and Hygiene Bottleneck Analysis Tool (WASH BAT) helps formulate costed and prioritized Action Plans to remove the bottlenecks that constrain the WASH sector and hinder the delivery of sustainable WASH services. The tool is designed for governments to lead the process, guided by trained moderators and facilitators, to reach a broad consensus on the major fundable activities. This report provides an overall analysis of the WASH BAT outputs and outcomes, and recommendations for how it can be improved.



## Response to Cholera Outbreaks - Area Targeted Interventions and Community Outbreak Response Teams

This operational guideline was developed by Gregory Bulit and Monica Ramos to support the establishment of CORTs in a country or region affected by cholera. It includes the tools and resources required to facilitate the set-up, implementation, training and capacity building, data-collection, analysis and reporting, and monitoring and evaluation for these teams. It is intended to be used as a toolkit to support The United Nations Children's Fund (UNICEF) country offices and their partners when responding to cholera outbreaks.



## The Disability-friendly Squatting Plate Add-on in Emergencies



## Household Water Treatment Filters Product Guide

The purpose of this product guide is to raise awareness on the different products that are available on the market with the aim of empowering local procurement of water filtration products wherever possible.



The publication underlines that none of the existing filter technologies is a perfect and universal solution and examines the categories that represent the majority of available filters, highlighting a few products.

## Global WASH Cluster Mid-year Report 2020





Global

maitresse

j'aime l'école

Peer Reviewed Journals





# Shining the Spotlight on Household Investments for Water, Sanitation and Hygiene (WASH): Let Us Talk About HI and the Three 'T's

This editorial/discussion paper argues that the use of the three 'T's financing source framework (taxes, tariffs and transfers) leads us to ignore key costs to the customer, especially the poor customer, of accessing an adequate level of the water, sanitation and hygiene (WASH) service. These costs include household investment (HI) for self-supply (commonly excluded from tariffs) and time costs of water collection and travelling to a place of open defaecation. We propose an adaptation to the framework, which we call 'HTs and the four 'T's'.

**Author**  
Kerstin Danert and Guy Hutton

**Publication Date**  
May 2020

**Language**  
English

# Designing Human Rights for Duty Bearers: Making the Human Rights to Water and Sanitation Part of Everyday Practice at the Local Government Level

In most countries, local governments bear primary responsibility for ensuring everyone has access to water and sanitation services. For the human rights to water and sanitation to move from recognition to realisation, they need to become part of the everyday practice of local authorities. Yet the potential for the human rights to water and sanitation to practically inform local efforts towards inclusive, sustainable service delivery has received limited attention to date, with human rights discourse more typically focusing on national and international levels or on building the capacity of rights holders to claim their rights from government. There is considerable opportunity to consider how human rights can constructively inform local government efforts to expand and improve services. This Communication article presents a novel approach to making human rights relevant and actionable for local authorities. Developed by a consortium of WASH-focused organisations and informed by design thinking, the Making Rights Real approach combines user-centred materials showing how human rights can inform local action, with a process of constructive engagement between civil society and local government professionals. The Making Rights Real approach has been applied in 12 countries by 37 civil society organisations to date. In this paper, we describe the development and features of the Making Rights Real approach, share initial results from its implementation, and reflect on the potential for the approach to catalyse transformational change towards local realisation of the human rights to water and sanitation.

**Publication Date**  
January 2020

**Language**  
English



**Authors**  
Naomi Carrard, Hannah Neumeyer, Bikash Kumar Pati, Sabiha Siddique, Tshering Choden, Tseguereda Abraham, Louisa Gosling, Virginia Roof, Jorge Alvarez-Sala Torrealano and Sören Bruhn

# Drinking Water Quality and the SDGs

Access to safe drinking water is recognized as a human right and has long been a goal of national and international policy. The United Nations Sustainable Development Goals (SDGs) include ambitious global targets for drinking water, sanitation and hygiene. The indicator for SDG target 6.1, use of safely managed drinking water services (SMDW), seeks to address the limitations of previous monitoring efforts1. SMDW services are defined as improved sources of drinking water (piped water, protected groundwater sources, rainwater collection and packaged or delivered water) that are accessible on premises, available when needed and free from contamination2. For global reporting on drinking water quality the WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene focuses on the major priorities from a public health perspective: faecal contamination as indicated by detection of *Escherichia coli*, and elevated levels of arsenic and fluoride. While these three key parameters are the focus of SDG monitoring at global level, WHO's Guidelines for Drinking Water Quality3 provide the underlying framework that underpins national standards in many countries and is far wider range of water quality parameters. The latest estimates from the JMP find that around 2 billion people lack SMDW, the majority in Central and South Asia (768 million) and Sub-Saharan Africa (747 million) and demonstrate that contamination of drinking water is often the limiting factor for SMDW4. Despite an increase from 96 to 117 countries with SMDW estimates between the 2017 and 2019 JMP reports, a large number of UN Member States are still unable to report on SMDW, often due to a lack of nationally-representative data on water quality.

**Author**  
Robert Bain, Rick Johnston & Tom Slaymaker

**Publication Date**  
August 2020

**Language**  
English



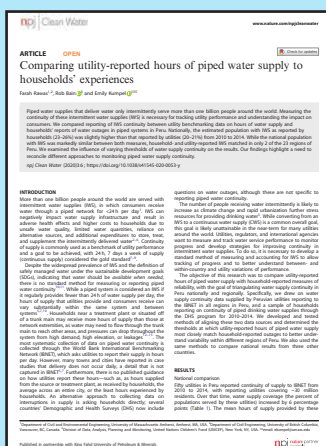
# Comparing Utility-reported Hours of Piped Water Supply to Households' Experiences

Piped water supplies that deliver water only intermittently serve more than one billion people around the world. Measuring the continuity of these intermittent water supplies (IWS) is necessary for tracking utility performance and understanding the impact on consumers. We compared reporting of IWS continuity between utility benchmarking data on hours of water supply and households' reports of water outages in piped systems in Peru. Nationally, the estimated population with IWS as reported by households (23-26%) was slightly higher than that reported by utilities (20-21%) from 2010 to 2014. While the national population with IWS was markedly similar between both measures, household- and utility-reported IWS matched in only 2 of the 23 regions of Peru. We examined the influence of varying thresholds of water supply continuity on the results. Our findings highlight a need to reconcile different approaches to monitoring piped water supply continuity.

**Author**  
Farah Rawas, Rob Bain & Emily Kumpel

**Publication Date**  
March 2020

**Language**  
English





# Novel Methods for Global Water Safety Monitoring: Comparative Analysis of Low-cost, Field-ready E. coli Assays

Current microbiological water safety testing methods are not feasible in many settings because of laboratory, cost, and other constraints, particularly in low-income countries where water quality monitoring is most needed to protect public health. We evaluated two promising E. coli methods that may have potential in at-scale global water quality monitoring: a modified membrane filtration test followed by incubation on pre-prepared plates with dehydrated culture medium (CompactDry™), and 10 and 100 ml presence-absence tests using the open-source Aquatest medium (AT). We compared results to membrane filtration followed by incubation on MI agar as the standard test. We tested 315 samples in triplicate of drinking water in Bangalore, India, where E. coli counts by the standard method ranged from non-detect in 100ml samples to TNTC (>200). Results suggest high sensitivity and specificity for E. coli detection of candidate tests compared with the standard method: sensitivity and specificity of the 100ml AT test was 97% and 96% when incubated for 24 h at standard temperature and 97% and 97% when incubated 48 h at ambient temperatures (mean: 27 °C). Sensitivity and specificity of the CompactDry™ test was >99 and 97% when incubated for 24 h at standard temperature and 97% and 97% when incubated 48 h at ambient temperatures. Good agreement between these candidate tests compared with the reference method suggests they are suitable for E. coli monitoring to indicate water safety.

**Author**  
Joe Brown, Arjun Bir & Robert E. S. Bain

**Publication Date**  
March 2020

**Language**  
English

## Monitoring Drinking Water Quality for the Sustainable Development Goals

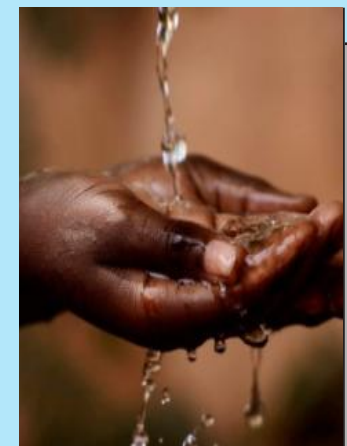
This is a collection of articles on monitoring drinking water that brought together a special issue of npjClean Water.

It brings together the latest research in exposure assessment, risk factors and health impact analysis, and new approaches to testing and water policy that all contribute to making safe drinking water available across the world.

**Author**  
UNICEF and WHO

**Publication Date**  
August 2020

**Language**  
English





**Geographical inequalities in drinking water in the Solomon Islands**

**Corresponding author:**  
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**Highlights:**

- First representative study on drinking water inequality in the Solomon Islands.
- Urban households are more likely to use improved drinking water sources and have on at least basic drinking water service.
- Central provinces use piped water supplies and remote provinces using rainwater and surface water as their primary source.
- Overall, PICs, the Solomon Islands have among the lowest access to basic drinking water services.
- Need to address all dimensions of geographical inequality – rural-urban, provincial, geographic location, inter-national – in monitoring, policy and programming.

