Contents

Acronyms and abbreviations iv

Executive summary vi
  Highlights of 2021 results vi

Strategic context 2021 1

Monitoring results and impacts 5
  Achieving impact: keys to success and lessons learned 2021 7

Key accomplishments against the strategic plan 11
  Results on programmatic outcomes 11
  Results area: drinking-water quality and safety 12
  Results area: sanitation and wastewater 16
  Results area: WASH in health care facilities 21
  Results area: integration of WASH with other health programmes 27
  Results area: WASH evidence and monitoring 30
  Results area: burden of disease from WASH 37

Risk management, operations and value for money 38

Expression of thanks 39

Key references 40

Annex 1 – Strategic framework and theory of change 42

Annex 2 – Overview of WHO WASH expenditure 45
Acronyms and abbreviations

ADB  Asian Development Bank
AFD  Agence Française de Développement
AMCOW African Ministers’ Council on Water
AMR  antimicrobial resistance
COVID-19 coronavirus disease 2019
CR-WSP climate resilient water safety planning
DFAT Department of Foreign Affairs and Trade, Australia
DEVCO Directorate General for International Cooperation and Development, European Union
DGIS Directorate General for International Cooperation, The Netherlands
ECH WHO department of Environment, Climate Change and Health
ESA external support agency
ESAWAS Eastern and Southern Africa Water and Sanitation
ESPEN Expanded Special Project for Elimination of Neglected Tropical Diseases
EU European Union
FAO Food and Agriculture Organization of the United Nations
FCDO Foreign Commonwealth & Development Office, United Kingdom of Great Britain and Northern Ireland
GAF Global Acceleration Framework (for SDG6)
GDWQ Guidelines for Drinking-Water Quality
GLAAS UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water
GPW 13 WHO Thirteenth General Programme of Work 2019–2023
HCWM health care waste management
HWT household water treatment
IADB Inter-American Development Bank
IAEA International Atomic Energy Agency
ILO International Labour Organization
IPC infection prevention and control
IWA International Water Association
JICA Japan International Cooperation Agency
JMP WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
LuxDev Directorate for Development Cooperation, Luxembourg
MNCCH maternal, newborn and child health
NGO nongovernmental organization
NNN Neglected Tropical Disease NGO Network
NPO national professional officer
NTD neglected tropical disease
OIE  World Organisation for Animal Health
PHAC  Public Health Agency of Canada
PMAT  Policy Monitoring and Assessment Tool
PPE  personal protective equipment
RegNet  International Network of Drinking-Water Regulators
SARS-CoV-2  severe acute respiratory syndrome coronavirus 2
SDGs  Sustainable Development Goals
SHF  Sanitation and Hygiene Fund
Sida  Swedish International Development Cooperation Agency
SIWI  Stockholm International Water Institute
SMOSS  safely managed on site sanitation
SNV  SNV Netherlands Development Organisation
SOPs  standard operating procedures
SSP  sanitation safety planning
SWA  Sanitation and Water for All
TrackFin  WHO methodology to develop WASH accounts
UHC  universal health coverage
UN  United Nations
UNDP  United Nations Development Programme
UNEP  United Nations Environment Programme
UNICEF  United Nations Children's Fund
US CDC  United States of America Centers for Disease Control and Prevention
USAID  United States Agency for International Development
WAPT  WASH accounts production tool
WASH  water, sanitation and hygiene
WASH FIT  WASH for Health Facility Improvement Tool
WEDC  Water Engineering and Development Centre
WHO  World Health Organization
WSH  WHO water, sanitation, hygiene and health unit
WSP  water safety plan (planning)
Executive summary

This report summarizes the World Health Organization’s (WHO) global work on water, sanitation and hygiene (WASH) during 2021. It describes how the Organization continued to deliver its essential WASH programming as elaborated in its 2018–2025 strategy, as well as WHO’s continuing WASH response to the ongoing COVID-19 pandemic.

This includes publication and dissemination of its work monitoring access to WASH and WASH systems through the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) and the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS), continued development and implementation of its norms on drinking-water and sanitation, and overall advocacy including on hand hygiene. All of WHO’s work was augmented through the strength of its partnerships.

Highlights of 2021 results

Norms, guidelines, technical documents and tools

- Publication of *Toxic cyanobacteria in water - Second edition* (1) which presents the current state of knowledge on the occurrence of cyanobacteria and cyanotoxins, as well as their impacts on health through water-related exposure pathways.
- Publication of *Chemical background documents on asbestos, manganese, nickel and silver* (2), which will inform the development of the WHO Guidelines for drinking-water quality, 4th edition, incorporating the 2nd addendum (3), published in 2022.
- WHO launched the *Guidelines for recreational water quality* (4), setting out health-based targets for water quality, as well as best practice for surveillance, risk assessment and improved management and monitoring approaches that provide timely advice to water users.
- A new report, *Reflecting on TrackFin 2012-2020* (5), summarizes results of using the TrackFin methodology to develop WASH accounts, highlighting key outcomes, results from countries as well as lessons learned.
- WHO completed evaluations of 6 *household water treatment* (6) products; a continuation of WHO’s work since 2014 to independently assessed the microbial performance of HWT technologies under the International Scheme to Evaluate Household Water Treatment Technologies (the Scheme) (7). To date, most products of global relevance are now evaluated.
- The *Technical brief on water, sanitation, hygiene (WASH) and wastewater management to prevent infections and reduce the spread of antimicrobial resistance (AMR)* (8)
Infographics released in conjunction with publication of Progress on household drinking water, sanitation and hygiene 2000-2020: Five years into the SDGs, in July 2021, helped communicate the report’s key messages in Arabic, Chinese, English, French, Spanish and Russian.

launched in late 2020, was augmented with versions in French, Russian, Spanish and Portuguese.

• Updated version of the Global overview of national standards and regulations for drinking-water (9).

• Real-time country progress tracker (10) to provide global visibility and allow for benchmarking on country efforts to implement the World Health Assembly Resolution 72.7 on Health Care Facilities.

• Building on rapid production of a suite of interim guidance (11) in 2020, in 2021 WHO commenced development of additional interim guidance on Environmental surveillance for SARS-COV-2 to complement public health surveillance (12), published in 2022.

• A report highlighting the pilot of the sanitation policy monitoring and assessment tool (PMAT) in six countries.

Health leadership

• The 74th World Health Assembly marked the two-year anniversary of the Resolution on WASH in Health Care Facilities. The official report on progress (13) found huge gaps in services, encouraging progress on adopting national standards and establishing baselines but a significant need to increase regular budgets, monitoring and integration with health programmes. Statements by Malawi, Philippines and Zambia (14) all articulated the importance for action and investment, especially with the COVID-19 pandemic, and the importance of climate resilience WASH services, a key prescription to a healthy COVID-19 recovery (15).

• WHO and UNICEF published State of the world’s hand hygiene (16), which brought together various data sets to present the current status of hand hygiene, highlight lagging progress and call governments
and supporting agencies to action, offering numerous inspiring examples of change. Virtual webinars were held to support the launch.

- **State of the world’s sanitation** (17), published in 2020 and bringing together the data on sanitation coverage and investment, and how it impacts health, economies, and the environment, was made more accessible through published versions in Spanish and French.

- With UNICEF and the World Bank, WHO initiated work on the last report in the ‘state of’ series, with State of the world’s drinking water on track for publication in late 2022.

- The **Global analysis of health care waste in the context of COVID-19** (18) was completed and launched in early 2022. The report quantified the additional COVID-19 health care waste generated, described current health care waste management systems and their deficiencies, and summarized emerging best practices and solutions to reduce the impact of waste on human and environmental health, and included related recommendations.

- WHO promoted improved WASH regulation and the reform of regulatory institutions through the **WHO International Network of Drinking-water and Sanitation Regulators (RegNet)** (19) and together with UNICEF, SIWI, IADB, through the publication of the **WASHReg approach tool** (20).

- Progress was made on a major update to **WASH FIT: A practical guide for improving quality of care through WASH in health care facilities** (21), published in 2022, with additional guidance and information incorporating climate and environment, gender and equity and infection prevention and control considerations.

- There was high visibility for environment within the AMR agenda through the **Global leaders group (GLG), UNEP and the G7** (22), where health ministers at the G7 summit tackled environmental dimensions of AMR as part of a call to strengthen One-Health approaches to global health threats. G7 ministers also called AMR a ‘silent pandemic’ and called upon WHO to accelerate changes to the Good Manufacturing Practice (GMP) sections on wastewater as part of environmental, social and corporate responsibilities.

- In January 2021, WHO launched **A Global strategy on water, sanitation and hygiene to combat neglected tropical diseases, 2021–2030** (23), a new roadmap which sets targets and milestones for control, elimination and eradication of 20 neglected tropical diseases (NTDs) by 2030. The roadmap emphasizes the importance of cross-sectoral action for NTD control by including a cross-cutting target on WASH.

- Continued co-leadership of the **UNICEF/WHO Hand Hygiene for All** global partnership (24) to maintain political attention and action on hand hygiene.
Monitoring

• Published Progress on household drinking water, sanitation and hygiene 2000-2020: Five years into the SDGs (25), which reported that billions of people will lack access to safe water, sanitation and hygiene in 2030 unless progress quadruples. To achieve universal access to safely managed drinking-water by 2030, the current rate of progress in the Least Developed Countries would need to increase ten-fold. In fragile contexts, where people were twice as likely to lack safe drinking-water, it would need to accelerate by a factor of 23. The report also noted that 3 in 10 people worldwide could not wash their hands with soap and water at home during the COVID-19 pandemic. Emerging data on menstrual health, included in the report for the first time, showed that, in many countries, a significant proportion of women and girls are unable to meet menstrual health needs.

• Successful launch of the GLAAS 2021/2022 cycle (26) to collect data on WASH systems through country surveys, with the global report to be published towards the end of 2022.

• Development of the UN-Water GLAAS data portal (27) launched in 2022, to provide easy online access to policy- and decision-makers at all levels with reliable, easily accessible, comprehensive data on water, sanitation and hygiene systems.

• Water quality testing in household surveys: published synthesis report and journal article (28), supported 11 countries.

• Building on previous work, the WHO/UNICEF JMP team with Emory University published A Review of Measures and Indicators for Gender in WASH (29), with follow-up activities planned for 2022. The gender review also was used as an input to a broader initiative to develop a gender contextualization for all the SDG 6 global indicators, facilitated by UN-Water.

• User research conducted on washdata.org (30) identified several areas for further development in 2022 to improve user navigation and overall experience, including easier identification of country-related data files and summaries.

• WHO, together with UN Water and UN Habitat, published Progress on wastewater treatment (31) in September, an Integrated Monitoring Initiative (IMI) SDG 6 progress report. This report presents the global status on wastewater treatment and acceleration needs to achieve target 6.3 by 2030, based on the latest data on indicator 6.3.1 (total wastewater flows as well as flows from industrial sources and households).

The UN-Water GLAAS data portal: https://glaas.who.int/.
Research

- During 2021 the JMP worked intensively with six pilot countries (Bangladesh, Ecuador, Indonesia, Kenya, Serbia and Zambia) to develop or refine tools and methods for monitoring of safely managed on-site sanitation (SMOSS) and published a synthesis report (32), increasing understanding on what the JMP 2021 progress update identified as the single biggest data gap for national and global monitoring of safely managed sanitation services: the management of excreta from on-site sanitation systems.

- WHO with partners developed WASH coverage and NTD endemicity overlay maps for the ESPEN-NTD portal (33). The maps show areas with high NTD prevalence and low WASH coverage, therefore demonstrating stronger correlation, for example, between WASH access and prevalence of soil-transmitted helminths and schistosomiasis and informing greater collaborative WASH and health actions.

- A new hand hygiene costing tool (34) from WHO and UNICEF and partners was launched in September. Because it provides country-specific cost estimates of achieving universal hand hygiene in households by 2030, the tool supports understanding the costs of implementing hand hygiene plans and the funds necessary to carry them out.

- WHO with partners launched a call for development of a research agenda on sanitation workers, part of the ongoing partnership with ILO/WaterAid/World Bank/SNV on the rights and working conditions of sanitation workers. In November, WHO engaged in the Sanitation Workers Forum (35), a free online conference enabling sharing, learning and exchange of knowledge about sanitation workers around the world, including WHO’s own report Health, safety and dignity of sanitation workers (36).

- WHO with UNICEF, in collaboration with staff from World Bank and WaterAid, led a price tag analysis on the costs for providing basic WASH and waste services in all health care facilities in the 46 least developed countries. The research article was published in pre-print in 2021 in Lancet Global Health (37) and final form in 2022. The analysis revealed the costs are modest compared to current government spending on health and WASH and serve an important basis for advocacy and investments efforts.

Training and capacity

- With RegNet, the WHO Regional Office for Europe, AMCOW and UNICEF, as well as other conferences, WHO conducted training and sensitization on the Guidelines for sanitation and health (38).

- Sanitation safety planning training, as recommended in the Guidelines, also was a major focus, with training being held with regional regulators’ networks in east and southern Africa and Latin America, and with the WHO country office in Nigeria.

