

# UNICEF Global Annual Results Report 2022

## Goal Area 4: Every child lives in a safe and clean environment

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Hussein Abdo and his daughter near a UNICEF-supported solar-powered water system in Dhamar, Yemen.  
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## Expression of thanks

UNICEF programmes to help ensure that every child lives in a safe and clean environment are funded entirely through the voluntary support of millions of people around the world and our partners in government, civil society and the private sector. Voluntary contributions enable UNICEF to deliver on its mandate to protect children's rights, to help meet their basic needs, and to expand opportunities to reach their full potential. We take this opportunity to thank all our partners for their commitment and trust in UNICEF.

UNICEF expresses its sincere gratitude to our government partners that have provided the largest contributions to the water, sanitation and hygiene (WASH) and the climate, environment, energy and DRR

(CEED) programmes in 2022: the United States of America, Germany, the United Kingdom of Great Britain and Northern Ireland, Sweden, the Netherlands and Japan.

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Girl drinking water in an open defecation free community in Côte d'Ivoire

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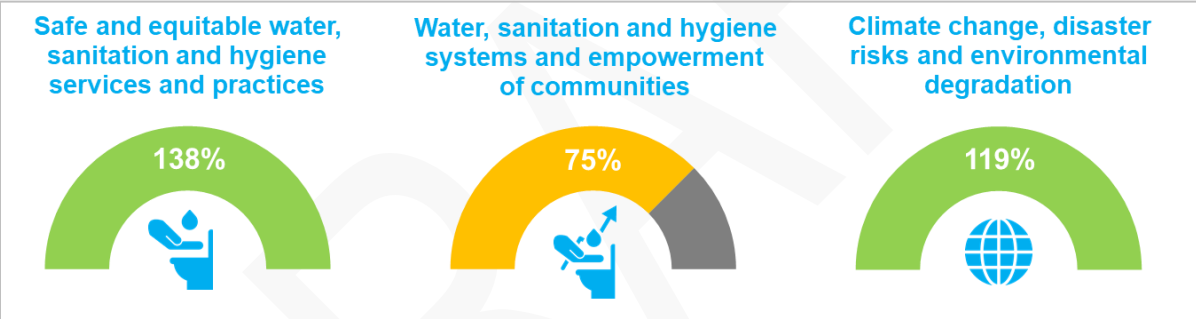
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# Executive summary

UNICEF works towards the vision that all children everywhere live in a safe and clean environment including in humanitarian crises and in fragile contexts. Goal Area 4 of the UNICEF Strategic Plan, 2022–2025, is aimed at ensuring that every child, including adolescents, has access to and uses safe water, sanitation and hygiene (WASH) services, lives in a resilient community and in a safe climate and environment.

Under Goal Area 4, UNICEF pursues outcomes within three results areas: (1) provide WASH services for 50 million people over four years through direct support, (2) support government partners to strengthen national WASH systems and (3) address climate change, disaster risks and environmental degradation, with a focus on the most vulnerable children. In the first year of the Strategic Plan, good progress was made against indicator targets in all three of these areas (see Figure 1).

Figure 1. Progress against 2022 milestones, Strategic Plan Goal Area 4



Source: UNICEF Core Standard Indicators (CSIs) (2022).

## Water, sanitation and hygiene

As sector stakeholders take stock of the state of the world’s water and sanitation at the UN-Water Conference, WASH coverage estimates show that while much progress has been made to improve access to services, greatly accelerated efforts are needed to reach SDG Goal 6 of ensuring the availability of sustainable services for all by 2030. Key challenges to achieving this goal include insufficient financing, the impact of climate change on WASH systems and on communities and expanding humanitarian crises.

In spite of these challenges, UNICEF exceeded 2022 milestones for its Strategic Plan, 2022–2025 result area of improving safe WASH services through direct support. In 2022 a total of 26 million people gained access to at least a basic sanitation service, 30.6 million to safe water and 23.6 million to basic hand hygiene. The vast majority of these beneficiaries – over 88 per



cent – are in fragile contexts, where this support is focused. This is an important accomplishment, but much more work is needed by all sector actors to meet overall goals.