**Keywords:** Global health, international health policy, Oceania, SDG 6, water supply

# Geographical inequalities in drinking water in the Solomon Islands

Sustainable Development Goal 6.1 seeks to “by 2030, achieve universal and equitable access to safe and affordable drinking water for all”, which remains a challenge particularly in Small Island Developing States (SIDS) and Pacific Island Countries (PIC). This paper reports drinking water sources and services in one of the poorest PICs- the Solomon Islands - and examines rural-urban, provincial and geographical, and inter-national inequalities.

This study shows that drinking water inequality is a critical issue, and highlights that all identified dimensions of inequality – rural-urban, provincial, geographical and international- need to be explicitly recognized and addressed and included in pro-equity monitoring, policy and programming efforts by the Solomon Islands Government and stakeholders to reduce inequalities as per the 2030 Agenda for Sustainable Development.

## Author

WM Tikoisuva, MB Thakkar, M Overmars et al.

## Publication Date

April 2020

## Language

English

# Prevention and Control of Cholera with Household and Community Water, Sanitation and Hygiene (WASH) Interventions: A Scoping Review of Current International Guidelines

Cholera remains a frequent cause of outbreaks globally, particularly in areas with inadequate water, sanitation and hygiene (WASH) services. Cholera is spread through faecal-oral routes, and studies demonstrate that ingestion of *Vibrio cholerae* occurs from consuming contaminated food and water, contact with cholera cases and transmission from contaminated environmental point sources. WASH guidelines recommending interventions for the prevention and control of cholera are numerous and vary considerably in their recommendations. To date, there has been no review of practice guidelines used in cholera prevention and control programmes.

## Author

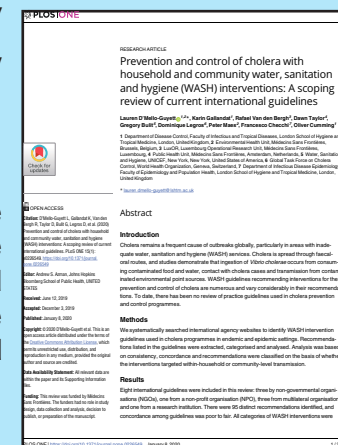
Lauren D'Mello-Guyett, Karin Gallandat, Rafael Van den Bergh, Dawn Taylor, Gregory Bulit, Dominique Legros, Peter Maes, Francesco Checchi, Oliver Cumming

## Publication Date

January 2020

## Language

English



Hygiene, handwashing

# Multiple and Complex Links Between BabyWASH and Stunting: an Evidence Synthesis

Studies have shown linkages between water, sanitation and hygiene (WASH) and stunting in children under 2 years in sub-Saharan Africa. WASH interventions have been shown to reduce stunting rates; however, the biological mechanisms and socio-economic influences responsible for this trend remain poorly understood. This paper reviews the literature regarding these links, and the efficacy of both general WASH interventions and those targeted at children in their first 1,000 days, known as babyWASH, for stunting reduction. Fifty-nine papers published between 2008 and 2019 were reviewed, retrieved from Science Direct, Scopus and Web of Science databases, comprising field trials and data analysis, and literature and systematic reviews. Key findings showed that stunting is directly attributed to diarrhoea, environmental enteric dysfunction and undernutrition although a more comprehensive understanding of these biological mechanisms is necessary. Interventions to interrupt the faecal transmission cycle proved to effectively reduce stunting rates, particularly improved sanitation facilities to reduce open defaecation, increased proximity to water and widespread behavioural change. Methodologies should move away from randomised controlled trials towards selected contexts, mixed data collection methods and inclusion of broader social, cultural and environmental conditions. Improved cross-sectoral collaboration is encouraged, particularly to ensure the complexity of social and contextual factors is fully considered.

## Author

Amy Waller; Monica Lakhanpaul; Samuel Godfrey; Priti Parikh

## Publication Date

November 2020

## Language

English

# Evidence Summary of WASH Coordination in Humanitarian Response

Providing water, sanitation, and hygiene (WASH) to emergency-affected populations is necessary for dignity and disease control. Humanitarian response is coordinated via the 'cluster approach'. We summarized the outcomes and impacts of WASH cluster coordination using; literature review; UNICEF document review; and, key informant interviews. Across these three data sets, consistent themes were identified, including: the cluster approach evolved into a cost-effective 'best-fit' model; cluster staff require technical and coordination skills; context is related to cluster performance; and, there are trade-offs of cluster participation for members. Additionally, consistent intractable challenges were identified, including: accountability to beneficiaries; cross-cluster and sub-national cluster coordination; working with national governments; and, transition to post-emergency. We found previous research was largely subjective and did not address future cluster challenges. Evaluation of cluster outcomes and impacts, including member and beneficiary perspectives is needed. To enable this research, a theory of change for cluster coordination was also developed.

## Author

Travis Yates, Hur Zannat, Nabila Khandaker, Dominique Porteaud, Franck Bouvet and Daniele Lantagne

## Publication Date

August 2020

## Language

English



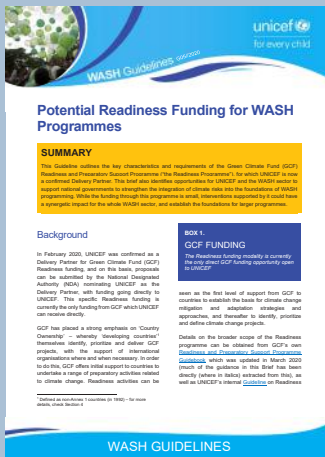


# WASH Publications Template

Global







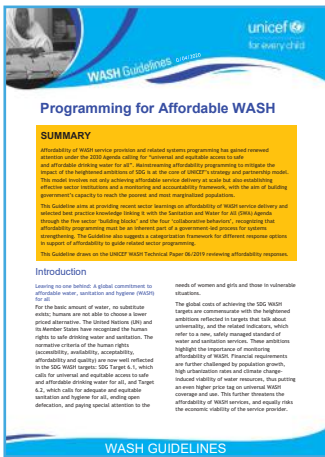
# Potential Readiness Funding for WASH Programmes

This Guideline outlines the key characteristics and requirements of the Green Climate Fund (GCF) Readiness and Preparatory Support Programme ("the Readiness Programme"), for which UNICEF is now a confirmed Delivery Partner. This brief also identifies opportunities for UNICEF and the WASH sector to support national governments to strengthen the integration of climate risks into the foundations of WASH programming. While the funding through this programme is small, interventions supported by it could have a synergetic impact for the whole WASH sector, and establish the foundations for larger programmes.

## Authors

Fiona Ward, Jen Stephens, and Alastair Morrison

UNICEF, 2020



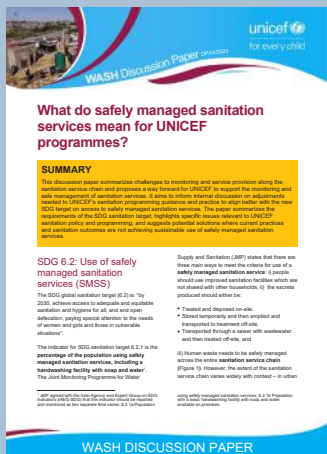
# Programming for Affordable WASH

This Guideline aims at providing recent sector learnings on affordability of WASH service delivery and selected best practice knowledge linking it with the Sanitation and Water for All (SWA) Agenda through the five sector 'building blocks' and the four 'collaborative behaviors', recognizing that affordability programming must be an inherent part of a government-led process for systems strengthening. The Guideline also suggests a categorization framework for different response options in support of affordability to guide related sector programming.

## Authors

Simone Klawitter and Guy Hutton

UNICEF, 2020



# What do Safely Managed Sanitation Services Mean for UNICEF Programmes?

This discussion paper summarizes challenges to monitoring and service provision along the sanitation service chain and proposes a way forward for UNICEF to support the monitoring and safe management of sanitation services. It aims to inform internal discussion on adjustments needed to UNICEF's sanitation programming guidance and practice to align better with the new SDG target on access to safely managed sanitation services. The paper summarizes the requirements of the SDG sanitation target, highlights specific issues relevant to UNICEF sanitation policy and programming; and suggests potential solutions where current practices and sanitation outcomes are not achieving sustainable use of safely managed sanitation services.

## Author

Andy Robinson

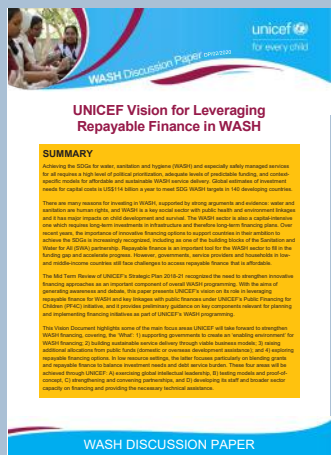
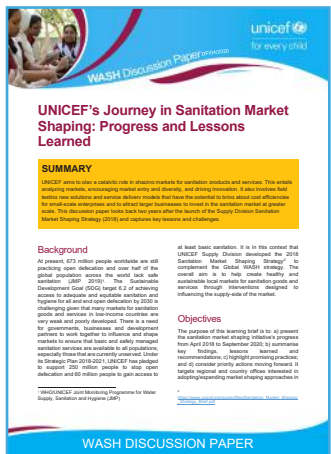
UNICEF, 2020

# UNICEF's Journey in Sanitation Market Shaping: Progress and Lessons Learned

UNICEF aims to play a catalytic role in shaping markets for sanitation products and services. This entails analyzing markets, encouraging market entry and diversity, and driving innovation. It also involves field testing new solutions and service delivery models that have the potential to bring about cost efficiencies for small-scale enterprises and to attract larger businesses to invest in the sanitation market at greater scale. This discussion paper looks back two years after the launch of the Supply Division Sanitation Market Shaping Strategy (2018) and captures key lessons and challenges.