- In addition, WHO worked with UNICEF to train UNICEF staff on safely managed sanitation approaches. The online event, held in October and November, increased understanding of the health rational and definitions for safely managed sanitation in different contexts, embedding SMS in national policy, programs, standards, regulations and plans, and assessment tools for use at national and local level. Building on course content, WHO also
initiated development of a related course for publication during 2022 on the WHO learning platform OpenWHO (39).

- Reinforced by the Global strategy on water, sanitation and hygiene to combat neglected tropical diseases 2021–2030 (40) published by WHO in 2021, WASH-NTD Toolkit (41) training was completed in East Africa and South Asia as part of WHO’s engagement in the NTD NGO Network (NNN) WASH Working Group and the Ascend East Africa and South Asia programme funded by the United Kingdom of Great Britain and Northern Ireland. The series covered the toolkit, and the experiences of countries in using it, enabling participants to promote and lead WASH and NTD coordination at the national and subnational levels. A summary report (42) is available.

- In July, more than 80 people in 35 countries joined a virtual meeting to hear from national leaders on how governments are advancing hand hygiene at webinar convened by the Hand Hygiene for All (HH4A) initiative on its one-year anniversary.

- Following a comprehensive ‘listening’ and diagnosis exercise with national professional officers, WHO initiated a major effort to improve WASH capacity and collaboration across the three levels of the organization, with an initial focus on supporting WHO country offices, which often have limited staff dedicated to WASH. The aim is to improve capacities to coordinate technical assistance on WASH with Health Ministries and key partners, and to facilitate deeper understand of WHO WASH normative guidelines, monitoring activities and implementation tools.

“Handwashing is one of the most effective ways to prevent the spread of COVID-19 and other infectious diseases, yet millions of people across the world lack access to a reliable, safe supply of water. Investment in water, sanitation and hygiene must be a global priority if we are to end this pandemic and build more resilient health systems.”

- Dr Tedros Adhanom Ghebreyesus, WHO Director-General
Strategic context 2021

**WASH work is a pillar of WHO’s Environment, Climate and Health (ECH) Department within the Healthier Populations Division, and achievement of WASH outcome indicators on drinking-water and sanitation are essential to WHO meeting its triple billion target from the WHO Thirteenth General Programme of Work 2019–2023 (GPW 13).**

As reported during the first pandemic year of 2020, **WHO’s team continued to adapt to pandemic realities through virtual leadership, training and guidance**, much of it guided by the experiences of the previous year. This meant continued engagement with colleagues in the WHO health emergency programme, and in departments dealing with quality of care; patient safety; health financing; data analytics and delivery for impact; maternal, newborn and child health; infection prevention and control; antimicrobial resistance; neglected tropical diseases; nutrition; food safety; and tropical disease research and training.

Despite the ongoing pandemic, **WHO grew its work within the WASH team and through increased mainstreaming of WASH at leadership levels in WHO or within other WHO health programmes**. For example, with respect to advocacy and leadership, with WASH featuring in numerous speeches of the Director General or within efforts to improve action on WASH at country level, within the **triple billion targets**, and on improving WASH in health care facilities, including the incorporation of climate resilience and a focus on health care waste in facilities. The publication of the **State of the world’s hand hygiene** report, as with **State of the world’s sanitation** the year before (and augmented with new translations in 2021), continued to be **useful tools to enlighten and to galvanize political prioritization and funding**. These two reports, useful both through the recommendations they provide and the advocacy-friendly content they include, will be complemented in 2022 by State of the world’s drinking water, preparation of which began in 2021.

WHO followed up on its 2020 COVID-19 focused efforts (launch and coordination of the Hand Hygiene for All global partnership; rapid production of **interim guidance**) with work to develop additional interim guidance on **Environmental surveillance for SARS-COV-2 to complement public health surveillance**, published in 2022. On SDG 6 monitoring, WHO retained its authoritative role (WHO monitors SDG 6.1, 6.2, 6.3 along with 6a and 6b and SDG 3.9.2) and associated detailed reporting through JMP, GLAAS and WASH accounts production.

**Leveraging leadership**

WHO’s work continues **to engage strongly to leverage WASH-health partnerships**, and there are many examples of strong collaboration and partnerships also at the country level working with key WASH partners across all areas of work. Examples include engagement with the UN-system and UN-Water, including at country level to promote SDG progress through the **SDG 6 Acceleration Framework**, country participation in the
WHO/UNICEF Hand Hygiene for All partnership, country engagement, including through WASH FIT and the country progress tracker in the WHO/UNICEF WASH in health care facility movement, country level partnering with UNICEF, partnering on health care waste with The Global Fund to Fight AIDS, Tuberculosis and Malaria, International Monetary Fund and UNDP, and partnering with key WASH NGOs, like WaterAid and World Vision, on WASH implementation.

In response to the ongoing COVID-19 pandemic, WHO managed or initiated partnerships like the Hand Hygiene for All initiative to promote handwashing in all settings, and a network of practitioners monitoring SARS-CoV-2 in wastewater. WHO continued to strengthen strategic partnerships with UNICEF, the World Bank and regional development banks and contributed to partnership platforms such as UN-Water, Sanitation and Water for All, the Sanitation and Hygiene Fund and Health Care Without Harm, and by convening multi-stakeholder WASH knowledge sharing at global events such as World Water Week. Monitoring work has been extended through substantive coordination with the UN-Water Integrated Monitoring Initiative of SDG 6. Certain partners were engaged to secure outreach to vulnerable populations, including the Rural Water Supply Network and various NGOs working on neglected tropical diseases. New partners were also engaged to prevent emergence and spread of AMR through the environment (tripartite +, including UNEP, FAO, OIE).

WHO continued to drive for WASH-driven health impact in two ways: 1) to influence healthier policy making through WHO norms directed at WASH/environment authorities and stakeholders and 2) to mainstream WASH into health sector decision-making to prevent diseases. Normative work has been effective through WASH and health messaging and partnerships named above, while monitoring work has focused on improving data analysis on areas that are most important for health, including analysis on inequalities (e.g. sanitation workers, JMP data collection, presentation and explanation of WASH burden of disease, on financing, and in health care facilities). At the regional level, a good example is the African Leaders Summit, which included three WHO-led preparatory training sessions on the WASH in HCF country progress tracker, and where First Ladies advocated strongly in support of implementation the World Health Assembly resolution on improving access to water, sanitation and hygiene services in health care facilities. First Ladies and implementers from Africa came together with over 300 participants to discuss progress, challenges, investment needs and next steps in providing universal WASH services in all health care facilities.

Producing global goods

Global public goods, such as guidelines and technical reports, are central to WHO’s work, though the reallocation of resources to develop COVID-19 related publications did slow delivery of some products, including WASH and IPC guidance, the State of the world’s hand hygiene report, and the Global analysis of health care waste in the context of COVID-19, as well as COVID-19 related delays impacting country capacity to collect data such as the GLAAS report. In the latter case, partners were informed to enable a smooth launch of the report in 2022. Despite this and some delays on drinking-water quality related norms, the majority of technical products were completed and many documents published that were not in the original plans, such as translated versions of the State of the world’s sanitation.
The Global analysis of health care waste, prepared in 2021, found poor waste management has the potential to affect healthcare workers through needlestick injuries, burns and exposure to pathogenic micro-organisms.

**Technical support**

WHO stayed agile and adaptable to meet country needs by providing and even expanding differentiated support through virtual modalities. For example, training on WASH monitoring and norms has been adapted to the country capacity depending on familiarity with material. Examples include bespoke training on WASH accounts, sanitation safety training, including through regional networks of water and sanitation regulators and through partners like UNICEF. Huge efforts were made in 2021 to provide training on WASH in health care facilities and disease-specific programming requiring WASH such as NTDs.

The effectiveness of WHO technical assistance is assessed post-training and is generally regarded as high. While budget cuts initially disrupted some training on WASH monitoring, WHO has been able to improve the timeliness of response for technical assistance and quality because of investments in virtual modalities; in addition, more regular and systematic three-level (headquarters – regional office – country office) dialogue has improved. Technical support has transitioned to sustainable WASH “systems” strengthening with support for, e.g. water safety plan auditing, regulation, surveillance and WASH planning.

**Gender equality, disability and social inclusion (GEDSI)**

2021 saw completion of a review of monitoring gender and WASH with Emory University, and the sanitation worker initiative gained momentum and visibility via a WHO/ILO/WaterAid/World Bank/SNV partnership, including through a global survey to develop a WHO-led research agenda. **WASH FIT has a new focus on GEDSI** to assess and promote access for women, children and ethnic minorities and how these vulnerable groups are included in the planning and management process. WASH FIT trainings include dedicated training modules on gender equality and equity.

**WHO monitors and analyzes numerous indicators of gender equality in WASH through GLAAS and JMP.** JMP presents these through country inequalities files and publication of new indicators on menstrual health. GLAAS findings were incorporated into the UN-Women gender snapshot SDG 6b. As well, the small drinking-water systems guideline when published in 2022 will by its very focus be addressing a disadvantaged group. Many project activities and priorities, especially those related to WASH in HCF strengthening, are intended to address and overcome the disadvantage experienced by women and girls and those living with disabilities and are informed by strong evidence of needs and best practice.
Dual cross-cutting challenges and opportunities: WASH, climate and health, and integration of WASH in the broader national health context

An ongoing challenge – and opportunity – for WHO is further mainstreaming climate resilience into its work on norms, monitoring and tools. Recent and compelling evidence, along with newly identified good practices, and the evolving roles and responsibilities of external support agencies, necessitates taking stock of WHO’s actions at the interface of WASH, climate change and health to optimize future actions. WASH, as one of the cornerstones of public health, is therefore critical within the building of resilience in the face of climate change. The Working Group II contribution to the IPCC Sixth Assessment Report noted, among other findings, that “climate change is expected to compromise WASH services, compounding existing vulnerabilities and increasing water-related health risks (medium evidence, high agreement). Therefore, additional research is required on disease-, country- and population-specific risks due to future climate change impacts.” To that end, WHO initiated a process in 2021 for publication in 2022 of a WHO WASH, Climate Change and Health Strategy. The strategy will further articulate future areas of work for WHO on climate change and WASH, with recommendations for both mainstreaming climate resilience into WHO’s work and initiating related activities and evolving further the existing stand-alone interventions to reduce WASH and climate related health-risks – for example, water safety planning, sanitation safety planning and climate resilient health care facilities.

Climate-related challenges, like WASH challenges in general, manifest themselves at the national level, so a key issue for WHO will be how to strengthen WASH work through WHO country offices to more effectively integrate WASH in the larger national health context, systems and thinking. In 2019, through the Water, sanitation, hygiene and health: A primer for health professionals, WHO articulated a case for the centrality of WASH to human health and well-being, and how poor WASH services also weaken health systems, threaten health security and place a heavy strain on economies. Recent experiences – cholera outbreaks in Niger and Nigeria in 2021, and the Ukraine crisis in early 2022 – point out the clear need for systematic coordination and integration to respond to the water, sanitation and hygiene needs of people. But even routine development has long been known by WHO and others as needing greater coordination and integration between ministries responsible, for example, for health and water and sanitation – as well as those responsible for trade and development, infrastructure, environment and education, to name a few. In 2022, WHO will deepen efforts to understand and capacitate WHO country offices to work in a cross-cutting, cross-sectoral manner. This will include an analysis of the kinds of technical and financial support it offers to country offices, on its own and in collaboration with other units in the Environment, Climate Change and Health Department.
Monitoring results and impacts

WHO’s work on WASH is consistent with WHO’s vision of its transformation to a more effective and efficient organization, delivering results at country level, and promoting healthier populations by addressing the determinants of health. 2021 was the fourth year of implementation of WHO’s 2018–2025 WASH strategy, outlining WHO WASH’s vision “to substantially improve health through the safe management of water, sanitation and hygiene services in all settings”.

The WHO WASH strategy discusses the positioning of WHO’s work within the SDG framework and the objectives presented in the GPW 13, as well as WHO’s comparative advantages in WASH. The strategy is summarized in a strategic framework complemented by a theory of change (see Annex 1). The strategy and a log frame provide a robust basis for monitoring both outputs and outcomes. Annual progress and results are summarized in a completed log frame and report, including WHO WASH annual reports for 2018, 2019 and 2020. This document covers 2021, with achievements in each of the WHO WASH results areas presented through a technical narrative and quantitative results against the log frame milestones. WHO achieved or surpassed 24 of 26 (92%) of the 2021 output milestones, with one delayed due an external partner and another paused at donor request.

WHO Organization-level monitoring

WASH results and impacts are tracked and measured as elements within the WHO’s Thirteenth General Programme of Work (GPW 13) and corresponding results framework covering 2019–2023, with the most recent corporate assessment covering the biennium 2020-21. The framework aims to reflect the measurable impact of WHO on people’s health at the country level, and includes three components: impact measurement, the output scorecard and qualitative country case studies.