Progress was also made on strengthening WASH systems in programme countries on several fronts, including sector financing, WASH systems sustainability and promoting the humanitarian–development–peace nexus. However, progress in this systems-strengthening result area has been more modest due to a lack of dedicated or flexible funding resources needed to drive results.

UNICEF continues to also provide direct support in humanitarian crises on a large scale, reaching 39.4 million people with water services and 9.3 million with sanitation services in 2022 in 98 countries across all regions. The largest emergency responses were in response to political upheaval in Afghanistan, to the war in Ukraine, to conflict and severe drought in Ethiopia, and to the ongoing crises and



Group handwashing at school in Cameroon

an unprecedented cholera outbreak in Yemen, the Syrian Arab Republic and neighbouring countries. UNICEF continued to play a leadership role on humanitarian WASH coordination, and expanded its work on strengthening the humanitarian–development–peace nexus to increase the disaster resilience of WASH systems and to use WASH programming as a catalyst for peacebuilding efforts.

The WHO–UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) released a data update on WASH in schools in 2022 highlighting how efforts must be sharply accelerated – by a factor of 14 – to achieve universal coverage by 2030 and reduce inequalities.<sup>1</sup> UNICEF direct support in development and emergency contexts helped 32,939 schools gain access to a complete set of basic WASH services in 2022, and support for capacity-building and systems-strengthening efforts continued in programme countries.

A total of 10,827 health-care facilities achieved a full set of WASH services through UNICEF direct support, while at the global level UNICEF and WHO launched an update of the WASH FIT guide for improving quality of care through WASH services, which is now in use in over 40 countries. UNICEF has additionally provided training for representatives from Ministries of Health and NGO partners from 23 countries in the application of WASH FIT in health-care facilities.

A total of 17.5 million women and girls were reached with menstrual hygiene and health services and information with UNICEF direct support in 2022. This includes focused media and

social campaigns, including on Menstrual Health Day, and provision of services in households, schools, health-care facilities, and in internally displaced persons, refugee and transit camps.

The UNICEF [Game Plan to Reach Safely Managed Sanitation](#) was launched in 2022 to more effectively contribute to the SDG target of safely managed sanitation for all by 2030, which is currently the most off-track of all SDG targets. The goal of the plan is for UNICEF with partners to help 1 billion people reach this sanitation standard by 2030 through direct support and strengthening of national WASH systems. The *Game Plan* is also intended to help renew interest in sanitation among stakeholders and reverse the trend of declining funds earmarked for sanitation programming across the sector.

UNICEF continues to shift its WASH programme to be climate-resilient and promotes the importance of climate resilience with government partners and other sector stakeholders. In 2022, UNICEF was engaged in 81 countries in climate-resilient WASH programming, in 10 countries supported the development of climate finance proposals for WASH and in 13 countries worked collaboratively with stakeholders to finalize comprehensive national climate rationales, which define climate change hazards and their impact on WASH services and communities, and outline technical and programming solutions. Through direct support 3.2 million people gained access to climate-resilient sanitation systems and 5.4 million people to climate-resilient water systems. UNICEF also constructed a total of 1,855 solar water systems serving communities, schools and health centres in 2022, the most ever in a single year.

UNICEF released a total of 149 publications in 2022, ranging from flagship global advocacy documents like the [State of the World's Drinking Water](#) report, published with WHO and the World Bank, to highly specific technical and guidance materials in programme countries, such as the WASH and peace guidelines published in Ethiopia. UNICEF also expanded its capacity-building role, including delivery of 18 sectoral courses on the UNICEF Agora training platform completed by 1,874 participants, mainly staff from UNICEF partners.

As the need for greater and more varied sources of financing for resilient WASH systems becomes ever more clear, UNICEF expanded its own efforts through support to government partners, work with the private sector and engagement in new financing initiatives ranging from its founding membership on the high-level panel of the Africa Water Investment Programme to support for micro-credit for household sanitation facilities in Ghana and Nigeria. This is a relatively new area of focus for UNICEF and much more needs to be done with all sector actors to effect change. However, some progress was made in 2022. UNICEF and partners issued a new guidance package on the development of costed, inclusive national WASH financing strategies, and nine countries are now implementing these strategies. Additionally, UNICEF efforts contributed to an increase in WASH sector financing from public or private sources in 15 countries.