**Author**  
Alain Giovanni Dusabe

UNICEF, 2020

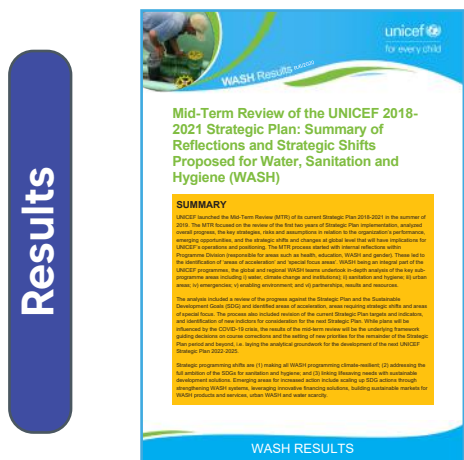


# UNICEF Vision for Leveraging Repayable Finance in WASH

This Vision Document highlights some of the main focus areas UNICEF will take forward to strengthen WASH financing, covering, the 'What': 1) supporting governments to create an 'enabling environment' for WASH financing; 2) building sustainable service delivery through viable business models; 3) raising additional allocations from public funds (domestic or overseas development assistance); and 4) exploring repayable financing options. In low resource settings, the latter focuses particularly on blending grants and repayable finance to balance investment needs and debt service burden. These four areas will be achieved through UNICEF: A) exercising global intellectual leadership, B) testing models and proof-of-concept, C) strengthening and convening partnerships, and D) developing its staff and broader sector capacity on financing and providing the necessary technical assistance.

**Authors**  
Liang Zhao, Chander Badloe, Guy Hutton

UNICEF, 2020



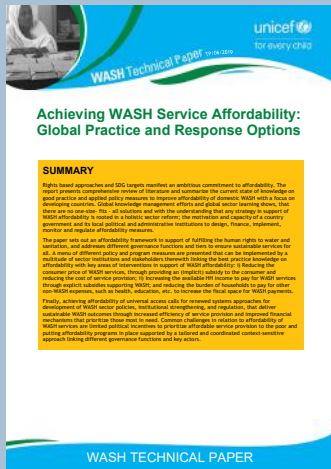
# Mid-term Review of the UNICEF 2018-2021 Strategic Plan: Summary of reflections and strategic shifts proposed for Water, Sanitation and Hygiene (WASH)

UNICEF launched the Mid-Term Review (MTR) of its current Strategic Plan 2018-2021 in the summer of 2019. The MTR focused on the review of the first two years of Strategic Plan implementation, analyzed overall progress, the key strategies, risks and assumptions in relation to the organization's performance, emerging opportunities, and the strategic shifts and changes at global level that will have implications for UNICEF's operations and positioning.

**Authors**  
Amanda Marlin, Kelly Ann Naylor and Chander Badloe

UNICEF, 2020

# Achieving WASH Service Affordability: Global Practice and Response Options



The paper sets out an affordability framework in support of fulfilling the human rights to water and sanitation, and addresses different governance functions and tiers to ensure sustainable services for all. A menu of different policy and program measures are presented that can be implemented by a multitude of sector institutions and stakeholders therewith linking the best practice knowledge on affordability with key areas of interventions in support of WASH affordability: i) Reducing the consumer price of WASH services, through providing an (implicit) subsidy to the consumer and reducing the cost of service provision; ii) Increasing the available HH income to pay for WASH services through explicit subsidies supporting WASH; and reducing the burden of households to pay for other non-WASH expenses, such as health, education, etc. to increase the fiscal space for WASH payments.

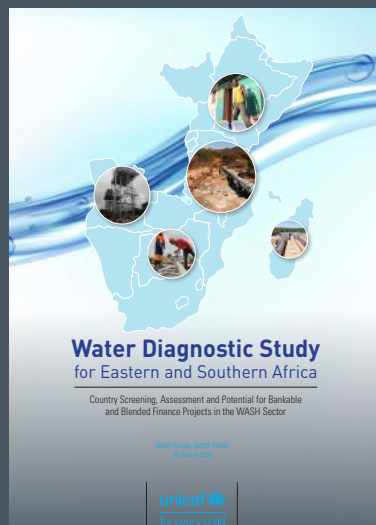
**Author**  
Simone Klawitter

UNICEF, 2020





Regional



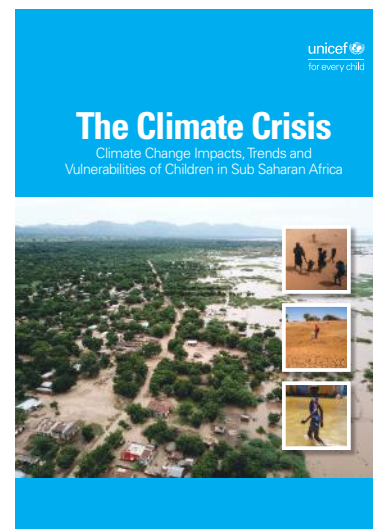
**Author**  
UNICEF

**Publication Date**  
October 2020

**Language**  
English

## Water Diagnostic Study for Eastern and Southern Africa

Read this report and find out how you can partner with UNICEF and governments in the development of bankable projects and related investments in order to ensure increased sector and project level financing blended and bankable project financing with IFIs, the public and private sectors.



## The Climate Crisis: Climate Change Impacts, Trends and Vulnerabilities of Children in Sub-Saharan Africa

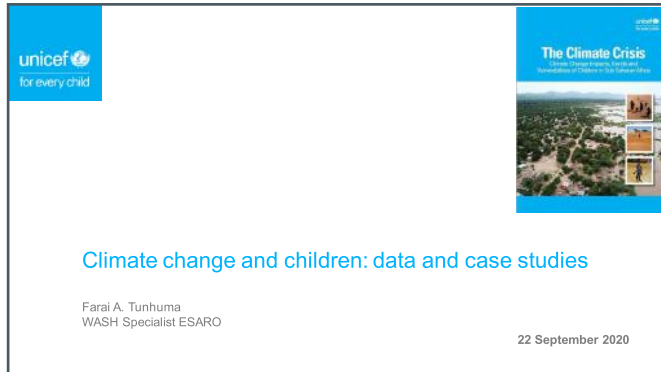
The objective of this report is to outline the observed and projected impacts of climate change, and the related climate hazards, risks and vulnerabilities in sub-Saharan Africa. The report highlights UNICEF's mandate as the advocate for children and women affected by the climate crisis, and demonstrates existing climate adaptation, mitigation, and communications and advocacy initiatives - including through a series of eight case studies - that UNICEF is strategically positioned to take to scale as part of the 2030 Agenda for Sustainable Development in Sub-Saharan Africa.

**Authors**  
Dr Samuel Godfrey, Farai  
Angela Tunhuma

**Publication Date**  
October 2020

**Language**  
English





## Climate Change and Children: Data and Case Studies

This presentation will cover the climate report findings, regional perspectives and climate futures for Sub-Saharan Africa, current & future climate hazards and impact, child rights deprivations, UNICEF case studies and moving forward on the climate journey.

### Author

Farai A. Tunhuma

### Publication Date

September 2020

### Language

English



UNICEF's Role in  
Leveraging Financing for  
WASH in South Asia



Authors  
UNICEF, Rosa

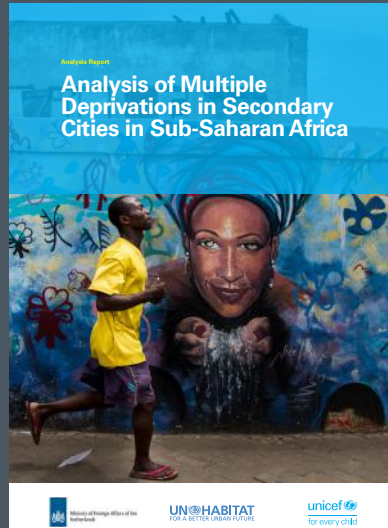
Publication Date  
2020

Language  
English

## UNICEF's Role in Leveraging Financing for WASH in South Asia

The paper summarizes and explains in layman's terms what the main funding and financing mechanism are to finance WASH services and explores in what specific context these hold most promise to be applied.





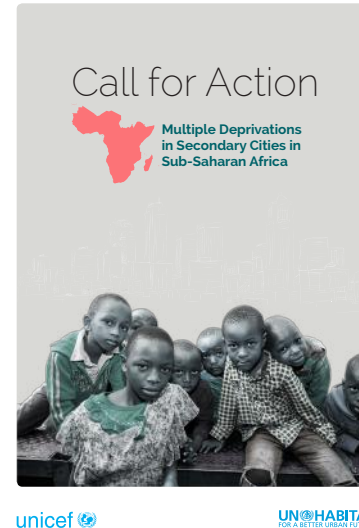
**Authors**  
UNICEF, UN Habitat,  
Ministry of Foreign  
Affairs of the  
Netherlands

**Publication Date**  
March 2020

**Language**  
English

## Analysis of Multiple Deprivations in Secondary Cities in Sub-Saharan Africa

This report provides an in-depth review of secondary towns in the SSA region from the lens of Indicators of Multiple Deprivations, focusing on city-wide and household-level indicators of deprivation. It is a culmination of analysis of secondary data and case studies on six secondary towns in Kenya and Zambia. It divides deprivations into the dimensions of city/town governance, economic, water and sanitation, living environment, education, health and crime. Furthermore, this report's narrative breaks down these indicators through the lens of children and youth, who are arguably the most affected groups in SSA



**Authors**  
UNICEF, UN Habitat

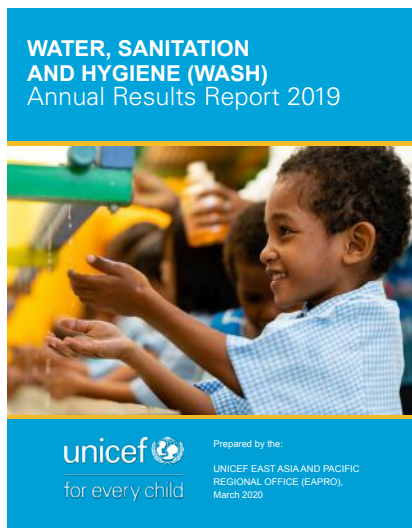
**Publication Date**  
2020

**Language**  
English

## Call for Action to African Leaders: Multiple Deprivations in Secondary Cities in Sub-Saharan Africa

"Turning Secondary Cities into Bedrocks for Settlement by our Future Children"

This study report will analyze the current situation in Sub-Saharan Africa, outlining principles and make a call for action to change the current scenario.