The foundation of the impact measurement is based on health-related SDGs and measures progress through 46 outcome indicators, the triple billion targets, and Healthy Life Expectancy (HALE). Triple billion targets are composite indices, to be reached initially by 2023 but now extended to 2025:

- One billion more people benefitting from universal health coverage (UHC).
- One billion more people better protected from health emergencies (Health Emergencies Protection).
- One billion more people enjoying better health and well-being (Healthier Populations).

Safely managed sanitation and safely managed drinking-water are key contributors to the Healthier Populations billion, and basic sanitation is counted towards the UHC billion. Through cross-cutting
Fig. 1: the critical importance of safely managed sanitation and safely managed drinking-water services to country progress towards the Healthier Populations billion target set by WHO within GPW 13.

health programme linkages, the WASH work also contributes to GPW 13 targets related to AMR (deaths from sepsis caused by resistant organisms), the number of persons in fragile settings with access to essential health services, as well as maternal and child mortality (which are also components of the UHC Billion). The integration of WASH indicators into the GPW 13 impact measurement helps drive prioritization of WASH in regional and country workplans.

**Fig. 1 above highlights the critical importance of safely managed sanitation and safely managed drinking-water services, to country progress towards the Healthier Populations billion.** The blue bars in the left-hand view show projected progress if historical rates of progress are maintained and show over 800 million people (double-counting not removed) globally having healthier lives by 2025 due to improvements in water and/or sanitation services. The yellow bars show an estimate of what progress is needed to be on track to achieve the Sustainable Development Goal (SDG 6) to ensure universal access to safely managed drinking-water and sanitation services by 2030 – requiring expansion of access to safely managed drinking-water services to over 800 million additional people, and to safely managed sanitation services to over 1.1 billion additional people, by 2025. The red and green bars in the right-hand view indicate the number of member states with negative progress, no progress, positive progress, or no data at country level between 2018 and 2020.

The countries with negative or no progress represent opportunities to promote a shift toward implementing healthier policies and actions; for example, through existing WHO tools such as sanitation safety planning (SSP) and water safety planning (WSP). Many such tools for WASH, and other environmental health interventions, are highlighted in the *2021 Compendium of WHO and other UN guidance on health and environment.*

Additionally, a new scorecard approach for output measurement is also part of the GPW13 results framework, as a way to improve WHO’s accountability for delivering on its mandate and commitments to Member States. The scorecard assesses both technical and enabling outputs, capturing six assessment dimensions, each with multiple attributes, related to the following:
As in 2020, project activity in 2021 was impacted by the coronavirus disease (COVID-19) pandemic, which continued to divert human and financial resources. The COVID-19 pandemic has raised awareness of the critical role of WASH in public health protection, creating political will to improve, for example, WASH in HCFs and fast-tracking many project activities. On the other hand, abrupt shifts in shorter-term government priorities, reduced government counterpart availability and COVID-19 impacts

Leadership function at all levels;
2. Delivery of the priority global public health goods that are critical to achieving outputs;
3. Delivery of technical support to achieve impacts in countries;
4. Value for money based on considerations of ethics, effectiveness, efficiency, equity and economy;
5. Integration of gender, equity and human rights; and
6. Results: achievement of early indications of success (leading indicators, which for WASH is the number of countries with policies on WSP) in ways that influence impacts.

The WASH team at WHO headquarters (i.e. the water, sanitation, hygiene and health unit, or WSH) completed the required self-assessment based on a list of criteria for attributes identified for each of the dimensions. The results, for 2021 and 2020, presented graphically in Fig. 2, were collated in February 2022 as part of the reflections on 2021 performance and opportunities for improvements. The results are aggregated under the output 3.1.2 “Countries enabled to address environmental determinants of health, including climate change” in WHO’s Mid-term results report for 2021. Results for WHO headquarters and the regions, together with narrative explanations, can be accessed through the report or directly through this link.

A main message from comparing 2020 to 2021 internal self-assessment is that delivery of global goods was reduced, primarily due to COVID-19 related delays in the launch of major publications or processes. Technical support was higher, likely representing efficiency improvements in online training after some trial and error during the first pandemic year of 2020. Gender equity, human rights and disability saw a minor increase – examples highlighted in this report represent the incremental progress in gender-sensitive related programming or integration within programmes or tools like WASH FIT.

Achieving impact: keys to success and lessons

COVID-19 impacts

As in 2020, project activity in 2021 was impacted by the coronavirus disease (COVID-19) pandemic, which continued to divert human and financial resources. The COVID-19 pandemic has raised awareness of the critical role of WASH in public health protection, creating political will to improve, for example, WASH in HCFs and fast-tracking many project activities.

On the other hand, abrupt shifts in shorter-term government priorities, reduced government counterpart availability and
significant lockdowns delayed implementation of numerous planned activities in thematic areas such as drinking-water surveillance, where country plans to finalize WSP policies and regulations were impacted by COVID and other political circumstances. Other examples: laboratory testing due to COVID-related delays in sample shipping, and lengthy dispute resolution processes with testing equipment manufacturers. WHO staff at all levels were given additional COVID-related work responsibilities outside of water quality (e.g. Infection Prevention and Control), while some were re-assigned to support the emergency response. COVID and funding challenges necessitated that the GLAAS cycle reporting deadline be extended to April 2022.

However, COVID-19 has also resulted in some cost savings. These savings were achieved because of increased political will to improve WASH in HCFs (and hence less funding needed for WASH in HCF advocacy and WASH-health coordination), and because of travel savings realized by holding events (e.g. trainings, meetings) virtually. For example, lessons learned from virtual trainings in 2020 were applied in 2021, and further adaptions to virtual training approaches were explored successfully (e.g. use of virtual site visits for on-line trainings).

GEDSI and climate
A lesson learned from the WSP experience is that guidance materials that flag GEDSI (Gender Equality, Disability and Social Inclusion) and climate considerations at all relevant points in the process (e.g. team formation, hazard identification, risk assessment, improvement planning) greatly supports user understanding and uptake of recommendations as compared to packaging this guidance together as a “bolt on” consideration.

“Ramping up action to ensure universal access to hand hygiene facilities is one clear example of the complementarity of getting out of the pandemic, preparing for the next one, and meeting the Sustainable Development Goals — and it is certainly a requirement of universal health coverage.” - Dr Maria Neira, Director of the Department of Environment, Climate Change and Health, WHO.

The latest GLAAS survey includes numerous questions related to GEDSI and climate change resilience in policy and practice; the draft State of the world’s drinking-water report (to be published in 2022) includes dedicated sections on equity and climate; and the Global analysis of health care waste in the context of COVID-19 addresses climate change resilience as well as mitigation through environmentally friendly health care waste management practices. Finally, WHO headquarters has continued to target vulnerable groups through the settings prioritized for global guidance, e.g. more guidance on implementation of WASH FIT in primary health centres, and rural water supply systems as the focus of efforts related to field testing kits, sanitary inspection forms and the forthcoming Guidelines for small drinking-water supplies.

Strengthening country offices
Country offices, supported by their regional counterparts, are on the frontlines of WASH work at the national level, but too often WHO headquarters’ support and technical advice is ad-hoc and responsive-driven, as country office technical support requests are not guided by clear Environment, Climate Change and Health Department & WASH programming and priorities in country workplans. This experience incentivized efforts by WHO to
As a norms-setting organization, strategic partnerships with organizations with strong country programmes is tremendously important. The reach and impact of WHO’s norms and monitoring efforts are strengthened through strong partnerships with UNICEF, implementing NGOs like WaterAid and World Vision, and made more efficient through a harmonized approach within UN-system actors coordinated by a strong UN-Water.

Working in partnership and through other sectors

As a norms-setting organization, strategic partnerships with organizations with strong country programmes is tremendously important. The reach and impact of WHO’s norms and monitoring efforts are strengthened through strong partnerships with UNICEF, implementing NGOs like WaterAid and World Vision, and made more efficient through a harmonized approach within UN-system actors coordinated by a strong UN-Water.

Globally, environmental pollution and other environmental risks – including inadequate or absent WASH – cause 24 per cent of all deaths, which are largely preventable. A shift towards healthier policies and actions and the promotion of healthy sustainable personal and societal choices will reduce environmental health risks. To support acceleration of action on environmental health in countries, where representatives of WHO country offices occupy natural and central leadership and operational roles, WHO, through the Environment, Climate Change and Health Department and in collaboration with the Division of Data, Analytics and Delivery for Impact and the regional offices, initiated work on a three-level partnership aimed to reinforce and support quicker, more impactful efforts by WHO at the national level. When fully initiated in 2022, it will provide focused, coordinated support, and delivery of support (financial, human resource, technical) to accelerate progress in ‘trailblazer’ countries on the GPW 13 indicators which are off track, including those for water and sanitation through the kinds of actions identified in the Compendium of WHO and other UN guidance on health and environment published in 2021, such as the implementation of water and sanitation safety planning.

THE GLOBAL TASKFORCE FOR WASH IN HEALTH CARE FACILITIES

A global taskforce for WASH in Health Care Facilities was established by WHO, with support from UNICEF and key partners, in early 2021 to strengthen visibility, commitments and strategic investments in WASH in HCF. The taskforce met four times during the year, featured country presentations from five ministries of health (Ghana, Liberia, Tajikistan, Mozambique, Malawi) and was effective in exploring challenges, insights and engaging members in crystalizing needs and key, collaborative actions for improving WASH in health care facilities.
Capacity and collaboration across the three levels of WHO

In June 2021, WHO activated a package of work titled Strengthening capacity and collaboration on WASH and health within WHO at all three levels - headquarters, regional office and country office - with an initial focus on National Professional Officers (NPOs). Through regional virtual consultations between 8 June and 12 July, WHO listened and learned, about WASH activities, challenges and opportunities at the WHO country office level. This country-level input will inform further work in 2022 to map, organize, host, and signpost the existing WHO WSH ‘knowledge base’ to facilitate easier access for country offices and others, and support the capacity needs articulated during the consultations. The consultations are a starting point for an ongoing dialogue aimed to provide NPOs with additional targeted technical support for working on WASH, and for placing WASH more strategically within WHO’s work at all three levels.

A series of thematically self-paced WASH training packages were developed for use by WHO country offices and partners, introducing key WHO guidelines, monitoring activities, implementation tools, and recommendations for action.
**Key accomplishments**

Results on programmatic outcomes

The below tables present the two programmatic outcomes for WASH and related indicators, baselines, milestones and results. Further explanation can be found in the detailed reporting under WHO results areas, which follow the Outcome tables.

### Programmatic OUTCOME 1: National and International WASH and health programmes, regulations and initiatives are based on normative guidance produced by WHO. Risk-based approaches are adopted at national level.

<table>
<thead>
<tr>
<th>Outcome 1 indicators</th>
<th>Baseline 2019</th>
<th>Milestone 2020</th>
<th>Results 2020</th>
<th>Milestone 2021</th>
<th>Results 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Number of countries with WSP policies (using risk-based approaches).</td>
<td>61 countries</td>
<td>No target 2020 (2021 target is 65)</td>
<td>NA</td>
<td>65</td>
<td>Partially achieved: 64. Country plans to finalize WSP policies/regulations were impacted by COVID-19 and political circumstances, while there were delays in WHO’s key mechanism for monitoring, such as the GLAAS survey.</td>
</tr>
<tr>
<td>1.2 Number of countries that have or are implementing WHO sanitation guidelines and/or SSP (using risk-based approaches).</td>
<td>40 countries</td>
<td>No target 2020 (2021 target is 47)</td>
<td>NA</td>
<td>47</td>
<td>Surpassed: 94</td>
</tr>
<tr>
<td>1.3 Evidence of international partners integrating WHO guidelines/information in their programming approaches.</td>
<td>Examples in 2019 annual report</td>
<td>Examples documented</td>
<td>Examples</td>
<td>See examples in 2021 annual report.</td>
<td></td>
</tr>
</tbody>
</table>

### Programmatic OUTCOME 2: National and international WASH and health programmes and initiatives are informed by monitoring data produced by WHO.

<table>
<thead>
<tr>
<th>Outcome 2 indicators</th>
<th>Baseline 2019</th>
<th>Milestone 2020</th>
<th>Results 2020</th>
<th>Milestone 2021</th>
<th>Results 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Number of countries that are implementing national standards and other elements of the World Health Assembly resolution on WASH in health care facilities.</td>
<td>30 countries</td>
<td>60 countries</td>
<td>Partially achieved: 47 countries documented + additional countries.</td>
<td>90 countries</td>
<td>Partially achieved: 58 countries part of tracker, of which all are implementing 2 or more practical steps.</td>
</tr>
<tr>
<td>2.2 Number of countries with national targets in alignment with SDG criteria for safe management of excreta along the sanitation chain.</td>
<td>29 countries</td>
<td>No target 2020 (2021 target is 34)</td>
<td>NA</td>
<td>34</td>
<td>Data not yet available.</td>
</tr>
<tr>
<td>2.3 Number of countries with national targets in alignment with SDG criteria for safe management of drinking-water.</td>
<td>61 countries</td>
<td>No target 2020 (2021 target is 70)</td>
<td>NA</td>
<td>70</td>
<td>Data not yet available.</td>
</tr>
<tr>
<td>2.4 WASH partner publications, informational materials and websites use WHO-generated WASH data.</td>
<td>Examples in 2019 annual report</td>
<td>Examples documented</td>
<td>Examples</td>
<td>See examples in 2021 annual report.</td>
<td></td>
</tr>
</tbody>
</table>
Experiences in 2021 showed that there are opportunities to better integrate and streamline various WHO risk management approaches for drinking-water quality and safety, to both simplify and clarify for field-level use. One way to do this, for example, is by integrating key WSP (and SSP) steps into WASH FIT for greater water quality risk management in health care facilities without requiring a separate WSP.