# Climate, environment, energy and disaster risk reduction

UNICEF is ramping up its climate, environment, energy and disaster risk reduction (DRR) work to address the ever-increasing impacts on children and young people from climate change, environmental degradation, pollution, biodiversity loss and from all types of disasters. UNICEF is working to address a long-standing gap in the international community which leaves children and young people behind in the face of this planetary crisis.

UNICEF has three main areas of focus in its response to this crisis: (1) improve the resilience of children and their communities through support to adaptation efforts; (2) empower children and young people with the education, skills and opportunities to be environment champions; and (3) drive sustainability within UNICEF and its global network of partners and suppliers.

In 2022, 69 country offices implemented child-sensitive programmes to enhance the climate and disaster resilience of children and young people and promote environmental sustainability, up from 37 in 2021. UNICEF's programming aims to save lives, by ensuring essential social services for children and young people are child-sensitive and resilient to disasters, climate and environmental impacts, and by promoting environmental sustainability. The UNICEF Strategic Plan, 2022–2025 elevates climate and environmental action as a cross-cutting priority across global programme areas (health and nutrition, education, WASH, child protection and social policy), and includes a dedicated result area to promote cross-sectoral action, advocacy and internal operational efficiency.

The engagement of children and young people on climate action is also a key area of UNICEF programming. For example, in 2022 in 68 countries, UNICEF polled the opinions of young people, helped to integrate climate and resilience into education systems, and supported young climate, sustainable energy and DRR advocates. COP27 (the 2022 UNFCCC Conference of Parties) and GPDRR (the 2022 Global Platform on DRR) were important opportunities for engaging decision makers and stakeholders to link climate and environmental crises as a child rights crisis. UNICEF advocacy led to formal recognition of the role of children and young people as agents of change in climate and DRR action, and stressed the need to include them in processes for designing and implementing policy and action.

Systems-strengthening for climate and disaster resilient social services for children and young people is a key part of this effort, and UNICEF works across sectors to adapt existing national policy and strategy frameworks to fully incorporate child-sensitive resiliency elements. UNICEF provides ongoing support to the formulation or amendments of national and subnational policies, frameworks and legislation related to DRR and supports associated systems-strengthening processes and action in countries to reduce risk for children and young people. In 2022, UNICEF worked with governments and stakeholders to strengthen DRR; helping to establish or enhance preparedness frameworks to incorporate child needs and rights in 64 countries. In 16 of these countries, UNICEF's support was informed by comprehensive multi-hazard child-centred risk assessments.

UNICEF programme implementation and support to governments is driven by evidence, with a focus on filling critical data gaps with respect to children's vulnerability to climate and disaster

risk. This goes down to subnational levels, which are the front lines for resilience-strengthening. Building on the UNICEF [Children's Climate Risk Index](#) (CCRI) and leveraging tools such as child-centred risk assessments (e.g., Children's Climate Landscape Analysis reports), UNICEF has been advancing on new methodologies for subnational risk mapping in pilot countries, efforts that are being scaled up in 2023 to more countries through open-data platforms that can be used by all partners to inform child-sensitive action.

Advocacy and programming efforts were promoted and informed by 2022 flagship publications, including [A Liveable Planet for Every Child – Climate, environment, energy and DRR strategy](#); [Every country protected; every child resilient](#) on DRR and [A brighter life for every child with sustainable energy](#); the [Child-sensitive climate policies for every child](#) on the child sensitivity of Nationally Determined Contributions (NDCs); and [The coldest year of the rest of their lives](#) on the impact of heatwaves on children.

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# Strategic context

## Water, sanitation and hygiene

This report is being published just after the [United Nations 2023 Water Conference](#), the first United Nations conference focusing on the water sector in almost 50 years.<sup>2</sup> The conference's [Water Action Agenda](#) is a once-in-a-generation opportunity to galvanize action among key stakeholders to accelerate progress on achieving SDG Goal 6 of safe WASH services for all, as well as the United Nations Decade for Action on Water and Sanitation (2018–2028). It is also a key moment to encourage greater collaboration among stakeholders, including within the United Nations system.