## Water, Sanitation and Hygiene (WASH) Annual Results Report 2019 for East Asia and Pacific Region

### Authors

UNICEF East Asia and Pacific Regional Office (EAPRO).

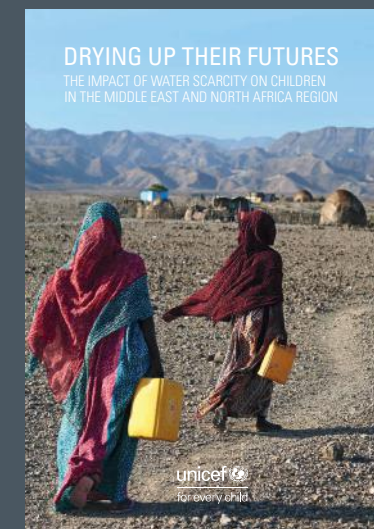
### Publication Date

March 2020

### Language

English

In 2019, the regional WASH evaluation was completed, outlining UNICEF achievements in WASH in rural areas particularly, and pointed out some key areas of engagement: faecal sludge management, climate resilience, new skills for staff in private-sector engagement and WASH financing, and WASH entrepreneurship. The evaluation recommended increasing regional partnerships in water and sanitation, linking development to humanitarian situations. A management response was developed, and a clear regional WASH and climate-resilient service strategy is being developed.



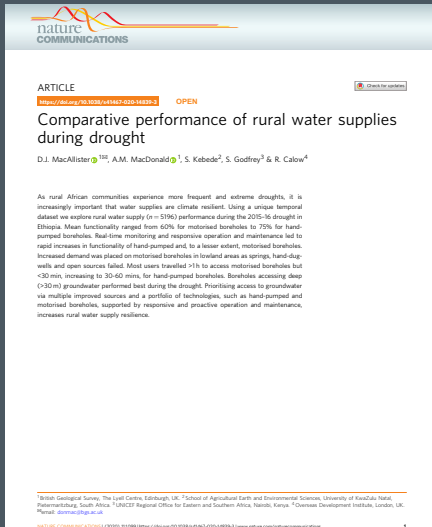
Authors  
UNICEF

Publication Date  
June 2020

Language  
English

## Drying Up Their Futures: the Impact of Water Scarcity on Children in the Middle East and North Africa Region

This paper proposes that UNICEF works innovatively with a broader set of stakeholders to safeguard water resources and sustain water supply programming for the benefit of the most marginalised children. The number of existing protracted crises in the region, compounded by the enormous potential for significantly and progressively more severe water crises, provides UNICEF with an even stronger rationale to move away from a focus on water supply, and to take action on the use and distribution of water resources at a broader and inter-sectoral level. Integrating broader water resource considerations into humanitarian programming would ensure that lifesaving water is provided in emergency contexts while minimising the impact of such interventions on available water resources.



## Comparative Performance of Rural Water Supplies During Drought

As rural African communities experience more frequent and extreme droughts, it is increasingly important that water supplies are climate resilient. Using a unique temporal dataset we explore rural water supply (n=5196) performance during the 2015-16 drought in Ethiopia. Mean functionality ranged from 60% for motorised boreholes to 75% for hand-pumped boreholes. Real-time monitoring and responsive operation and maintenance led to rapid increases in functionality of hand-pumped and, to a lesser extent, motorised boreholes. Increased demand was placed on motorised boreholes in lowland areas as springs, hand-dug wells and open sources failed. Most users travelled <1h to access motorised boreholes but <20 min, increasing to 20-40 min, for hand-pumped boreholes. Boreholes accessing deep (>30m) groundwater performed best during the drought. Prioritising access to groundwater via multiple improved sources and a portfolio of technologies, such as hand-pumped and motorised boreholes, supported by responsive and proactive operation and maintenance, increases rural water supply resilience.

**Authors**  
Samuel Godfrey et al

**Publication Date**  
March 2020

**Language**  
English



## Household-Reported Availability of Drinking Water in Africa: A Systematic Review

This paper aims to examine the methods used to measure availability and synthesise evidence on African domestic water availability by systematically reviewing the literature from 2000-2019. Structured searches were conducted in five databases: Web of Science Core Collection, Scopus, GEOBASE, Compendex and PubMed/Medline.

**Authors**  
Mair L. H. Thomas et al

**Publication Date**  
September 2020

**Language**  
English





# Striving for Borehole Drilling Professionalism in Africa: A Review of a 16-Year Initiative through the Rural Water Supply Network from 2004 to 2020

Authors

Kerstin Danert et al

Publication Date

November 2020

Language

English

Drilled boreholes are vital to achieving universal, safe drinking water and meeting Sustainable Development Goal (SDG) 6.1, particularly in Africa. Poor quality siting, borehole design, drilling and completion lead to premature failure of the water supply. From 2004 to 2020, a multi-stakeholder initiative through the Rural Water Supply Network (RWSN) has endeavored to raise the professionalism of borehole drilling and its management in Africa. The initiative comprised in-country and desk studies, training, and the development of guidelines, manuals, training materials, short animated films for advocacy as well as using blogs, webinars and online communities of practice to share experiences.





National



National



Evaluation Reports





## Evaluation of the UNICEF supported Federal Government of Nigeria Water, Sanitation and Hygiene Programme (2014-2017)

This publication provides insights into how the WASH programme was implemented in collaboration with the Federal Government of Nigeria from 2014 to 2017, Identifies gaps in programming approach as well as the impacts achieved.

### Authors

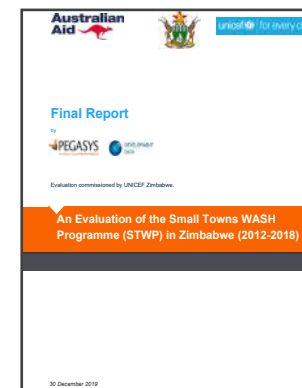
UNICEF Nigeria, the Nigerian Government, and Donors

### Publication Date

May 2020

### Language

English



## Zimbabwe evaluation: AusAID-funded Small Towns WASH programme

This is a summative evaluation of the Small Towns WASH Project which is commissioned by UNICEF Zimbabwe Country Office (ZCO) and Government of Zimbabwe (GOZ).

### Author

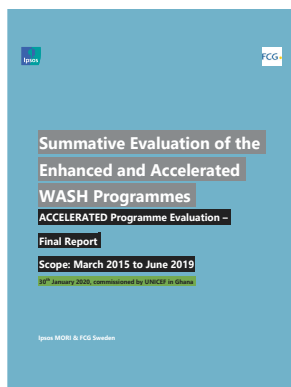
UNICEF Zimbabwe

### Publication Date

December 2019

### Language

English



## Summative Evaluation of the Enhanced and Accelerated WASH Programmes

The purpose of this evaluation, as set out in the Terms of Reference (ToR), is to determine the achievements and effectiveness of the Accelerated WASH Programme. The overall aim of the programme was to provide equitable and sustainable access to water and sanitation services in selected geographic areas.

### Author

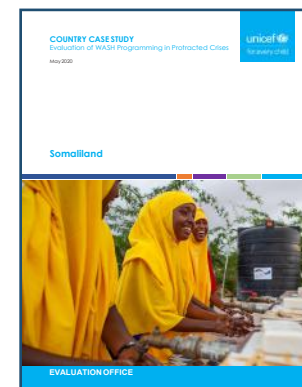
UNICEF Ghana

### Publication Date

January 2020

### Language

English



## Somaliland - Country Case Study, Evaluation of WASH Programming in Protracted Crises

This evaluation is both formative and summative. It is intended to provide learning (for UNICEF and the wider sector) on WASH action in protracted crises between 2014-2019 and also provide accountability for UNICEF's performance in this area. Some areas of enquiry cover both functions. However, the evaluation team recognizes that there are some areas (most notably linking humanitarian and development programming, or LHD) for which, although there was a clear commitment from UNICEF, there was no universally agreed standard or framework applied to UNICEF programming in the period 2014-2019.