The updated WASH FIT guide partially addresses this by promoting water safety planning in HCFs for more comprehensive water supply system management and incorporating use in WASH FIT of the new sanitary inspection forms for WSPs. WHO is
also collecting experiences from countries that have worked with both WSPs in HCFs and WASH FIT (e.g. Philippines) to learn how to more fully integrate these two approaches rather than promoting two approaches for already overstretched HCF staff. In addition, there are opportunities to better integrate climate and environmental messaging throughout guidance documents (e.g. WSP manual, WASH FIT) rather than approaching these as “bolt on” additions, adding to the perception that it is separate or additional work.

In 2021 WHO published Toxic cyanobacteria in water - Second edition, which presents the state of knowledge on the occurrence of cyanobacteria and cyanotoxins, as well as their impacts on health through water-related exposure pathways. A virtual launch event in May 2021 had over 200 registered participants. Significant progress was made towards the early 2022 publication of the Guidelines for drinking-water quality: Fourth edition incorporating the first and second addenda. This included publication in 2021 of Chemical background documents on asbestos, manganese, nickel and silver, which will inform the development of the guidelines. Further, substantive progress was made on a technical brief on managing lead in drinking-water.

Targeted technical support was provided to Ethiopia, Bangladesh and Nepal for continuation of national scale-up of climate resilient water safety planning, to Indonesia in the development of their national WSP manual and associated training materials, and to Bhutan for surveillance programme strengthening, including integration of sanitary inspection forms into their national information management system and in planning WSP audit pilots.

2021 also saw continued updates to the small systems guideline. These updates included revisions based on feedback from a working group and end user consultation on guidance around water quality monitoring; a targeted peer review process; and finalization of a programme of feedback on eight sanitary inspection packages involving desk-top and field review from 15 countries. Also, there was continued sensitization on the guidelines via engagement with the Rural Water Supply Network and RegNet, for example, while a guidance document to support selection of water quality field test kits was drafted. Technical ad hoc support was provided to countries and regions, including:

- South-East Asia Region training on climate resilient water safety planning and regional guidance package on audit scheme development, with strengthening to be applied in Bhutan, Indonesia, Philippines and Viet Nam in 2022,
- Eastern Mediterranean Region training materials on surveillance,
- Region of the Americas training on water quality issues during volcanic eruptions, and
- Direct support to countries including Ghana, Liberia, Mali, Madagascar and the Philippines.

Collaboration remained essential to the WHO drinking-water quality work in 2021. This included, for example, providing strategic and technical input to the Asociación de Entes Reguladores de Agua Potable y Saneamiento de las Américas (ADERASA) and the East and Southern Africa Water and Sanitation (EASAWAS) Regulators Association, on the review of regulatory frameworks in Latin America and the Caribbean, and Africa, respectively. WHO also provided leadership on
Examples of 2021 impacts

• New surveillance protocols developed in Bhutan and the Philippines, including new surveillance elements reflecting WHO’s risk management guidance (sanitary inspections in Bhutan sanitary inspections and WSP auditing in the Philippines).
• WSP programmes were strengthened in Indonesia and Viet Nam, including integration into standards, strategies and systems. In Indonesia, the national decree mandating WSPs progressed (final approval delayed by government restructuring); a national task force on drinking-water (covering WSPs) was established; and the national WSP roadmap was launched, including a target to implement WSPs in 190 districts/cities by 2024 and to put in place the WSP audit system in 2023. In Viet Nam, the strategy for rural water supply and sanitation for 2021-2030 and vision to 2045 was approved by the Prime Minister, covering WSPs.
• Supported the Philippines in the selection of suitable field-testing equipment for national use.
• Supported technical content development on WSP audit scheme development (or strengthening) in Bhutan, Indonesia, Philippines and Viet Nam.
• Technical guidance and financial support provided to Liberia for water quality monitoring to support WSP implementation, Mali for development of WSP pilots, and Madagascar, with planning for development of a national strategy for drinking-water quality.
• Completion of peer-to-peer coordination support to Ghana on operationalization of water safety planning for the national utility and targeted technical support on Ghana’s national water policy.
• As part of efforts to strengthen capacities of water quality laboratories, WHO contributed funds towards the survey and assessment of laboratories in the region of Latin America and the Caribbean. The objective of the survey was to determine existing capacities for water and wastewater quality testing, and identify barriers and enablers for effective risk-based management of water and sanitation systems. The survey was conducted in 30 countries across the region, and included laboratories of the ministries of health/directorates of environmental health; and national water and wastewater quality laboratories.
• Supported technical content development for a regional training for nine countries in the South-East Asia Region on climate-resilient water safety planning (Bangladesh, Bhutan, India, Indonesia, Myanmar, Nepal, Sri Lanka, Thailand, Timor Leste).
• Water safety plan piloting has been undertaken by UNICEF in countries; for example, in Jordan this included a focus on resilience to climate impacts, with this

USING WSP IMPROVEMENT PLANS TO LEVERAGE FUNDING

In Ethiopia, six urban water utilities (Assosa, Itang, Dangilla, Woliso, Debere Tabor and Meki) mobilized resources from various sources to complete priority improvement works that were identified through the climate-resilient WSP process. The sources of funding included internal revenue and national development funds, as well as international partners such as UNICEF, International Rescue Committee (IRC) and Japan International Cooperation Agency (JICA).
work having potential to be a showcase for water safety planning in the region.

- **WHO completed evaluations of 6 household water treatment products**: a continuation of WHO's work since 2014 to independently assess the microbial performance of HWT technologies under the International Scheme to Evaluate Household Water Treatment Technologies (the Scheme). To date, most products of global relevance are now evaluated.
- WHO publications translated by partners: *Climate-resilient water safety plans* into French, *WSP audit guide* into Japanese, and *Chemical mixtures in source water and drinking-water* in Russian.
- Partners mainstreaming WHO guidance on WSPs into their work programmes: International Water Association technical briefs *Water Safety Planning to improve public health, water security and climate resilience* and *Engaging vulnerable groups in the implementation of CR WSP*.

**Regional and national activities**

The Regional Office for Europe supported the European Commission to adopt the revised EU Drinking Water Directive that impacts regulations in 27 Member States. The Directive now features requirements for a fully-fledged risk-based approach in water supply management and surveillance and promoting access to drinking-water for all in all settings. This gives significant leverage for WSP uptake in the European Union Member States and beyond. In the South-East Asia Region, a comprehensive guidance package to support country-led workshops to develop or advance national schemes for regulatory WSP auditing was developed, as were virtual training materials on climate-resilient WSPs and climate-resilient WASH (covering water, sanitation, health care facilities). The Regional Office for Africa also supported climate resilient water safety planning implementation in Ethiopia, Mali, Mozambique, Malawi and Sierra Leone, as well as support for water quality policy updating in Madagascar, Guinea and Mauritania. The Region of the Americas trained 18 countries in climate-resilient water safety plans and sanitation safety plans, and conducted virtual courses with 2025 students. It also developed an online course Household Water Treatment and Safe Storage.

In Lao People's Democratic Republic, climate-resilient WSP training and monitoring support took place at eight urban and 10 district level water suppliers, and water quality testing capacity was strengthened. Nepal developed policy documents on climate-resilient WSPs, while in Ghana, training was conducted on household water treatment systems by the Ministry of Sanitation and Water Resources in collaboration with the University of Ghana, where participants were oriented on the International Scheme to Evaluate Household Water Treatment Technologies. In addition, Ghana supported the drafting of microbiological standards for evaluating the performance of household water treatment technologies. In Zambia, national water quality monitoring was supported, and the country office delivered integrated WASH activities in collaboration with other institutions and the UN family on provision of household water treatment and safe storage, and mapping of water infrastructure.
## Output 2 – Sanitation and Wastewater: Risk management approaches based on up-to-date guidelines for sanitation, safe use of wastewater, excreta and greywater, and recreational water are available with tools to support implementation and dissemination to national and international WASH partners.

<table>
<thead>
<tr>
<th>Output 2 Indicators</th>
<th>Baseline 2019</th>
<th>Milestone 2020</th>
<th>Results 2020</th>
<th>Milestone 2021</th>
<th>Results 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2 Global guidance documents and training materials to support country level implementation of WHO Sanitation and Health Guidelines and Sanitation Safety planning (SSP).</td>
<td>2 documents</td>
<td>Digitized inspection forms published.</td>
<td>Achieved: Published on mWater platform and tested.</td>
<td>Sanitation Guidelines training package completed, SSP manual V2 published, pathogen fact sheets published.</td>
<td>Achieved: Guidelines training package completed, SSP training platform completed, SSP V2 manual final draft and layout complete - launch Q1 2022, Pathogen fact sheet pre-final draft - launch Q2 2022.</td>
</tr>
<tr>
<td>2.3 Number of countries receiving technical support for implementation of WHO sanitation guidance and SSP (through technical cooperation, regional trainings, RegNet).</td>
<td>NA</td>
<td>No milestone for 2020.</td>
<td>Strong progress towards 2021 milestone: Three countries for SSP (Ethiopia, Nepal, Nigeria).</td>
<td>Sanitation regulators from 30 countries (RegNet) + 10 countries on SSP.</td>
<td>Achieved: Sanitation regulators from five countries joined RegNet; regional training workshops on SSP with regulators from 14 countries. SSP training for an additional 23 countries (5 in AFRO, 18 in PAHO).</td>
</tr>
</tbody>
</table>

At the midpoint of the SDG period, WHO has a strong and comprehensive set of sanitation guidelines, tools and associated training packages as well as strong relationships with key partners, including UN agencies and non-governmental organizations, and regional entities.

However, across many of these partnerships, as noted in last year’s annual report, the level of understanding of the definitions and transitions needed to move from Millennium Development Goal thinking (focused on ending open defecation) to SDG service delivery approaches for safety managed sanitation, is not well understood across all national governments and implementing partners working on sanitation. Furthermore, within
WHO regions and country offices, sanitation (outside of data and health care facilities settings) is not well understood or prioritized. There remains a clear need to strengthen capacity for WHO country level work on sanitation; in particular, this involves working in closer coordination with UNICEF country offices under their new Sanitation Game Plan and developing joint system strengthening approaches for sanitary inspections to maintain open defecation free status, remediate systems and also generate much needed data on on-site sanitation services for SDG 6.2 progress reporting.

This needs to include headquarters backstopping on training and financial support (consistently chronically low across the sector) for implementation in priority countries. Given that WHO’s capacity for country support will always be small relative to major financing partners, scaling up engagement with regulators through RegNet will be a priority channel for disseminating and scaling WHO sanitation guidelines and tools as well as exchange of best practice among members.

Nonetheless, despite ongoing travel restrictions due to COVID, WHO’s package of sanitation-related activities focused on reaching as many sanitation stakeholders as possible to sensitize, train and support implementation of safely managed sanitation as described in the Guidelines for sanitation and health, Sanitation safety planning and Sanitation inspection package forms. Collectively, this outreach and training reached some 500+ professionals.

Related to antimicrobial resistance, publication of the Technical brief on water, sanitation, hygiene (WASH) and wastewater management to prevent infections and reduce the spread of antimicrobial resistance (AMR) in late 2020 cemented the tripartite WHO/FAO/OIE collaboration on environmental dimensions of AMR and helped to bring UNEP into a quadripartite collaboration on AMR and environment under the Multi Party Trust Fund (MPTF). In 2021, this four-agency collaboration clarified respective roles among agencies, initiated global awareness raising and capacity-building for national action plan (NAP) teams using the technical brief as a point of departure, and supported the Global Leaders Group on Antimicrobial Resistance on their statements and call to action on reducing antimicrobial discharges from food systems, manufacturing facilities and human health systems.

In January 2021, WHO released the new Road map for neglected tropical diseases 2021–2030, which for the first time included specific WASH targets and indicators for disease prevalence (rather than number of cases treated), marking an import strategic shift to a more preventive and sustainable approach (as opposed to a treatment centred approach) at the highest level. The companion Strategy on WASH and NTDs 2021–2030 was published soon after the roadmap to guide cross sector collaboration between WASH and NTD actors. Specific training on the WASH and NTD Toolkit was offered for the African Region and Americas Region.

The year also marked an important breakthrough on identifying priority districts for WASH-NTD collaboration with the development of overlay maps for the African Region countries showing areas with high NTD prevalence and low WASH coverage on the
ESPEN-NTD portal, with Ethiopia’s WASH and Worm overlays showing the regions correlating strongly between WASH access and prevalence of soil-transmitted helminths and schistosomiasis, for example.