UNICEF played a central role at the conference, supporting the participation of

government partners, providing extensive contributions to preparatory processes, contributing data and analysis of global trends, co-writing one of five thematic papers for the conference (see below), hosting or co-hosting [eight conference events](#) and facilitating participation of young people at the conference. The conference was also an opportunity to highlight UNICEF WASH programming for current and future partners, and [advocate](#) for child rights within the context of the sector.

The Water for Health interactive dialogue session, which was the first of the five themes of the conference was co-chaired by the United Kingdom and the Dominican Republic and moderated by UNICEF Executive Director Catherine Russell. At the [session](#), Ms. Russell spoke of the role of WASH in ensuring gender equality, freeing women and girls from the dangerous and time-consuming work of water collection, and stressed that 1,000 children under the age of 5 die every day from diseases that are due to a lack of appropriate WASH services. Over 30 government delegates, intergovernmental representatives and other stakeholders intervened during the session, stressing that water and sanitation is a human right, and that WASH is essential for health, education, gender equality and development. Participants reaffirmed that drinking-water and sanitation are human rights; stressed that access to safely managed WASH services is vital for health, education, gender equality and development; and urged action and innovation in the areas of political leadership, government systems and smart financing to achieve the ambition of the SDGs and reach everyone, everywhere, with sustainable, climate-resilient WASH services.

The [Water for Health background paper](#) for the conference was developed jointly by UNICEF and WHO. It assesses the current status of WASH in households, schools and health-care facilities, stresses the links between WASH and health, and illustrates how while good progress has been made in the sector, much more needs to be done to meet SDG Goal 6 targets.

Some countries have made exceptional progress, notably in East Asia, but elsewhere progress has been slower. The latest dataset from the WHO–UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) shows that in 2020 a total of 2 billion people globally still did not use safely managed drinking-water, 3.6 billion people used unsafe sanitation services that leave human waste untreated and 2.3 billion people did not have access to hand-washing facilities with soap and water.<sup>3</sup> Disparities in coverage are significant, including among countries and regions, and between rural and urban communities (Figure 2).

Figure 2. Global drinking-water, sanitation and hand hygiene coverage, 2015–2020



Source: JMP (2021).

At least a quadrupling of current rates of progress is needed to meet the global SDG WASH targets, and much higher rates of progress are needed in the most off-track countries and to reach the most vulnerable populations, including in fragile and crisis contexts.<sup>4</sup> A renewed focus on equity is needed to ensure that WASH services are provided wherever they are needed, including in workplaces, schools and health-care facilities, places where food is prepared, markets, refugee camps, and centres for displaced persons and migrants?

More progress is also needed for WASH in institutions. The JMP released a [progress update](#) on WASH in health-care facilities (HCF) in 2022 showing that just half of health-care facilities globally have basic hygiene services, and a 2022 [data update on WASH in schools](#) highlights low rates of progress and how efforts must be sharply accelerated – by a factor of 14, 3 and 5 for school water, sanitation and hygiene, respectively – to achieve universal coverage by 2030 and meet the SDG target.

As the climate crisis worsens, access to water is threatened by water scarcity and unsustainable water abstraction, WASH services are increasingly interrupted by more frequent and severe

floods and droughts and other climate-related events, and 450 million children live in communities with high or extremely high water vulnerability.<sup>5</sup> To ensure gains made to date are not lost, sector programmes and financing must ensure that both existing and new WASH systems are fully climate-resilient, and [all stakeholders have role to play](#) in ensuring climate resilience.

The UNICEF–WHO [Water for Health background paper](#) and [joint statement](#) for the 2023 UN-Water Conference stressed that government leadership and willingness to drive change is the key to accelerated action, along with greater political commitment to safely managed, resilient and inclusive WASH services together with a significant increase in financial resources. It is also critical to strengthen governance and the institutions required to deliver WASH services at scale, such as by establishing autonomous regulatory agencies, encouraging a more gender-balanced workforce, prioritising capacity development at the local level, and by developing policies that encourage innovation and foster collaboration between government, civil society groups, and private sector actors.