### Authors

UNICEF

### Publication Date

May 2020

### Language

English

National

Country Studies

CHINA, FINALMENTE CAIU NA AUSTERIDADE  
APÓS VÁRIAS SEMANAS DE INCENDIOS QUE  
DESVIATOU O PAÍS.  
OS INCENDIOS MATARAM 78 PESSOAS E MIL  
FAMILÍAS, DESALTOU O E. MAIS DE MIL  
MILHÕES DE ANIMAS FORAM MORTAS.  
SÓBRE O SUJEITO  
TEMPO REAL  
PÁG. 02/14





## Formative Research Report Development of an Integrated WASH SBCC Campaign for the Punjab Province

The Government of Punjab, with the support of UNICEF, is developing an integrated Social and Behavioral Change Campaign for WASH initiatives in the province. The SBCC campaign aims to create demand for clean drinking water and storage, building and use of toilets, disposal of household waste, and Hand Washing with Soap (HWWS)

**Authors**  
Government of Punjab and UNICEF

**Publication Date**  
2020

**Language**  
English



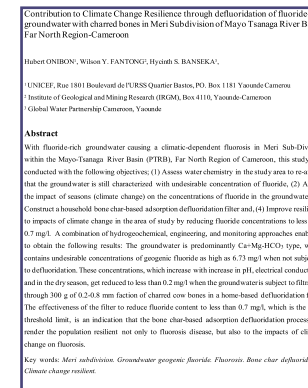
## Groundwater Mapping for Climate Resilient WASH in Ethiopia, Reports and maps

UNICEF/EU RESET II program contracted Acacia water and a local team of experts to conduct a groundwater study to make groundwater suitability maps and to identify drilling target sites for 16 BH in the eight clusters of the RESET II program. The project areas encompass 41 water scarce woredas known to have complex hydrogeology.

**Authors**  
UNICEF/EU

**Publication Date**  
June 2020

**Language**  
English



## Contribution to Climate Change Resilience Through Defluoridation of Fluoride-rich Groundwater with Charred Bones in Meri Subdivision of Mayo Tsanaga River Basin, Far North Region-Cameroon

**Author**  
Hubert Oniboni, Wilson Y. Fantong, Hycinth S. Banseka

**Publication Date**  
2020

**Language**  
English



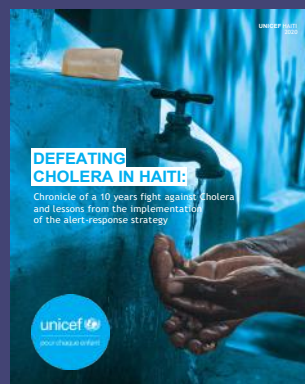
## Strengthening the Humanity in Humanitarian Action of the WASH Sector in the Rohingya Response, Bangladesh

The audit and capacity assessment of the gender, GBV and inclusion aspects of the work of the WASH sector in the Rohingya response, was undertaken between September 2018 and February 2019. It was supported by UNICEF and the WASH Sector and funded by UNICEF. Over 115 community members (just over half being female and the rest male) and 130 humanitarian actors participated.

**Authors**  
UNICEF Bangladesh

**Publication Date**  
2020

**Language**  
English



## Defeating Cholera in Haiti: Chronicle of a 10 Years Fight Against Cholera and Lessons From the Implementation of the Alert-response Strategy

This document has been prepared to share the 10-year experience, from 2010 to 2020, that UNICEF staff and their partners have accumulated in fighting cholera in Haiti. This guidance document has the objective of providing WASH, Health, Communication for Development and Emergency sectors staff with insights and tools in dealing with a wide-scale cholera epidemic. Although the case of Haiti is particular in many respects, the implemented strategy and lessons learnt from the alert-response approach will be applicable in a number of contexts.

**Authors**  
UNICEF Haiti

**Publication Date**  
2020

**Language**  
English



## Maharashtra: Creating an Enabling Environment for MHM

This document aims to capture the key processes, strategies and the convergence towards strengthening the institutional framework and MHM implementation in the state of Maharashtra, India. There are ongoing efforts to further build and strengthen the capacity of the resource team at various levels, enabling social and behavioural change regarding menstruation and efforts for further convergence and partnerships between various government departments.

**Authors**  
UNICEF India

**Publication Date**  
2020

**Language**  
English



## Communication for Development Annual Report, Mainstreaming Gender Programming in WASH, India

C4D's programme design is based on Social and Behaviour Change Communication (SBCC) - Gender framework of UNICEF India. The framework enlists six strategies - system strengthening, capacity development, building social capital, platforms and mega-partnerships for at-scale and convergent SBCC programming, targeted SBCC campaigns, evidence generation and knowledge management.

**Authors**  
UNICEF India

**Publication Date**  
2020

**Language**  
English



## The Zimbabwe Formative Research on Menstrual Hygiene Management

This study was commissioned by UNICEF with the aim of consolidating and documenting the status of menstrual hygiene management (MHM) for in and out of school girls aged 10-24 years in Zimbabwe. The findings are intended to direct initiatives to more effectively address girls' and young women's MHM needs in Zimbabwe in line with global standards and trends. This is especially important as communities are not homogenous and MHM solutions need to be tailor made to suit different socio-economic, cultural and religious considerations.

**Authors**  
UNICEF Zimbabwe

**Publication Date**  
December 2019

**Language**  
English



## Macro-economic Impact Evaluation of the Swachh Bharat Mission, Final Report, India

This evaluation aims to assess how improving sanitation services at a large scale through the Swachh Bharat Mission (SBM) has impacted India's overall economic development, both directly and indirectly, and both in the short-term and long-term. The objectives are to: 1) Estimate what are the likely economic and financial impacts of the SBM at national level; 2) Make recommendations for the future implementation of WASH programmes based on the evaluation findings on the key determinants of economic and financial impact; 3) Based on the implementation costs of the observed SBM interventions, estimate the efficiency of sanitation and hygiene interventions using value-for-money measures.

**Authors**  
UNICEF India

Click [here](#) for Infographic

**Publication Date**  
January 2020

**Language**  
English





## EasyWASH

Nudging Positive Hand-Washing with Soap Behaviour Change in Schools in Bangladesh

## UNICEF Bangladesh Launches the “EasyWash” Handwashing Monitoring Device

### Authors

UNICEF Bangladesh

### Publication Date

2020

### Language

English



## Operational Guidelines for the Implementation of Jal Jeevan Mission, India.

Mission, it is imperative that proper techno-economic appraisal and socio-economic analysis is carried out, most appropriate option is opted, and necessary approval of the local community/ User Group is taken for in-village water supply infrastructure to ensure that they have a 'sense of ownership' and are ready to undertake steps to manage, operate & maintain the system as well as drinking water sources for long-term sustainability.

### Authors

Government of India

### Publication Date

December 2019

### Language

English



## Assessment of Risks Associated with Use of Chemicals at Voda Donbasa

This report was developed in cooperation by UNITE LLC. and UNICEF Ukraine in order to identify and quantify risks associated with use of chemicals by structural subdivisions of 'Voda Donbasa' in territories controlled by the Government of Ukraine for water treatment.

This report was produced with the financial support of the German Government through KfW Development Bank. Its contents are the sole responsibility of UNITE LLC and do not necessarily reflect the views of the German Government and/or UNICEF.

### Authors

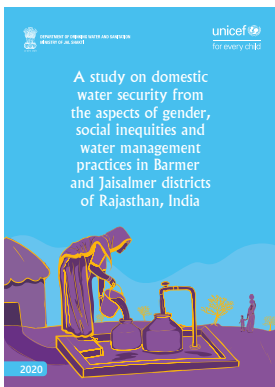
UNITE LLC. and UNICEF Ukraine

### Publication Date

2019

### Language

English



## A Study on Domestic Water Security From the Aspects of Gender, Social Inequities and Water Management Practices in Barmer and Jaisalmer Districts of Rajasthan, India

It aims to ensure that by 2022, at least 90 per cent of rural households are provided with piped water supply; at least 80 per cent of rural household have piped water supply with household connections, that less than 10 per cent use public taps and less than 10 per cent use hand-pumps or other safe and adequate private water sources.

**Authors**  
UNICEF

**Publication Date**  
2020

**Language**  
English



## Market Study for Household Water Treatment in Haiti

In order to sustainably develop this market, this study's recommendations are focused on the importance of growing constant demand through awareness campaigns based on a will of change in behavior of consumers at the national level, to put in place a favorable environment by reinforcing roles and responsibilities of private and public actors, and finally to promote relevant business models with financial and logistic supports

**Authors**  
UNICEF, USAID

**Publication Date**  
2020

**Language**  
English



## WASH Assessment Platform Report 2020

The WaSH Assessment Platform (WAP) Report 2020 highlights the most recent status of Informal Tented Settlements (ITSs) in Lebanon. In collaboration with 16 partner organization, UNICEF Lebanon has consolidated and analyzed data from 7,236 locations from September 2019 through January 2020. The data within this report covers 5,602 ITSs housing 326,812 individuals, 52.2 percent of which are children.

**Authors**  
UNICEF Lebanon

**Publication Date**  
September 2020

**Language**  
English



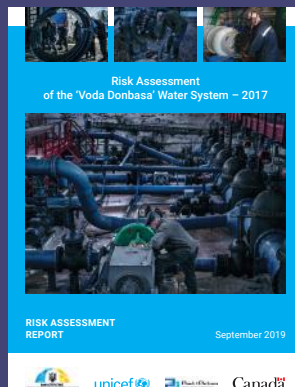
# Accelerating Delivery of Water, Sanitation and Hygiene Services with Rural Communities Using Real-Time Data and Rapid Response to Service Disruptions: Good Practices and Lessons Learned in National Systems Strengthening Using Mobile Technology from Zimbabwe

Zimbabwe is experiencing an economic crisis characterized by hyperinflation and compounded by recent and ongoing natural disasters (floods, drought and cyclones). These crises have eroded capacities across all social sectors, including the water, sanitation and hygiene (WASH) sector.