During 2021, wastewater surveillance for COVID rapidly transitioned from being a novel approach implemented by research agencies to become a tool used to support public health decision-making for COVID in over 50 countries. Demonstrated uses included early warning of increasing and decreasing trends, identification of outbreaks in places thought to be COVID-19-free, supporting risk communications and promotion of good behaviours, cost-effective targeting of diagnostic testing to hot spots, informing localized restrictions in pockets of (re-) emergence, targeting surveillance in vulnerable or high-risk settings, isolated communities, transport vessels, multi-day events and gatherings, as well as more recently for identifying known and novel variants and for biobanking for later retrospective analysis.

WHO has forthcoming guidance which will be published in 2022 that summarizes use cases, capacity and coordination needs to establish a credible programme, and analytic methods.

**WHO continued its focused efforts on behalf of sanitation workers and their working and living conditions by engaging in a number of activities in the spheres of research, policy and practice.** These included continued engagement as an organizational partner for the Initiative for Sanitation Workers, a collaborative partnership for global advocacy on sanitation workers together with ILO, WaterAid, World Bank and SNV. The partnership arranged the first Sanitation Workers Forum in November, where a global call for input to a WHO-led research agenda, was made, and the first Sanitation Workers awards were made. WHO also completed an updated systematic review and meta-analysis of occupational health outcomes among sanitation workers. Preparatory work was done for a 2022 launch of a partnership website, which will present progress and outputs of the initiative. WHO also presented on its own or with partners virtual webinars on sanitation worker at the World Water Week in Stockholm, WEDC, and UNC Water and Health conferences – leveraging much of the initial assessment in 2019’s Health, safety and dignity of sanitation workers.

Along with sanitation safety planning and local level sanitary inspection forms, a strengthened RegNet continues to be a key mechanism for supporting implementation of the Guidelines on sanitation and health and translation of these guidelines into appropriate national regulations and standards for sanitation services. Highlights for 2021 of the regulatory work included the addition of new members in RegNet and an updated Terms of Reference for the network. As well, training on sanitation safety
planning took place with regional regulators’ networks in east and southern Africa and Latin America. Working with partners, WHO and IWA issued a call to action on regulating inclusive sanitation; and with UNICEF WHO worked on establishing or reforming regulatory institutions. Finally, a Global overview of national regulations and standards for drinking-water quality, 2nd ed., was produced.

Examples of 2021 impacts
• 2021 highlighted the importance of robust risk-based regulation for sanitation services as part of a system strengthening approach towards professionally managed and regulated WASH service. Regulation is central to both the governance and data pillars of the SDG 6 Acceleration Framework in which regulatory data at the lower administrative level using tools such as sanitary inspection forms drives progress and also informs data needs for SDG progress tracking on safely managed onsite sanitation systems (SMOSS).
• Robust implementation of sanitation package activities in Nigeria supportive of shifting from an ending open defecation approach to safely managed sanitation and local level systems strengthening, and cholera prevention (see box, next page).
• The Guidelines for recreational water quality, setting out health-based targets for water quality, as well as best practice for surveillance, risk assessment and improved management and monitoring approaches that provide timely advice to water users, have been influencing regional and national bathing water legislation by providing the scientific and normative underpinning for revision of the European bathing water directive in 2022.
• WHO worked with implementation networks to synthesis evidence for WHO general COVID surveillance guidance and the forthcoming Environmental surveillance for SARS-COV-2 to complement public health surveillance – Interim Guidance.
• The environmental dimension of AMR remained high on the agenda through sustained engagement. The 2020 Technical brief on water, sanitation, hygiene and wastewater management to prevent infections and reduce the spread of antimicrobial resistance has resulted in it being well recognized as an important aspect of the fight against AMR at the highest political levels, including in the Global Leaders Group on AMR’s call to action and the G7 health ministers communique.
• An on-site sanitation meeting for the Parties to the European Protocol on water and health led to binding actions on onsite sanitation for the first time.
• Sanitation Inspection forms were digitized and tested on the mWater platform, leading to increased accessibility.
• State of the world’s sanitation, published in 2020 and bringing together the data on sanitation coverage and investment, and how it impacts health, economies and the environment, was made more accessible through published versions in Spanish and French.
• With RegNet, the WHO Regional Office for Europe, AMCOW and UNICEF, as well as at other conferences, WHO conducted training and sensitization on the Guidelines for sanitation and health.
• Safely managed sanitation training supported 265 UNICEF WASH staff global in their own preparation for the UNICEF...
Regional and national activities
The European Region spearheaded wastewater surveillance of SARS-CoV-2 and held expert meetings on on-site sanitation, and the African Region supported dissemination of translated versions of the State of the World’s Sanitation report. Serbia participated with JMP support in the implementation of the safely managed onsite sanitation project, as did Zambia.

NIGERIA SHOWS IMPACT OF MULTI-PRONGED SANITATION APPROACH

Nigeria is the African country with the largest unmet sanitation need. As part of its overall response, the WHO country office in 2021 implemented a multi-pronged sanitation package that focused on preventing the transmission of water-borne diseases like cholera, supporting the ending of open defecation while facilitating broader SDG 6 sanitation objectives such as the institution of safely managed sanitation, and helping to address AMR. The country office finalized implementation of sanitation safety planning interventions in the states of Bayelsa, Lagos and Niger while laying the groundwork for similar implementation in Sokoto, Abia and Bauchi States in 2022. Other highlights included:

• Facilitation, development and adoption of City-Scale Sanitation Safety Plans (SSP) in Minna, Lagos and Yenagoa municipalities.
• Securing commitment by major municipalities, including Lagos, to build or upgrade eight wastewater treatment plants.
• Exposing 1.5 million people to hygiene promotion on behaviour change to end open defecation.
• Training of a 72-member interdisciplinary expert team on the WHO Sanitation and health guidelines, and sanitation safety planning.
• Distribution of 40 sanitary dustbins to public places for promotion of healthy cities.
• Country office leveraging on SSP multisectoral framework to responds to a cholera outbreak.
• Establishment of SSP-WASH Offices in Bayelsa and Niger under the Ministries of Environment & Water Resources, respectively.

Sanitation Game Plan 2.0.
• Sanitation safety planning training was conducted with 18 countries in the Region of the Americas, together with ESAWAS and ADERASA, and the WHO country office in Nigeria, where the training and implementation in three states was linked with the national cholera control strategy. In addition, training for regulators at the...
Results area: WASH in health care facilities

The work on WASH in health care facilities requires a truly collaborative and coordinated approach. The eight practical steps to achieve universal access to quality care and the WASH FIT tool provide a sound basis for all partners to engage, and the JMP monitoring data provides a sound basis for understanding and addressing gaps. However, there is still more effort needed to engage health actors at every level to understand the current status of services and national actions, key priorities to address gaps, and to understand how the tools (e.g. WASH FIT) and frameworks (e.g. eight practical steps/country progress tracker) can be used in their own programmes and to engage in efforts to achieve fundamental health objectives.

While the investments and budgets needed for WASH may be modest compared to other health needs, a greater understanding of current budgeting processes, how to influence them and where there are opportunities to increase budgets and mobilize additional financing is important.

COVID-19 exposed the lack of investment and services around safe health care waste management among all partners who procure and distribute health commodities and personal protective equipment. This work can no longer just focus on segregation and safe treatment, but must address the
entire waste chain, including reducing procurement of non-essential personal protective equipment (PPE), seeking products with streamlined packaging and biobased packaging and components, and supporting safe reusable PPE as well as recycling and reverse logistics to reinvest in value chains and use more advanced, non-burn treatment in more centralized locations. Such efforts also align with the new framework being put in place to support countries in implementing COP 26 commitments on safe and sustainable health systems.

Catalyzing country efforts and progress through WHO tools, frameworks and technical support remained a priority. In 2021, there were two main mechanisms though which WHO, in close collaboration with UNICEF, supported countries in improving access to WASH and waste services in health care facilities and achieve commitments set for in the 2019 World Health Assembly Resolution on this topic. The first is through support in implementing the eight practical steps, which are national actions, including baseline assessments and situational analyses, development of national, costed roadmaps, regular monitoring and workforce training and empowerment. WHO has produced a number of resources to advance progress on these steps, including co-developing with health colleagues a guide for conducting a situational analysis of WASH and quality in health care facilities. A number of countries have used this approach, including Ethiopia, Ghana and Rwanda to identify opportunities to strengthen WASH and waste services as part of broader health services quality improvements.

WHO and UNICEF also launched the online country progress tracker in August 2021. The tracker provides a real-time metric for governments and partners to see how countries are progressing, and where further investments and action is needed and is directly linked to progress reporting on the aforementioned World Health Assembly Resolution. An online form is available for new countries to submit updates to be included in the tracker and for existing countries to provide update their progress.

The second key area of technical work is support for implementation of the Water and Sanitation for Health Facility Improvement Tool (WASH FIT), which provides a risk-based framework for making and sustaining incremental WASH improvements. The pack-
Age is now implemented in over 40 countries and in 2021 the assessment form was updated to include key aspects of energy, waste and sustainability, climate resilience and gender equity. Several modules were added to the training platform OpenWHO. A state-of-the-art training and implementation package with resources for training, implementation and sustaining improvements, which reflects latest guidance and innovation on climate resilient and sustainable WASH and waste services in health care facilities, will be released in 2022. This guide will include examples of national adoption and roll-out of WASH FIT. As well, a summary of country examples are found on the global knowledge portal.

Though the 2019 Resolution generated clear momentum, the need remains to engage leaders to further high level advocacy and collaborative work. Following from the four main recommendations in the Global Progress Report on WASH in health care facilities, namely to develop costed national roadmaps, integrate with health, regularly monitor and increase budgets and financing, in 2021 WHO, with UNICEF, established the Global Taskforce on WASH in Health Care Facilities. The Taskforce is co-led by the WHO Directors of Child and Maternal Health and Environmental Health and Climate and includes leaders from government, NGOs, UN partners and academia who are all committed to strengthen and amplify advocacy for greater investments and identify solutions to unlocking key barriers towards improving WASH in health care facility services. The Taskforce has contributed to high level UN and G-7 and G-20 processes on health and development and is working to embed WASH in health policy, funding and accountability mechanisms.

The ongoing need to support communities of practice through state-of-the-art tools, information and exchange led WHO to redesign and upgrade of the WHO/UNICEF global knowledge portal on WASH in HCF, which was launched in August 2021. New features include the country progress tracker, a WASH FIT page with all WASH FIT resources, case studies and training tools in one place, and a more easily searchable resources page. In addition, WHO, with support from several of the aforementioned Taskforce members, led the price-tag analysis of the costs of providing basic WASH in health care facilities in the 46 least developed countries. The analysis was published in pre-print in 2021 (and in the Lancet in 2022) and found that the ten year price tag of US$ 6.5-9.6 billion, which equates to US$ 0.60 capita/year is modest compared to current government health and WASH spending and is a “doable” and attractive investment objective for governments and partners alike.

Advocacy work included publication of articles in the media, such as Devex, on WASH in HCF recommendations.
Examples of 2021 impacts
• In May 2021, WHO provided a report of progress on the 2019 World Health Assembly Resolution. This included data from 47 early adopter countries showing how they are implementing the WHO/UNICEF eight practical steps and other key elements of the Resolution.
• While COVID-19 presented many challenges, it also offered an opportunity to dedicate attention on IPC and pandemic resources towards improving WASH in waste services in health care facilities. For example, in Lao People’s Democratic Republic, where the Ministry of Health had developed climate resilient and sustainable WASH standards in 2017, implementation of these had been somewhat limited due to lack of resources. However, since 2020, the Ministry of Health has mobilized over US$ 2 million from several donors (Pandemic Emergency Financing Facility of World Bank, BMZ [Germany], LuxDev, DFAT, and UHC Japan) to boost the national initiative in 62 health care facilities in six provinces and Vientiane (the capital). Money has gone to procuring autoclaves, water tanks, hand hygiene stations and other infrastructure as well as to run WASH FIT trainings and deliver ongoing supportive supervision to waste and health care workers.
• Throughout 2021, WHO (with UNICEF) worked to update the WASH FIT package, including a second edition of the guide, new user-friendly assessment forms (in Excel and on Kobo toolbox), a set of five technical factsheets, training materials (a new training manual and updated set of modules) and a mobile application.
• In Niger, where a 2021 cholera outbreak, increasing terrorist threats and growing food insecurity threatens many households, the work on WASH in health care facilities took an important step forward with the establishment of a national task-force, the adoption of WASH FIT as the national implementation tool and work on a national roadmap in budget. As in other countries, the Ministry of Health is leading the effort with strong support from WHO, UNICEF and other key partners including World Vision, the US Centers for Disease Control, Save the Children and IRC.
• Engagement in global events included the WASH in HCF sessions at the International Conference of Midwives, the ISQUA Quality Conference, Stockholm World Water Week and a video for the International Council of Nurses Conference.
• WHO is also providing technical support to countries on specific practical steps, for examples helping countries to develop national strategies and roadmaps, notably this year in Indonesia, Madagascar, Philippines and Viet Nam.
• The real-time country progress tracker was useful for partners/countries to assess progress; other health areas regularly using WASH data (e.g. IPC).
• Health care waste emerged as a “hot” topic; environmental/climate considerations were increasingly a core focus of all WASH in HCF work, and the world’s biggest procurers of health products (e.g. UNICEF, Global Fund) are now reviewing and updating their procurement and country support strategies with the aim to incorporate green and sustainable waste interventions into their efforts (e.g. reducing procurement of unnecessary PPE, budgeting for waste management and treatment, etc.).