UNICEF's focus in the WASH sector is on children. UNICEF advocacy stresses that the impact of inadequate WASH services affects children the most, and that needs of children and young people, including privacy, dignity and menstrual hygiene services for girls and adolescents, must be fully incorporated into systems and programme design. Children and adolescents were at the centre of UNICEF advocacy at the Water Conference, and the theme of a special analysis completed by UNICEF for the conference. The [triple threat](#) analysis focuses on how the nexus of inadequate WASH services, WASH-related diseases and climate hazards threatens children in particular, and shows how the lives of 190 million children are in danger from this triple threat, especially in the Sahel region of sub-Saharan Africa.<sup>6</sup> The analysis identifies the need for rapid scale-up of investment in the WASH sector in these countries, improved climate resilience in the most vulnerable communities and support for systems-strengthening, capacity-building and coordination.

Humanitarian crises caused by protracted conflicts, climate change, global economic disruption and the continuing effects of the COVID-19 pandemic continued to have a major impact on WASH systems in 2022, affecting tens of millions of vulnerable children in every UNICEF region, and impeding work on new systems. These include the war in Ukraine, flooding in Pakistan, the ongoing crisis in Yemen, [political upheaval in Afghanistan](#), [severe drought in the Horn of Africa](#) and many others.

A particular danger for children was cholera, or the 'pandemic of the poor' that affects vulnerable communities most of all. In 2022 cholera reached crisis levels with outbreaks in an unprecedented 30 countries, including in the Syrian Arab Republic, Lebanon and other countries that had been cholera-free for years.<sup>7</sup> The resurgence is due to a range of inter-related factors including fragility, conflict and climate change, but the underlying cause of cholera continues to be poor access to WASH services, with the vast majority of cases in countries with the lowest WASH coverage (see '*Emergency WASH*').



# Climate, environment, energy and disaster risk reduction

Climate change, environmental degradation, pollution, disasters and biodiversity loss affect everyone on the planet, but the impacts are felt the most by children and young people, especially in fragile countries and in the communities that have contributed the least on a per-capita basis to global emissions and pollution. According to the UNICEF Children's Climate Risk Index (CCRI), an estimated 1 billion children in 33 countries are at extremely high risk from the impacts of climate change.<sup>8</sup> Children and young people bear the brunt of losses in disasters and other humanitarian crises, which are increasing in severity and driven by the exacerbating effects of climate change. More than three-quarters of United Nations' humanitarian appeals involve an extreme weather event, up from just over one-third in 2000,<sup>9</sup> and in 2021 alone 23.7 million were displaced due to disasters.<sup>10</sup> Children and young people are affected by the lack of clean energy sources, including the 186 million in primary schools without electricity and the estimated 600,000 children under the age of 5 who die from pollution resulting from unsustainable energy practices.<sup>11</sup>

There is a global gap in addressing these impacts on children and young people, particularly the most vulnerable. The latest Intergovernmental Panel on Climate Change (IPCC) reports remind us that some impacts of climate change are now irreversible, and given climate dynamics, that impacts will inevitably worsen in the coming decades. Analysis from UNICEF's CCRI (among others) indicates that among the best ways to reduce risk for these children and young people is to ensure that the essential social services that they need to survive, grow and thrive are made resilient to climate and environmental impacts, including disasters. However, less than 20 per cent of global climate finance is targeted towards adapting to climate impacts, with a small proportion of that going towards the social services that children most depend on in countries that are the most vulnerable.

Action for children and young people is needed now, including cross-sectoral efforts (such as DRR, national and subnational policies, data, etc.) and sector-specific efforts in education, health, nutrition, WASH, child protection and social protection – all critical for child health and well-being. There is growing recognition of the need for child-specific action. However, while progress has been made putting in place child-sensitive, climate and disaster resilience policies and programmes, funds to implement these are lacking.<sup>12</sup> UNICEF is working with partners on innovative disaster and climate risk financing mechanisms that can have measurable results for children, young people and their families.