**Authors**  
UNICEF Zimbabwe

**Language**  
English

**Publication Date**  
December 2020



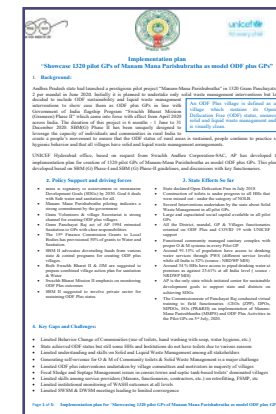
# Risk Assessment of the "Voda Donbasu" Water System

The risk assessment of Voda Donbasu Water Utility Company that was conducted in 2017 and updated in 2019 is a snapshot of the situation at that time. Recommendation on main risks faced by the Company were divided in the report into technical, financial, security, environmental and governance issues.

**Authors**  
UNICEF Ukraine

**Publication Date**  
October 2020

**Languages**  
Ukrainian, English



# Implementation Plan "Showcase 1320 Pilot GPs of Manam Mana Parishubraha as Model ODF Plus GPs"

UNICEF Hyderabad office, based on request from Swachh Andhra Corporation-SAC, AP has developed this implementation plan for creation of 1320 pilot GPs of Manam-Mana Parishubraha as model ODF plus GPs. This plan is developed based on SBM (G) Phase-I and SBM (G) Phase-II guidelines, and discussions with key functionaries.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



**Mapping Climate Induced Risk in WASH in  
the Indian State of Maharashtra Using a  
Composite Index**

**M. Dinesh Kumar and Yusuf Kabir**

Prepared for the WASH Symposium  
4-5 March, 2020  
University of Colorado  
Boulder, Colorado, USA

## **A Better Climate for Disaster Risk Management, Maharashtra, India.**

**Author**

M. Dinesh Kumar and Yusuf Kabir

**Publication Date**

March 2020

**Language**

English



National

Peer Reviewed  
Journals



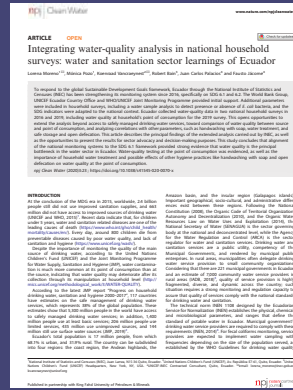
# Comparison of the Costs and Benefits of the Clean India Mission

The Swachh Bharat (Clean India) Mission (SBM) launched in October 2014 is the world's largest sanitation campaign. Our aim was to estimate and compare major economic costs and benefits associated with sanitation improvement achieved during three years of SBM from households' financial and economic perspectives and a broader societal perspective.

**Authors**  
 Guy Hutton, Sumeet Patil, Avni Kumar, Nicolas Osbert, Francis Odhiambo

**Publication Date**  
 June 2020

**Language**  
 English



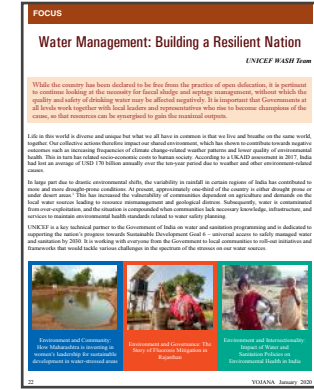
# Integrating Water-quality Analysis in National Household Surveys: Water and Sanitation Sector Learnings of Ecuador

This article describes the principal findings of the extended analysis carried out by INEC, as well as the opportunities to present the results for sector advocacy and decision-making purposes. This study concludes that alignment of the national monitoring systems to the SDG 6.1 framework provided strong evidence that water quality is the principal bottleneck in the water sector in Ecuador.

**Authors**  
 Koenraad Vancaeynest, Robert Bain, Juan Carlos Palacios, Fausto Jácome, et al

**Publication Date**  
 2020

**Language**  
 English



# Environment and Governance: The Story of Fluorosis Mitigation in Rajasthan

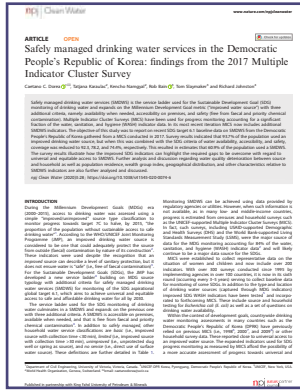
While the country has been declared to be free from the practice of open defecation, it is pertinent to continue looking at the necessity for faecal sludge and septage management, without which the quality and safety of drinking water may be affected negatively. It is important that Governments at all levels work together with local leaders and representatives who rise to become champions of the cause, so that resources can be synergised to gain the maximal outputs.

**Authors**  
 Nanak Santdasani and Anirudh

**Publication Date**  
 January 2020

**Language**  
 English





# Safely Managed Drinking Water Services in the Democratic People's Republic of Korea: Findings from the 2017 Multiple Indicator Cluster Survey

The survey results illustrate how the improved SDG indicators can highlight the required gaps to be overcome with regard to universal and equitable access to SMDWS. Further analysis and discussion regarding water quality deterioration between source and household as well as population residence, wealth group index, geographical distribution, and other characteristics relative to SMDWS indicators are also further analysed and discussed.

**Authors**  
Kencho Namgyal, Rob Bain, Tom Slaymaker et

**Publication Date**  
June 2020

**Language**  
English



# Risky Responsibilities for Rural Drinking Water Institutions: The Case of Unregulated Self-supply in Bangladesh

The drinking water sector is off track to reach Sustainable Development Goal (SDG) 6.1 with over a quarter of the world's population lacking safe and reliable services. Policy approaches are shifting away from provision of access towards managing the multiple risks of water supply and quality. By considering how infrastructure, information, and institutional systems evolved in Bangladesh, this article identifies the unintentional consequences of reallocating management responsibility for rural water services away from government agencies towards individuals and households.

**Authors**  
Adnan Hakimd et al

**Publication Date**  
November 2020

**Language**  
English



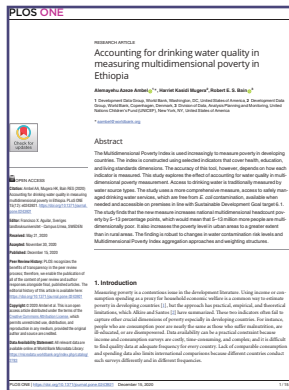
# Water Quality for Young Children in Cambodia—High Contamination at Collection and Consumption Level

Unsafe drinking water is a leading cause of child morbidity, especially among young children in low-income settings. Safe water consumption requires high-quality water available at its source and at point of use. We examined the quality of drinking water at point of collection and point of use in 796 households in three provinces, in Cambodia.

**Authors**  
Sam Treglown et al

**Publication Date**  
August 2020

**Language**  
English



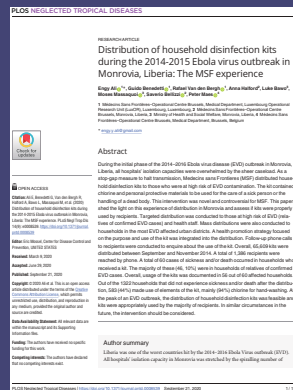
# Accounting for Drinking Water Quality in Measuring Multidimensional Poverty in Ethiopia

This study explores the effect of accounting for water quality in multidimensional poverty measurement. Access to drinking water is traditionally measured by water source types. The study uses a more comprehensive measure, access to safely managed drinking water services, which are free from E. coli contamination, available when needed and accessible on premises in line with Sustainable Development Goal target 6.1. The study finds that the new measure increases national multidimensional headcount poverty by 5-13 percentage points, which would mean that 5-13 million more people are multidimensionally poor.

**Authors**  
Alemayehu Azeze Ambel, Harriet Kasidi Mugeru, Robert E. S. Bain

**Publication Date**  
December 2020

**Language**  
English



# Distribution of Household Disinfection Kits During the 2014-2015 Ebola Virus Outbreak in Monrovia, Liberia: The MSF Experience

This paper shed the light on this experience of distribution in Monrovia and assess if kits were properly used by recipients. Targeted distribution was conducted to those at high risk of EVD (relatives of confirmed EVD cases) and health staff. Mass distributions were also conducted to households in the most EVD affected urban districts.

**Authors**  
Engy Alil et al

**Publication Date**  
September 2020

**Language**  
English



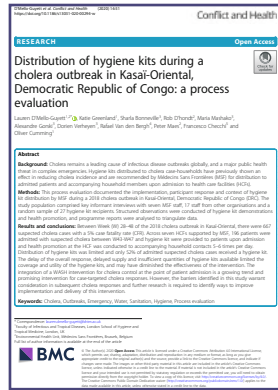
# Improved Sanitation is Associated with Reduced Child Stunting Amongst Indonesian Children Under 3 Years of Age

This paper examined whether household access to improved sanitation facilities and sources of drinking water was associated with reduced child stunting and anaemia amongst children aged 6-35 months of age in Indonesia.

**Authors**  
Aidan Cronin et al

**Publication Date**  
August 2020

**Language**  
English



# Distribution of Hygiene Kits During a Cholera Outbreak in Kasai-Oriental, Democratic Republic of Congo: A Process Evaluation

Cholera remains a leading cause of infectious disease outbreaks globally, and a major public health threat in complex emergencies. Hygiene kits distributed to cholera case-households have previously shown an effect in reducing cholera incidence and are recommended by Médecins Sans Frontières (MSF) for distribution to admitted patients and accompanying household members upon admission to health care facilities (HCFs).