Regional and national activities
The European Region offered one-to-one support to countries on WASH in HCFs in Georgia, Montenegro and Tajikistan, on standard setting in Azerbaijan and Tajikistan, and produced a video on sanitation in health care facilities in connection with World Toilet Day in November. For the Western Pacific Region, COVID-19 provided opportunities for fund-
ASSESSMENT OF WASH IN MONTENEGRIN HEALTH CARE FACILITIES

WHO supported Montenegro in executing an assessment of WASH in health care facilities, including the process of prioritisation and planning of activities, providing international experts and instruments for capacity-building and for conducting the assessment. See the full impact story on WHO’s 2021 Results Report website.

ing and collaboration with other programs on WASH such as IPC. It also highlighted the need to upgrade WASH in HCFs and continued its DFAT-funded project on monitoring and surveillance and WASH in HCFs. The South-East Asia Region produced the Star Rating Mechanism for Green and Clean HCFs, a standardized rating system and competitive framework that can be adopted by countries to strengthen climate resilience and environmental sustainability. The regional office also mainstreamed GEDSI in country plans for WASH in HCFs and developed a discussion paper and offered technical support in the management of health care waste. The African Region saw strong commitment at a regional leaders event which involved 35 countries, many of whom presented case studies of WASH FIT implementation, and a dedicated commitment from First Ladies to support the WHA resolution on improving access to water sanitation and hygiene services in health care facilities, including waste management. The Eastern Mediterranean Region supported national baseline assessments and situational analysis of WASH services in HCFs in Sudan, Iran and Oman (and a pilot in Morocco) and had strong collaboration with UNICEF on several activities in the region e.g. WASH in health care facilities and the WHO/UNICEF JMP Regional Workshop and Country Consultations on WASH in HCFs and Schools. The Eastern Mediterranean Region also worked to highlight data gaps on WASH in HCF and developed and piloted a training workshop on health care waste management in low-resource and emergency settings in Yemen. The Region of the Americas developed an evaluation protocol of WASH in HCF and developed three self-instruction courses on Environmental Cleaning and Disinfection in HCF, WASH FIT in HCFs, and WASH and the SDGs.

The Safe Clean, Green and Climate Resilient HCF initiative in Lao People’s Democratic Republic expanded to 77 HCFs with Global Environment Fund, World Bank, European Union and Australian (DFAT) support, conducted a baseline assessment of WASH in HCFs to define the national/SDG goal, annual target and indicators, and supported national and subnational capacity on health care waste management by providing standard operating procedures, training, supplies, equipment and construction of toilets. Nepal developed a new policy document on standards for WASH in health care facilities, and in Ghana, WHO supported the review and assessment of WASH data in the District Health Information System for 2018 – 2021 and conducted an assessment of WASH in COVID-19 treatment centers using the WASH FIT tool. It also published a related article in IWA’s Journal of Water, Sanitation and Hygiene for Development. Iran piloted the WHO guidance for climate-resilient and environmentally sustainable health care facilities in six provinces, engaging 267 health care facilities representatives. This work evaluated the status of HCFs in terms of the health workforce, WASH and waste management, energy and infrastructure, technologies and products.
In keeping with WASH FIT recommendations to actively involve women and disabled people in planning and decision-making, a WASH FIT planning meeting in Indonesia in May was attended by women’s organizations and four disabled people’s organizations (DPOs), namely LPPDS, Pertuni, Gerkatin and Himatras. Further, the meeting was supported by a sign language interpreter. In collaboration with Plan International, the WASH FIT process and tools were customized for roll-out in the districts of Manggarai and Sumbawa. It was agreed during the meeting that DPOs and women’s organizations would participate as WASH FIT team members and assessors. Indicators added related to gender and disability inclusiveness (above what already existed) include: the availability of personal protective equipment that fits not only men but also women; an audio hygiene promotion announcement to remind visitors/patients of good hygiene practices (to complement visual messaging); and skills of health care workers to communicate with people with disabilities.

At the regional level, guidance was developed to support the practical uptake of GEDSI recommendations by countries, e.g. South-East Asia Region’s mainstreaming GEDSI in country plans for WASH in HCFs, which provides step-by-step guidance on how countries can integrate GEDSI into their strategies and activities to strengthen WASH in HCFs. The document includes good practice examples from various countries, including Bhutan and Indonesia.

At the global level, the WASH FIT guidance document was updated with an enhanced focus on GEDSI, including a dedicated GEDSI fact sheet developed in partnership with GEDSI experts at WaterAid. The fact sheet aims to ensure that 1) all infrastructure is female-friendly and accessible; and 2) women and vulnerable groups are involved in decision-making. The assessment indicators include female-friendly and accessible infrastructure (see indicators #6 and #7 here). These GEDSI considerations were stressed during WASH FIT awareness raising and training events, contributing to the inclusive WASH in HCF practice described above.

A woman washes her hands in a handwashing point at Sentani Health Center, Papua. Functional water, sanitation, and hygiene services in health care facilities are critical for patient safety and quality of care.
### Results area: integration of WASH with other health programmes

**OUTPUT 3 - WASH IN HEALTH PROGRAMMES: Health and other programmes are aware of the importance of WASH and have access to up-to-date technical materials for their programming and policies.**

<table>
<thead>
<tr>
<th>Output indicator</th>
<th>Baseline 2019</th>
<th>Milestone 2020</th>
<th>Results 2020</th>
<th>Milestone 2021</th>
<th>Results 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5 Publication of WASH and NTD strategy 2021-2030 to action WASH elements of the NTD roadmap to 2030 completed and used by countries for implementation of the strategy.</td>
<td>NA</td>
<td>WASH and NTD strategy published.</td>
<td>Partially achieved: Draft ready but deferred to align with NTD roadmap in 2021.</td>
<td>WASH-NTD toolkit used at 2 regional workshops.</td>
<td>Achieved: 2 regional training on toolkit completed (AFRO, and PAHO); WASH and NTD strategy published Jan 2021 alongside NTD roadmap.</td>
</tr>
<tr>
<td>3.6 Number of countries receiving technical support to integrate WASH with cholera prevention and control efforts.</td>
<td>NA</td>
<td>5 countries</td>
<td>Partially achieved: 3 countries</td>
<td>5 additional countries.</td>
<td>Partially achieved: 3 countries.</td>
</tr>
<tr>
<td>3.7 Publication of WHO/FAO/OIE technical brief on WASH and wastewater management to combat AMR.</td>
<td>NA</td>
<td>Technical Brief published in 5 languages.</td>
<td>Achieved: Published in 5 languages.</td>
<td>90 countries reached by awareness raising for WASH improvements in AMR NAPS.</td>
<td>Delayed: Awareness raising still under development by FAO scheduled for 2022.</td>
</tr>
</tbody>
</table>

Integration of WASH in other health programmes – and promoting ‘WASH and health’ – is critical to achieving SDGs, WHO targets and the WHO WASH overarching vision. Partnering with WHO programmes across all areas of WASH work is integral to our strategic approach.
Previous sections of the report have provided numerous examples of the integration of WASH work and guidance with other WHO programmes including climate change and health, emergencies, IPC, MNCH, quality of care/health systems and UHC. This section focuses on WASH collaboration highlights in the specific areas covered by the indicators listed above: cholera prevention and control, NTDs, AMR and the Hand Hygiene for All Initiative. (Achievements related to output indicator 3.4 – COVID-19 guidance integrating WASH information and evidence – is presented in the first section of this report on the 2021 strategic context.) An important learning is that, increasingly, WHO is finding from experiences in countries including Niger, Ethiopia and Mozambique that cholera is being addressed through WASH in health care facility efforts (as Primary Health Care Facilities are the first point of engagement with infected), underscoring the importance of WASH for other health programming, as articulated in the 2019 WHO publication Water, sanitation, hygiene and health: A primer for health professionals.

Examples of 2021 impacts
- WHO launched a Global strategy on water, sanitation and hygiene to combat neglected tropical diseases 2021–2030, a new roadmap which sets targets and milestones for control, elimination and eradication of 20 neglected tropical diseases by 2030. The roadmap emphasizes the importance of cross-sectoral action for NTD control by including a cross-cutting target on WASH.
- The Technical brief on water, sanitation, hygiene (WASH) and wastewater management to prevent infections and reduce the spread of antimicrobial resistance (AMR), launched in late 2020, was augmented in 2021 with versions in French, Russian, Spanish and Portuguese.
- There was high visibility for environment within the AMR agenda through the Global Leaders Group (GLG), UNEP and the G7, where health ministers at the G7 summit tackled environmental dimensions of AMR as part of a call to strengthen One-Health approaches to global health threats. G7 ministers also called AMR a
‘silent pandemic’ and called upon WHO to accelerate changes to the Good Manufacturing Practice (GMP) sections on wastewater as part of environmental, social and corporate responsibilities.

• WHO and UNICEF published *State of the world’s hand hygiene*, which brought together various data sets to present the current status of hand hygiene, highlight lagging progress, and call governments and supporting agencies to action, offering numerous inspiring examples of change. Virtual webinars were held to support the launch.

• A critical building block to achieving the global goal of universal hand hygiene by 2030 is adequate levels of funding. Understanding the costs of implementing hand hygiene plans is an essential precursor to fund allocation. A new hand hygiene costing tool from WHO and UNICEF was launched in September and aims to provide country-specific cost estimates of achieving universal hand hygiene in households by 2030. It has been developed jointly by WHO and UNICEF, through a consultancy with WASHeconomics, and with input from the London School of Hygiene and Tropical Medicine, the World Bank and WaterAid.

• In July, over 80 people in 35 countries joined a virtual meeting to hear from national leaders on how governments are advancing hand hygiene at a webinar convened by the Hand Hygiene for All (HH4A) initiative on its one-year anniversary.

• WASH-NTD Toolkit training was completed in East Africa and South Asia as part of WHO’s engagement in the NTD NGO Network (NNN) WASH Working Group and the Ascend East Africa and South Asia programme funded by the United Kingdom of Great Britain and Northern Ireland.

• As described in earlier sections, WHO with partners developed WASH coverage and NTD endemicity overlay maps developed in the [ESPEN-NTD portal](https://www.who.int/ntd), improving correlation between areas with high NTD prevalence and low WASH coverage.

• A major challenge in 2021 was the cancellation of the large FCDO funded ASCEND project focusing on WASH and NTD collaboration in Africa. This also coincided with the COVID pandemic. As a result, WHO pivoted to strengthening online training to reach a similar audience with less funding and no travel.

• *Ebola Virus Disease (EVD): Key questions and answers concerning water, sanitation and hygiene*, first published in 2014, was updated in 2021 to reflect lessons learned and new operational research data.

• New leadership and actors within the Global Taskforce on Cholera Prevention and Control, including the WASH Working Group, worked further to develop key priority activities, although there is increasingly a need to streamline cholera activities within emerging work on primary health care, pandemic preparedness and in particular, with WASH in health care facilities.

### Regional and national activities

The African Region supported COVID-19 pandemic preparedness and response in support to the Emergency Preparedness and Response (EPR) cluster under the Infection, Prevention and Control (IPC) pillar, and in close collaboration with the Risk Communication and Community Engagement (RCCE) team. The Region of the Americas developed the WASH PRESS course for health care facilities, which focuses on the prevention and control of infections during emergencies and disasters for health establishments and formed a network of researchers for sharing of experiences in SARS CoV-2 surveillance, supporting analysis and quantification in wastewater, and the monitoring of pathogens in wastewater. Niger faced a major cholera outbreak and was supported as part of wider support efforts from WHO.
WHO and UNICEF have established, long-term WASH strategies which are aligned with the 2030 Agenda for Sustainable Development. In 2021, the JMP updated its strategy for 2021-2025, which builds on the progress achieved under the previous strategy.

The Joint Monitoring Programme (JMP) report – *Progress on household drinking water, sanitation and hygiene 2000-2020: Five years into the SDGs* – was published in 2021 and presents estimates on household access to safely managed drinking-water, sanitation and hygiene services over the past five years, and assesses progress toward achieving the sixth sustainable development goal (SDG) to ‘Ensure availability and sustainable management of water and sanitation for all by 2030’. For the first time, the report also presented emerging national data on menstrual health. In 2020, around 1 in 4 people lacked safely managed drinking-water in their homes and nearly half the world’s population lacked safely managed sanitation. COVID-19 has highlighted the urgent need to ensure everyone can access good hand hygiene. At the onset of the pandemic, 3 in 10 people worldwide could not wash their hands with soap and water within their homes. “Hand-washing is one of the most effective ways to prevent the spread of COVID-19 and other infectious diseases, yet millions of people across the world lack access to a reliable, safe supply of water,” said Dr Tedros Adhanom Ghebreyesus, WHO Director-General. “Investment in water, sanitation and hygiene must be a global priority if we are to end this pandemic and build more resilient health systems.” Following the report launch the JMP team prepared a series of regional snapshots: Excel files that automatically generate figures and tables for the SDG regions, WHO and UNICEF regional offices, and other regional groupings.