**Authors**  
Lauren D'Mello-Guyett et al

**Publication Date**  
July 2020

**Language**  
English



# Achieving the Sustainable Development Goals for Water and Sanitation in Indonesia – Results from a Five-year (2013–2017) Large-scale Effectiveness Evaluation

Access to safe sanitation and the elimination of open defecation are pre-conditions for improved child health and nutrition and wider achievement of the Sustainable Development Goals (SDGs). While Indonesia has a solid policy framework, the country ranks third globally in terms of numbers of people practicing open defecation.

Our aim was to assess the effectiveness of a five-year strategy to reduce open defecation through accelerating implementation of the national sanitation program across districts receiving variable levels of external support.

**Authors**  
Mitsunori Odagiri et al

**Publication Date**  
September 2020

**Language**  
English



# Use of Group Maturity Index to Measure Growth, Performance, and Sustainability of Community Health Clubs in Urban Water, Sanitation and Hygiene (WASH) Program in Zimbabwe

This study described the maturity status of CHCs as measured by GMI as a new monitoring tool and assessed if CHCs' performances in GMI's output domains are associated with the impact domain. The results suggested that over 75% of CHCs had reached the managed stage or the mature stage by 2018.

**Authors**  
Mitsuaki Hirai et al

**Language**  
English

**Publication Date**  
October 2020

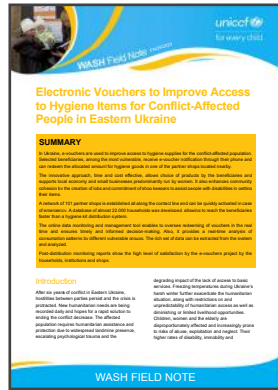




WASH Publications  
Template

National





## Electronic Vouchers to Improve Access to Hygiene Items for Conflict-Affected People in Eastern Ukraine

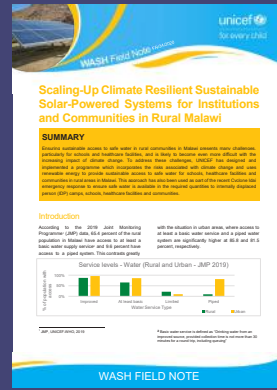
In Ukraine, e-vouchers are used to improve access to hygiene supplies for the conflict-affected population. Selected beneficiaries, among the most vulnerable, receive e-voucher notification through their phone and can redeem the allocated amount for hygiene goods in one of the partner shops located nearby.

Post-distribution monitoring reports show the high level of satisfaction by the e-vouchers project by the households, institutions and shops.

**Author**  
UNICEF Ukraine

**Publication Date**  
2020

**Language**  
English



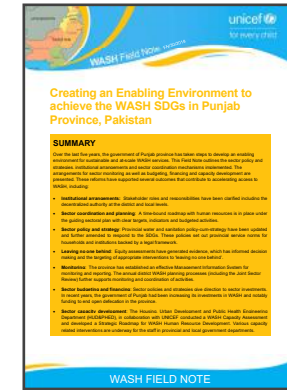
## Scaling-Up Climate Resilient Sustainable Solar-Powered Systems for Institutions and Communities in Rural Malawi

UNICEF has designed and implemented a programme which incorporates the risks associated with climate change and uses renewable energy to provide sustainable access to safe water for schools, healthcare facilities and communities in rural areas in Malawi. This approach has also been used as part of the recent Cyclone Idai emergency response to ensure safe water is available in the required quantities to internally displaced person (IDP)camps,schools, healthcare facilities and communities.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



## Creating an Enabling Environment to Achieve the WASH SDGs in Punjab Province, Pakistan

Over the last five years, the government of Punjab province has taken steps to develop an enabling environment for sustainable and at-scale WASH services. This Field Note outlines the sector policy and strategies, institutional arrangements and sector coordination mechanisms implemented. The arrangements for sector monitoring as well as budgeting, financing and capacity development are presented.

**Author**  
UNICEF

**Contact**  
tmulugeta@unicef.org

**Publication Date**  
2020

**Language**  
English



# Development of a Disaster-Resilient Toilet: Lessons From the States of Assam and Gujarat, India

This Field Note describes the development process of designing a Disaster-Resilient Toilet (DRT) which was carried out in the States of Assam and Gujarat in India. Both of these States are affected annually by flooding and cyclones, and they are also both located in earthquake-prone areas.

**Author**  
UNICEF

**Contact**  
nosbert@unicef.org

**Publication Date**  
2020

**Language**  
English



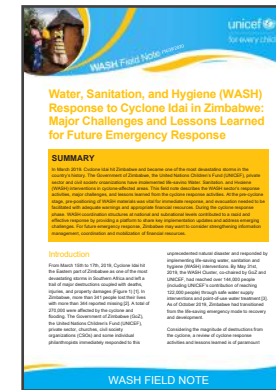
# Climate Resilient Wash Analysis: Innovating the WASHBAT in Ecuador

To contribute towards sustainable and climate resilient WASH services, UNICEF and Sector partners implemented the WASH Bottleneck Analysis Tool(WASH BAT) with a focus on climate change. The tool allows a structured diagnosis of the sector; identifying and costing main bottlenecks and governance areas in need of further support and articulating prioritized plans. With support from the Stockholm International Water Institute (SIWI) and key stakeholders, it was adapted to integrate a climate perspective and a new dimension on the "Rights of Nature" (as per the Ecuadorian Constitution).

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



# Water, Sanitation, and Hygiene (WASH) Response to Cyclone Idai in Zimbabwe: Major Challenges and Lessons Learned for Future Emergency Response

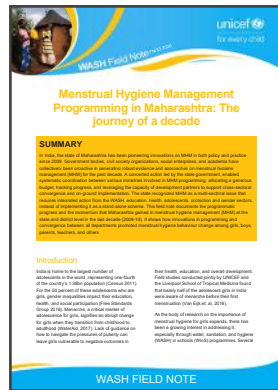
This field note describes the WASH sector's response activities, major challenges, and lessons learned from the cyclone response activities. At the pre-cyclone stage, pre-positioning of WASH materials was vital for immediate response, and evacuation needed to be facilitated with adequate warnings and appropriate financial resources. During the cyclone response phase, WASH coordination structures at national and subnational levels contributed to a rapid and effective response by providing a platform to share key implementation updates and address emerging challenges.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English





# Menstrual Hygiene Management Programming in Maharashtra: The journey of a decade

This field note documents the programmatic progress and the momentum that Maharashtra gained in menstrual hygiene management (MHM) at the state and district level in the last decade (2009-19). It shows how innovations in programming and convergence between all departments promoted menstrual hygiene behaviour change among girls, boys, parents, teachers, and others.

**Author**  
UNICEF

**Contact**  
nosbert@unicef.org

**Publication Date**  
2020

**Language**  
English



# WASH in Schools (WinS) in Zimbabwe: Better Coordination, Quality Data and Stronger Policies Towards Strengthening the WinS Programme

Despite economic and political crises, Zimbabwe has maintained a strong commitment to its national goals with the Education Sector, always providing a large percentage of its budget (30% in 2015) to the Public Education System. However, over time, decreasing public finances have negatively impacted WASH services in schools and there is a need to strengthen access to water, sanitation and hygiene in schools, especially in rural areas.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



# Post-Hurricane "Building Back Better" in Abaco Sunny Waters, the Bahamas

In collaboration with Water Mission and Friends of the Environment, a school outreach program was implemented, teaching the affected children of Abaco about proper hygienic behavior, but also about water quality, how to protect vulnerable water resources and sustainable water usage. In addition, the project will equip Abaco's schools with rainwater collection and storage infrastructure. To celebrate the launch of Abaco Sunny Waters, WSC's severely damaged water storage tank is transformed into a monument for Building Back Better, through the painting of a mural together with Abaco's children.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



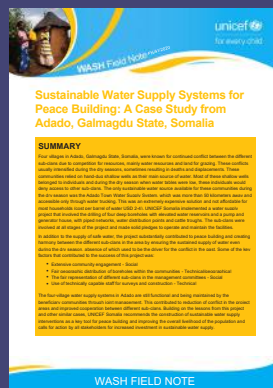
# WASH in Schools Programme in Chad: Development of a National Strategy using an Inclusive Sector Process

This note describes an inclusive process of analysis of the bottlenecks to water, sanitation and hygiene in primary schools in Chad. This activity led by the Ministry of Education with the support of UNICEF triggered the WASH sector into forming a National Alliance for Healthy Schools.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



# Sustainable Water Supply Systems for Peace Building: A Case Study from Adado, Galmagdu State, Somalia

The four-village water supply systems in Adado are still functional and being maintained by the beneficiary communities through joint management. This contributed to reduction of conflict in the project areas and improved cooperation between different sub-clans. Building on the lessons from this project and other similar cases, UNICEF Somalia recommends the construction of sustainable water supply interventions as a key tool for peace building and improving the overall livelihood of the population and calls for action by all stakeholders for increased investment in sustainable water supply.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



# Sanitation Revolving Funds for Rural and Peri-Urban Communities in Malawi

NICEF Malawi Country Office, in collaboration with its partners, has developed a scalable model based on revolving sanitation funds for peri-urban and rural areas to enhance access to market-based sanitation products and services. This approach has also proven effective in unlocking sanitation-related business opportunities for private sector operators and entrepreneurs. This field note follows a year of piloting the sanitation revolving funds in Malawi and captures key lessons and challenges.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



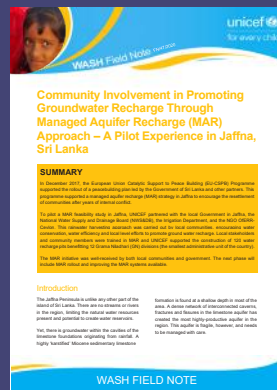
# A Community-based Approach to Improving WASH in Healthcare Facilities in the Democratic Republic of the Congo

The pilot phase of the CSA program was launched in 2018 with 84 HCFs in 9 provinces supported by UNICEF, and 35 HCFs in 2 provinces supported by the USAID-funded Maternal and Child Survival Programme (MSCP). The promising and relatively quick success and subsequent scale-up of the CSA program is evidence of how WASH in HCF programming in the DRC contributes to Health System Strengthening and community empowerment by reinforcing systems that support WASH and infection prevention and control within HCFs, the communities they serve and the broader health system.

**Author**  
UNICEF DRC

**Publication Date**  
2020

**Language**  
English



# Community Involvement in Promoting Groundwater Recharge Through Managed Aquifer Recharge (MAR) Approach – A Pilot Experience in Jaffna, Sri Lanka

To pilot a MAR feasibility study in Jaffna, UNICEF partnered with the local Government in Jaffna, the National Water Supply and Drainage Board (NWS&DB), the Irrigation Department, and the NGO OfERR-Ceylon. This rainwater harvesting approach was carried out by local communities, encouraging water conservation, water efficiency and local level efforts to promote ground water recharge.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



# Improved Operation and Maintenance and Revenue Collection from Metered Water Supply Systems: Lessons from Rural Afghanistan

The Government of Afghanistan is investigating service delivery options to achieve access to safe and affordable drinking water (SDG Goal 6.1). One option to provide rural communities with sustainable and quality water is metered household water connections. The Afghan government began supporting such an approach in 2006 which it began to scale-up in 2016. This study documents and assesses experiences in the operation and maintenance as well as revenue collection systems of this intervention.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English





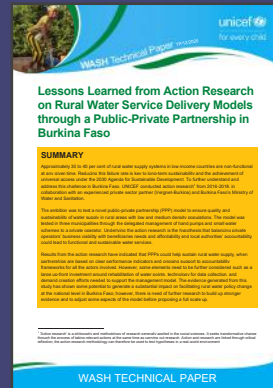
# District-level Joint Sector Review and WASH Bottleneck Analysis Tool: Lessons Learned from Jhang, Pakistan

This field note describes how the JSR was conducted in Jhang District, using WASH-BAT. Key WASH bottlenecks in Jhang District are described, along with proposed actions for mitigation and the removal of identified impediments.

Author  
UNICEF

Publication Date  
2020

Language  
English



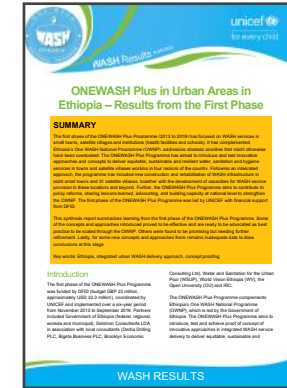
# Lessons Learned from Action Research on Rural Water Service Delivery Models Through a Public-Private Partnership in Burkina Faso

Approximately 30 to 40 per cent of rural water supply systems in low-income countries are non-functional at any given time. Reducing this failure rate is key to long-term sustainability and the achievement of universal access under the 2030 Agenda for Sustainable Development. To further understand and address this challenge in Burkina Faso, UNICEF conducted action research from 2016-2018, in collaboration with an experienced private sector partner (Vergnet-Burkina) and Burkina Faso's Ministry of Water and Sanitation.

Author  
UNICEF

Publication Date  
2020

Language  
English



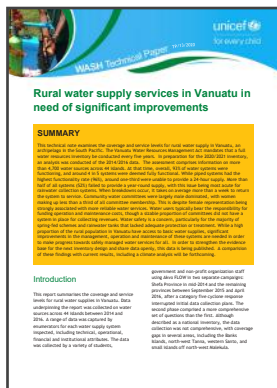
# ONEWASH Plus in Urban Areas in Ethiopia – Results from the First Phase

This synthesis report summarizes learning from the first phase of the ONEWASH Plus Programme. Some of the concepts and approaches introduced proved to be effective and are ready to be advocated as best practice to be scaled through the OWNPP. Others were found to be promising but needing further refinement. Lastly, for some new concepts and approaches there remains inadequate data to draw conclusions at this stage.

Author  
UNICEF

Publication Date  
2020

Language  
English



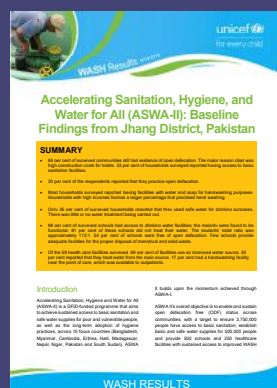
## Rural Water Supply Services in Vanuatu in Need of Significant Improvements

This technical note examines the coverage and service levels for rural water supply in Vanuatu, an archipelago in the South Pacific. The Vanuatu Water Resources Management Act mandates that a full water resources inventory be conducted every five years. In preparation for the 2020/2021 inventory, an analysis was conducted of the 2014/2016 data. The assessment comprises information on more than 4,700 water sources across 44 islands

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



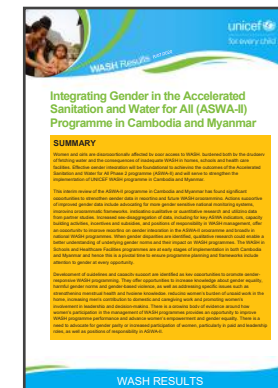
## Accelerating Sanitation, Hygiene, and Water for All (ASWA-II): Baseline Findings from Jhang District, Pakistan

9 per cent of surveyed communities still had evidence of open defecation. The major reason cited was high construction costs for toilets. 53 per cent of households surveyed reported having access to basic sanitation facilities. Most households surveyed reported having facilities with water and soap for handwashing purposes. Households with high incomes formed a larger percentage that practised hand washing. Only 35 per cent of surveyed households reported that they used safe water for drinking purposes. There was little or no water treatment being carried out.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



## Integrating Gender in the Accelerated Sanitation and Water for All (ASWA-II) Programme in Cambodia and Myanmar

Development of guidelines and capacity support are identified as key opportunities to promote gender-responsive WASH programming. They offer opportunities to increase knowledge about gender equality, harmful gender norms and gender-based violence, as well as addressing specific issues such as strengthening menstrual health and hygiene knowledge, reducing women's burden of unpaid work in the home, increasing men's contribution to domestic and care giving work and promoting women's involvement.

**Author**  
UNICEF

**Publication Date**  
2020

**Language**  
English



## Community Sanitary Complex Rural Gujarat

A public toilet need not be the dirty place that everyone images it to be, even a toilet can be attractive. Most importantly a clean and attractive space will change people's perception towards toilets. Through the design, goal is also to signify the importance of toilet, hygiene, and sanitation in the rural.

2020



## Étape Charnière du Secteur du Forage Manuel en République Démocratique du Congo

Cette publication se veut une source d'inspiration positive pour ce pays qui est souvent associé à des crises humanitaires, des conflits persistants, des guerres civiles récurrentes et des infrastructures routières généralement obsolètes.

### Author

UNICEF, Skat foundation and Ask for water

### Publication Date

2020

### Language

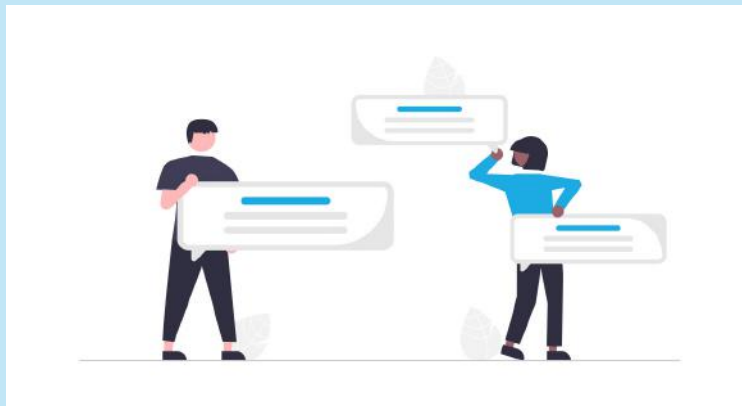
French

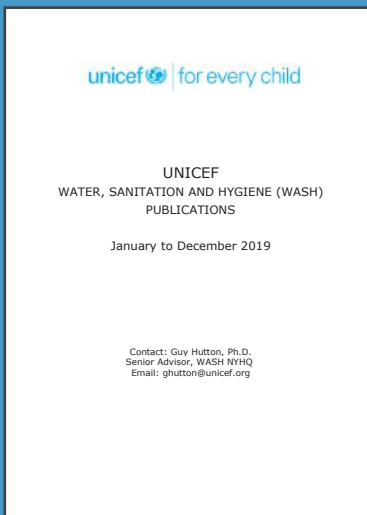


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To help us, just click on the image below and answer the three questions.





## Water, Sanitation and Hygiene (WASH) Publication Catalogue, 2019

The UNICEF 2016-2030 Global WASH Strategy highlights the importance of generating and sharing evidence for what works, building from UNICEF's deep programming experience and technical expertise to strengthen the WASH Sector.

This catalogue describes the rich diversity of UNICEF WASH knowledge-sharing activities during 2019, ranging from technical studies, programmatic guidance and peer-reviewed papers, to blog posts, op-eds, trainings, learning events and global webinars.

**Author**  
UNICEF

**Publication Date**  
2020

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