The JMP team is committed to improving how gender is monitored for targets 6.1 and 6.2 on drinking-water, sanitation and hygiene, and in 2020 launched a review of

<table>
<thead>
<tr>
<th>Output indicator</th>
<th>Baseline 2019</th>
<th>Milestone 2020</th>
<th>Results 2020</th>
<th>Milestone 2021</th>
<th>Results 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 Global, regional and national progress on access to basic WASH services in Health Care Facilities and in schools is documented and publicly available.</td>
<td>2018 report schools; 2019 report WASH in HCF.</td>
<td>Schools report published; WASH in HCF report published.</td>
<td>Achieved: Both reports published</td>
<td>Country consultation started.</td>
<td>Achieved: country consultations in process.</td>
</tr>
<tr>
<td>4.3 Number of countries receiving WHO technical support on monitoring of WASH services.</td>
<td>NA</td>
<td>4 countries.</td>
<td>Surpassed: 9 countries</td>
<td>10 countries</td>
<td>Surpassed: 17 countries receiving support.</td>
</tr>
</tbody>
</table>
opportunities for enhanced monitoring of gender in relation to the SDG WASH targets in collaboration with Emory University. The Emory team developed a conceptual framework for organizing the review, and based on desk review and inputs from expert consultations, built an inventory of 50 tools and measures that have been used or proposed for monitoring gender and WASH. These were then used to inform a gap analysis and to identify opportunities to leverage existing data for analysis and reporting related to gender and WASH. In addition, areas were identified for further development in monitoring gender either at the local or national scale. A final report was published in June 2021, and follow-up activities are planned for 2022. The gender review also was used as an input to a broader initiative to develop a gender contextualization for all the SDG-6 global indicators, facilitated by UN-Water.

During 2021 the JMP prepared draft updates to the global database on WASH in schools, and in December launched a country consultation on estimates for the period 2000-2020. A total of 182 country files were distributed, with feedback requested by the end of January 2022. A data update and short report on WASH in schools will be published in June 2022. The JMP will also publish a detailed methodological note describing the methods used to produce national, regional and global estimates for WASH in schools.

In 2021 the JMP prepared draft updates to the global database on WASH in health care facilities, and in December launched a country consultation on estimates for the period 2000-2020. A total of 183 country files were distributed, with feedback requested by the end of January 2022. A full report and progress update on WASH in health care facilities will be published in August 2022. The JMP will also publish a detailed description of the methods used to produce estimates for WASH in health care facilities.

As part of the Hand Hygiene For All Initiative, the JMP has made a review of monitoring of hand hygiene in public spaces, with particular reference to the COVID-19 pandemic context. The main findings of the report were discussed in a webinar, along with inputs from countries actively monitoring hand hygiene in public spaces, including Kenya, Indonesia and Nigeria.

Concerning on-site sanitation systems, the JMP 2021 progress update identified the management of excreta from on-site sanitation systems as the single biggest data gap for national and global monitoring of safely managed sanitation services. On-site sanitation technologies can be counted as safely managed, if they are improved, not shared, and prevent unsafe exposures along the sanitation chain, from containment to treatment and discharge.

During 2021 the JMP worked intensively with six pilot countries (Bangladesh, Ecuador, Indonesia, Kenya, Serbia and Zambia) to develop or refine tools and methods for monitoring of safely managed on-site sanitation (SMOSS) with the aim to develop a harmonized set of indicators, tools and methods.
that other countries can use. In each country existing data and data collection systems were reviewed, and new data collection rounds were planned from households, service providers, and government authorities. A *synthesis report* includes a summary of core and expanded indicators to monitor SMOSS; methods and tools for collecting this data; and lessons and examples from the six pilots.

While country missions remained suspended during 2021 due to COVID-19, the **JMP team continued to provide remote support and held consultations on SDG baselines and monitoring with a significant number of countries.** The JMP has continued to expand the package of communication and guidance materials for training sector stakeholders on national and global monitoring of SDG WASH targets.

During 2021, the **JMP team has supported WHO and UNICEF country offices to integrate core questions and indicators into Education Management Information Systems and schools surveys and censuses** in Angola, Cambodia, Fiji, Papua New Guinea, Tajikistan and Turkmenistan. The JMP also supported the implementation of the water quality testing module in many national household surveys. During 2021, field work was started or completed in Benin, Côte d'Ivoire, United Republic of Tanzania, Malawi, Fiji, Samoa, Tonga, Nauru, Tuvalu, Indonesia, Sri Lanka, Viet Nam, Eswatini and elsewhere. Technical support was also provided to seven countries (Ecuador, Nicaragua, Mozambique, Uganda, Azerbaijan, Guatemala and Lao People's Democratic Republic) that plan to implement water quality surveys in 2022.

**The JMP core questions on water, sanitation and hygiene for household surveys have been translated into French, Spanish, Russian and Arabic and widely disseminated through WHO and UNICEF regional and country offices.** The JMP team has supported their integration into the 6th round of UNICEF Multiple Indicator Cluster Surveys (2016-2021) and 8th round Demographic and Health Surveys (DHS 2018-2023). The JMP has also worked with the World Bank Living Standards Measurement Study, with national statistical offices and with international NGOs to integrate core questions and indicators into national household surveys and censuses. During 2021 the JMP supported the MICS team to begin the process of updating the WASH questions and indicators for the 7th round of MICS surveys which is expected to be launched at the end of 2022.

For safely managed drinking-water service, during 2020 the **JMP undertook a review of lessons learned from recent experience of integrating water quality testing into household surveys in over 30 countries.** The JMP subsequently published a thematic report on water quality testing in household surveys (available also in French and in Spanish) and conducted in-depth analysis of emerging data on drinking-water quality which was published in an academic journal. During 2021 the JMP successfully supported the adaptation of the Multiple Indicator Cluster Survey (MICS) water quality testing module for an Living Standards Measurement Survey (LSMS) in the United Republic of Tanzania and Demographic and Health Surveys (DHS) in Cote d'Ivoire, Mozambique and Uganda. The **JMP also contracted an independent laboratory to assess the performance of 20 portable kits used for measuring E. coli in drinking-water in the field.** The assessments were delayed due to the pandemic, but all testing work was completed by December and reports will be published in 2022.
Examples of 2021 impacts

• The latest JMP estimates for WASH in households were shared with the UN Statistical Division for inclusion in the official SDG global database and featured in the UN Secretary General's SDG Progress Reports. They have also been included in a wide range of global development databases, including the World Development Indicators and the UN Water Integrated Monitoring Initiative for SDG 6 targets; the Inter-Agency Expert Group on SDG indicators, the UN Statistical Commission and EuroStat; Global conferences including World Water Week, Water and Health, Brisbane Water Conference, and the WASH in Schools International Learning Alliance; Meetings of the Sanitation and Water for All global partnership; Global and regional WASHNET meetings of UNICEF WASH staff and key partners in East Asia, East Africa, Latin America, Middle East, South Asia and West Africa; Global and regional meetings of WASH professionals including, AMCOW, European Protocol on Water and Health, Sustainable Sanitation Network, Menstrual Health Symposium, WHO Region of the Americas and the Arab Water Forum.

• The latest JMP estimates for WASH in households were shared with the UN Statistical Division for inclusion in the official SDG global database and featured in the UN Secretary General's SDG Progress Reports. They have also been included in a wide range of global development databases, including the World Development Indicators and the UN Water Integrated Monitoring Initiative for SDG 6 targets; the Inter-Agency Expert Group on SDG indicators, the UN Statistical Commission and EuroStat; Global conferences including World Water Week, Water and Health, Brisbane Water Conference, and the WASH in Schools International Learning Alliance; Meetings of the Sanitation and Water for All global partnership; Global and regional WASHNET meetings of UNICEF WASH staff and key partners in East Asia, East Africa, Latin America, Middle East, South Asia and West Africa; Global and regional meetings of WASH professionals including, AMCOW, European Protocol on Water and Health, Sustainable Sanitation Network, Menstrual Health Symposium, WHO Region of the Americas and the Arab Water Forum.

Regional and national activities

The African Region prepared regional JMP snapshots on schools and HCFs and worked to strengthen WASH monitoring in G5 Sahel countries through support to roadmap. The Eastern Mediterranean Region followed up with countries on the country consultations of WHO/UNICEF JMP estimates on WASH in HCFs and Schools, and also developed and disseminated the regional snapshot of WASH in households and schools.

JMP AT INTERNATIONAL AND REGIONAL CONFERENCES AND WORKSHOPS

Meetings of the UN Water Integrated Monitoring Initiative for SDG 6 targets; the Inter-Agency Expert Group on SDG indicators, the UN Statistical Commission and EuroStat; Global conferences including World Water Week, Water and Health, Brisbane Water Conference, and the WASH in Schools International Learning Alliance; Meetings of the Sanitation and Water for All global partnership; Global and regional WASHNET meetings of UNICEF WASH staff and key partners in East Asia, East Africa, Latin America, Middle East, South Asia and West Africa; Global and regional meetings of WASH professionals including, AMCOW, European Protocol on Water and Health, Sustainable Sanitation Network, Menstrual Health Symposium, WHO Region of the Americas and the Arab Water Forum.
WHO successfully launched the GLAAS 2021/2022 cycle to collect data through country and external support agency surveys, with the global report to be published in 2022. Despite a potential funding deficit emerging in 2020, in 2021 the GLAAS team was able to secure additional funding from the Bill & Melinda Gates Foundation, which enabled launch of the cycle.

The data from the GLAAS 2021/2022 cycle will be published in the GLAAS 2022 report as well on a UN-Water GLAAS data portal, launched in early 2022. The portal provides online access to policy- and decision-makers at all levels with reliable, easily accessible, comprehensive data and information on the WASH enabling environment/WASH systems. 2021 also saw continued expansion of capacity and support for WASH accounts.

Examples of 2021 impacts

- The GLAAS 2021/2022 cycle was launched successfully, with virtual trainings in all regions in English, French, Spanish and Russian reaching over 90 countries.
- WHO launched the eGLAAS pilot, an online data collection system for the GLAAS country survey. In addition to designing the online survey, WHO organized three trainings for interested countries.
- Development began on the UN-Water GLAAS data portal, to be launched in two phases during 2022.
- A new report, Reflecting on TrackFin 2012-2020, was launched which summarizes results of using the TrackFin methodology to develop WASH accounts, highlighting key outcomes, results from countries as well as lessons learned.
- In June, WHO together with SWA co-convened two webinars focusing on "Why..."
track WASH expenditures through WASH accounts?" The events shared learning from country experiences and provided an overview of new materials and tools, including the newly published Reflecting on TrackFin 2012-2020 report. WASH Ministers from Madagascar and Nigeria, together with IRC in Burkina Faso, and donors discussed the value of, and challenges inherent in, developing, maintaining and using WASH accounts to influence policy and decision-making.

• In July, WHO led two training sessions on “Orientation to WASH accounts optimized approach” in English and in French for 35 participants, mainly government focal points from 12 countries. The aim of the sessions was to inform about and build capacity on the optimized approach for developing WASH accounts. Also in July, WHO organized a partner meeting to promote the optimized approach.

• In September and October, WHO organized three WASH accounts facilitators trainings comprised of three, three-hour sessions taking place in the same week. Two trainings were held in English to enable access to different time zones, and one was held in French. Participants included country WASH accounts team members and partners. WHO also organized “Orientation to the WASH accounts optimized approach for Latin American and Caribbean countries” to introduce new materials, tools and technical support in Spanish for the development of WASH accounts. The orientation included over 24 participants from 12 countries that are implementing WASH accounts.

• In September, GLAAS participated in the UN-Water Integrated Monitoring Initiative for SDG 6 (IMI-SDG6) series of webinars presenting the 2021 status of water and sanitation. Specifically, the GLAAS team presented SDG Means of Implementation Targets 6.a and 6.b and the 2021/2022 GLAAS Cycle (SDG 6.a.1-6.b.1).

• WHO also released a new version of the WASH accounts production tool, or WAPT, which is an essential software to support country teams in the development of WASH accounts. The tool was updated to feature improved hints and instructions, new data visualizations, graphs and tables, as well as the integration of the updated TrackFin classifications. The tool supports countries to import and map expenditure data and to automate the production of standard WASH accounts parameters and tables.

• WHO supported inclusion of GLAAS as a data source for the Africa Water Investment Scorecard indicators. The Scorecard will support countries to track water investments and progress in mobilizing resources, to identify bottlenecks, to enhance mutual accountability, and to take action to meet the investment needs for the achievement of SDG 6.

Regional and national activities
Having the engagement of WHO regional and country offices from the beginning of a project is critical, and the launch of the GLAAS 2021/2022 cycle was a success because of this engagement. The European Region provided one-to-one support to countries as well as organized trainings in English and Russian and supported eGLAAS pilots in Serbia and Belarus; the African Region launched the GLAAS cycle and organized trainings in French and English and supported the development of WASH accounts in various countries, including one new country; the Eastern Mediterranean Region conducted regional training for 18 countries, including eGLAAS pilots in Iran and Morocco; it also contributed as panellists on water scarcity at the League of Arab states meeting, highlighting the work on GLAAS; The Region of the Americas saw 20 countries participate in the GLAAS exercise in 2021, including Costa Rica who participated in the eGLAAS pilot, and also supported six new countries to develop WASH accounts.
STRENGTHENING WASH SYSTEMS IN G5 SAHEL COUNTRIES

The G5 Sahel countries, Burkina Faso, Chad, Mali, Mauritania and Niger, face security, development, climate change and health challenges. The Sahel Alliance was created in 2017 to foster cooperation between development partners to scale up investment and technical support for development activities that respond to country-identified needs, including related to WASH. WHO, through GLAAS and JMP, is supporting G5 Sahel countries to strengthen monitoring capacity and to track progress on improving WASH systems and WASH in health care facilities, including the capacity to plan, finance, implement, monitor and regulate drinking-water and sanitation service delivery.

In 2021, WHO supported the dissemination and initial implementation of the country roadmaps. The country roadmaps were developed in the G5 Sahel countries in 2020 and focus on monitoring access to WASH services; governance including improving coordination and capacity building; and tracking expenditures in the WASH sector. WHO worked closely with the government and partners in the G5 countries on implementing the roadmaps, including having virtual meetings with the government and development partners in each country. Originally, an in-person regional meeting was planned; however, due to COVID-19 it was decided to have national, virtual meetings instead.

The GLAAS 2021/2022 cycle launched in the G5 Sahel countries in Q3 2021. The GLAAS country survey package was translated into French, and WHO organized trainings on the GLAAS country survey and monitoring for countries in the region. In addition to the trainings, WHO provided initial support to GLAAS consultations to start the data collection. It is expected that the countries will submit the GLAAS country survey in 2022.

Work in the G5 Sahel countries also focused on the development of WASH accounts using the TrackFin methodology. Government officials from Burkina Faso, Chad, Mali and Niger attended WASH accounts trainings on the optimized approach for developing WASH accounts. Burkina Faso finalized their second cycle of WASH accounts in 2021 and Mali is planning its fourth cycle in 2022.

In addition to the finance and governance work, WHO is also supporting the strengthening of water and sanitation service delivery in the G5 countries. As part of this work, countries attended a RegNet meeting in July 2021, which consisted of four virtual sessions. After participating in the RegNet meeting, Mali became interested in regulating sanitation.

As the roadmaps are country specific, different countries focused on different areas. For example, Niger, in collaboration with WASH in health care facility partners, the Ministry of Health developed a roadmap and action plan for 2022 with the aim of introducing WASH FIT in 133 new health care facilities across eight regions of the country. Mali continues to strengthen efforts on WASH in health care facilities, including through regular monitoring within the health management information systems and continued roll-out and follow-up on WASH FIT now being used in 300 facilities. Finally, in Burkina Faso, Ministry of Health, is leading implementation of WASH FIT with a number of partners.

Throughout 2021, WHO was in close contact with the governments and partners in the G5 Sahel countries. For 2022, there are plans to have an in-person meeting on the roadmaps, monitoring and improving household surveys, depending on the COVID-19 situation. Initial discussions on planning this workshop started in 2021.
During 2021, WHO has been updating its estimates of the global burden of disease attributable to inadequate water, sanitation and hygiene, which contribute directly to the monitoring of SDG target 3.9 to substantially reduce the number of deaths or illnesses from hazardous chemicals and air, water and soil pollution and contamination.

WHO estimation of health impacts from environmental risks is based on comparative risk assessment (CRA) methods, combining data on exposure, disease burden and the exposure-response relationship to estimate the burden of disease associated with that exposure.

In the latest round of estimates WHO have been able to make a number of improvements in calculation of the global burden of disease. Improvements in the availability of JMP data on different levels of exposure, as well as improvements in epidemiological data for different health impacts, have enabled calculation of the impact of different levels of access to WASH services on a greater number of health outcomes. Notably, the present update will include acute-respiratory infections in global estimates for the burden of disease.

Acknowledging the potential power of national burden of disease estimates in strengthening the value proposition for WASH investment, WHO is also in the process of developing a country tool that will enable the calculation of national estimates. This will be piloted and rolled out in 2022.
Risk management, operations and value for money

WHO continued to create impact on WASH in 2021 through a lean expert team at WHO headquarters and a 2021 annual budget of US$ 5.7 million that included activities and distributions to regions and countries. Each area of work – from JMP and GLAAS to water quality, sanitation and health care facilities – is led by a single staff member with assistance from a more junior staff member or a consultant. Where necessary, additional work is contracted out in rigorous competitive bidding processes.

At regional office and country office levels, WASH work is also highly cost effective, with country work often coordinated through National Professional Officers, who are local staff making competitive salaries benchmarked nationally, but highly competitive at global level.

Previous sections within this report have spoken to the quality of developed products and services and how WHO's WASH programme has adapted its programming to COVID-19, with a focus on increasing the scope of work done in partnership and through shared platforms (for example, Hand Hygiene for All and the SDG 6 Acceleration Framework) and through virtual trainings and tools.

The COVID-19 context has driven efficiencies, as the WASH team has built greater three-level coordination by sharpening the focus of regular three-level meetings, with more attention to planning and lesson-sharing in meetings and at the annual (in this case virtual) retreat.

The 2021-22 performance log frame and the outcome scoring system (see Annex 1) has allowed for a structured overview to review accountability in the broader context of value for money.

The Overview of WHO WASH expenditure in Annex 2 summarizes WHO WASH resources, expenditures, aid priorities and distributions of aid disbursements and WHO's top donors to WASH.

---

**OUTPUT 7 - OPERATIONS: WHO WASH demonstrates organizational excellence through better targeting of resources, effective partnerships and documented results at country level.**

<table>
<thead>
<tr>
<th>Output indicator</th>
<th>Baseline 2019</th>
<th>Milestone 2020</th>
<th>Results 2020</th>
<th>Milestone 2021</th>
<th>Results 2021</th>
</tr>
</thead>
</table>

For the purposes of this report, value for money focuses on how an organization achieves results and is a combination of three key dimensions: economy (keeping human and financial resources as lean as possible); efficiency (to “buy” as much output as possible); and effectiveness (keeping quality as high as possible).
Expression of thanks

WHO would like to express its appreciation to all partners who collaborate with WHO on achieving joint aims on WASH and health, particularly the Member States who work with us on this agenda. WHO would also like to acknowledge the special appreciation for continued support during 2021, when the Organization faced challenges like never before in delivering its work in the face of an ongoing global pandemic.

Sincere gratitude is directed to the donors who gave financial and/or technical support for the important work described in this report including the Agence Française de Développement (AFD, France), the Bill & Melinda Gates Foundation (BMGF), the Department of Foreign Affairs and Trade (DFAT, Australia), the Directorate General for International Cooperation and Development (DEVCO, European Union), the Directorate General for International Cooperation (DGIS, The Netherlands), the Federal Ministry of Health, Germany, the Federal Ministry for Economic Cooperation and Development (BMZ, Germany), the Foreign, Commonwealth & Development Office (FCDO, United Kingdom of Great Britain and Northern Ireland), Ministry of Health, Labour and Welfare (MHLW, Japan), New Venture Fund (NVF), the Norwegian Agency for Development Cooperation (NORAD), the Public Health Agency of Canada (PHAC, Canada), the Swiss Agency for Development and Cooperation (SDC), the Swedish International Development Agency (Sida), United Nations Development Programme (UNDP), UNICEF, the United States Agency for International Development (USAID), the United States Environmental Protection Agency (USEPA) and World Vision International.
Key references


8. Technical brief on water, sanitation, hygiene and wastewater management to prevent infections and reduce the spread of antimicrobial resistance, world Health Organization (WHO), Food and Agriculture Organization of the United Nations (FAO) and World Organisation for Animal Health (OIE), 2020


14. Statements submitted by Member States and other participants at the Seventy-fourth World Health Assembly. In: WHO [website]. (https://apps.who.int/gb/statements/WHA74/)


22. G7 Finance Ministers’ Statement on Actions to Support Antibiotic Development. In: G7 [website]. (https://www.g7uk.org/g7-finance-ministers-statement-on-actions-to-support-antibiotic-development/)


33. WASH and neglected tropical diseases. In Expanded Special Project for Elimination of Neglected Tropical Diseases [website]. (https://espen.afro.who.int/diseases/wash)


Annex 1 - Strategic framework and Theory of change

Principles
- Prioritize actions with highest public health benefit
- Align with the Sustainable Development Goals
- Employ highest quality science and a full range of practical experience
- Strengthen health capacities in promoting safe WASH
- Stimulate sustainable change

Results areas
- Integration of WASH with other health programmes
- Drinking-water quality and safety
- WASH in health facilities
- WASH monitoring and evidence (IMP, GLASS, BMI, Burden of Disease)
- Sanitation and wastewater
- Emerging issues (e.g. climate change, AMR)

Strategic approaches
- Develop and disseminate norms, tools, standards
- Empower countries through technical cooperation
- Monitoring and research to inform policies and programmes
- Coordinate with multi-sectoral partners; lead processes
- Promote integration of WASH with other programmes
- Respond to emerging issues

Outputs
- Risk management approaches based on up-to-date guidelines are available and disseminated among those responsible for national and international WASH programmes.
- Health and other programmes are aware of the importance of WASH and have access to up-to-date technical materials that can be taken up in their programming and policies.
- WASH enabling environment evidence base (inputs, finance, policies, targets) produced /publicly accessible.
- Evidence base of country, regional and global progress on WASH services in different settings produced and publicly available.
- Estimates of diarrheal and other diseases attributable to WASH updated and publicly accessible.
- Technical support provided to countries including on uptake of WHO guidance, monitoring, development of national WASH policies and targets.

Outcomes
- National and international WASH and health programmes, regulations and initiatives are based on normative guidance produced by WHO, and risk-based approaches are adopted.
- National and international WASH and health programmes and initiatives are informed by monitoring data produced by WHO.

Vision: To substantially improve health through the safe management of water, sanitation and hygiene services in all settings.
**KEY ACTIVITIES**

- **Drinking-water quality and safety**
  - Develop, update and disseminate health-based guidelines on drinking-water, including small supplies.
  - Provide tools and country support for setting standards and regulations including adoption of Water Safety Planning (WSPs) and consideration of climate resilience.
  - Targeted support to countries for implementation of WSPs (including auditing), strengthening capacities for drinking-water quality surveillance programmes and effective response to waterborne disease outbreaks.

- **Evaluate Household Water Treatment Technologies and provide simplified protocols for low-resource settings.**

- **Sanitation and wastewater**
  - Develop and disseminate new WHO Guidelines for Sanitation and initiate country support.
  - Scale up training and country support on Sanitation Safety Planning and safe use of wastewater, excreta and greywater, incorporating climate resilience.
  - Develop, update and disseminate health-based guidelines on recreational water quality.

- **WASH in health care facilities**
  - Update and monitor a global workplan to improve WASH in health care facilities in response to the Call for Action on WASH in health care facilities; support uptake and implementation through regional and country processes.
  - Support development of tools to improve WASH in schools and other settings and convene health and education sectors to strategize improvements on WASH in schools.
  - Provide WASH-FIT tools and technical assistance and field support to improve WASH in health care facilities based on these tools and WHO standards.

- **Integration of WASH with other health programmes**
  - Develop and disseminate technical guidance, tools and training in selected countries to improve health care waste practices and infrastructure.
  - Develop and disseminate technical guidance, tools and training on sanitation and wastewater barriers to combat Antimicrobial Resistance (AMR).
  - Provide WASH technical information and web application for WASHFIT in emergencies for outbreaks and emergency response.
  - Provide information and technical support in selected countries to integrate WASH with cholera prevention and control efforts.
  - Support implementation of the WASH and NTD Strategy with advocacy, tools and technical support to countries.

**OUTPUTS**

- Risk management approaches based on up-to-date guidelines are available and disseminated among those responsible for national and international WASH programmes.

**OUTCOMES**

- National and International WASH and health programmes, regulations and initiatives are based on normative guidance produced by WHO.
- Health and other sectors and programmes are aware of the importance of WASH and have access to up-to-date technical materials that can be taken up in their programming and policies.

**IMPACT**

To substantially improve health through safely managed water, sanitation and hygiene services in all settings.
Annex 2 - Overview of WHO WASH expenditure

The figures below provide an overview of WHO WASH expenditure.

Fig. 1 Distribution of WASH expenditures by WHO region, 2021

Fig. 2 WASH expenditure, 2019-2021 (Source: GLAAS 2021/2022 ESA Survey)

Fig. 3 Top donors, 2021 (Source: GLAAS 2021/2022 ESA Survey)

Fig. 4 Breakdown of expenditures for WASH activities, 2021