Through its own programmes, advocacy, resource mobilization and data and evidence efforts, as described in this report, UNICEF works to realize the right of every child and young person to live in a safe, clean, healthy and sustainable climate and environment.

# Results: Water, sanitation and hygiene

UNICEF was active in WASH programming in over 100 countries in every region in 2022. This includes countries where UNICEF provides direct response for WASH services, in both development and emergency contexts, and countries where UNICEF supports WASH sector systems-strengthening initiatives. In most of these countries UNICEF is active on many programming fronts, sometimes on a very large scale (such as in Afghanistan, Ethiopia, Nigeria and Yemen). In other countries programmes are more modest, focusing in some cases on specific subsectoral areas such as WASH in schools or menstrual hygiene.

Total expenditure on WASH programmes was US\$1.13 billion in 2022, with almost half (48 per cent) for WASH response in humanitarian contexts and over 95 per cent expended at the country level (see *'Financial report' for details on 2022 expenditure patterns*). Over 700 professionals worked within the UNICEF WASH programme in 2022, mainly at the country and regional offices (97 per cent of staff members).



Improved, school gender-segregated toilet facilities in Vanuatu

The year 2022 is the first of the [UNICEF Strategic Plan, 2022–2025](#), which emphasizes the need for UNICEF to focus its programming efforts on the strengthening of WASH sector systems in programme countries and includes a new set of monitoring indicators to better track progress in this area (Result Area 2), along with a set of monitoring indicators for the delivery of WASH services (Result Area 1) (Table 1). Results against these indicators, and other results, are reported in the *'WASH systems-strengthening'* and *'WASH results by subsector'* sections of the report, below.

Table 1. WASH Strategic Plan output indicators

<b>Results Area 1: Sustained access to and use of safe water, sanitation and hygiene practices for all children and adolescents, particularly the most disadvantaged and those living in humanitarian and fragile contexts</b>	<b>Results Area 2: Strengthened and resourced water, sanitation and hygiene systems and empowered communities for gender-equal, inclusive, affordable and sustainable services</b>
4.1.1. Number of people reached with at least basic sanitation services through UNICEF-supported programmes	4.2.1. Number of countries that have prepared and implemented a costed and inclusive national WASH financing strategy, with UNICEF support
4.1.2. Number of people reached with at least basic water that is safe and available when needed, through UNICEF-supported programmes	4.2.2. Number of countries with increased annual sector expenditures from different funding and financing sources resulting from UNICEF support
4.1.3. Number of people reached with at least basic hygiene services through UNICEF-supported programmes	4.2.3. Number of countries with national monitoring systems incorporating sustainability in previous two years, with UNICEF support
4.1.4. Number of schools reached with basic WASH services, through UNICEF-supported programmes	4.2.4. Number of countries that have developed a climate rationale for the impact of climate change and water scarcity on WASH services
4.1.5. Number of health-care facilities reached with basic WASH services, through UNICEF-supported programmes	4.2.5. Number of countries integrating a humanitarian–development–peace nexus approach on WASH programming through the participation of affected populations
4.1.6. Number of women and adolescent girls reached whose menstrual health and hygiene needs are addressed through UNICEF-supported programmes	
4.1.7. Number of people in humanitarian contexts reached with appropriate drinking-water services, through UNICEF-supported programmes	
4.1.8. Number of people in humanitarian contexts reached with appropriate sanitation services, through UNICEF-supported programmes	

## WASH systems-strengthening

Service delivery by UNICEF and other development partners remains important in situations of crisis and fragility, and to address inequities, but sustainable results at scale will only be achieved through government-led efforts at national, subnational and community levels, working with a range of partners including CSOs, NGOs, academic institutions and private sector actors. In recognition of this, UNICEF has been steadily shifting its programming efforts towards systems-strengthening, and the 2022–2025 Strategic Plan further accelerates this move. Through an extensive internal consultative process, a review of past efforts and discussions with partners, UNICEF has developed an updated framework for action on systems-strengthening that emphasizes the urgent need for more action in this area.<sup>13</sup>

UNICEF systems-strengthening work cuts across the five enabling environment ‘building blocks’ that are widely used in the WASH sector: (1) policy and strategy; (2) institutional arrangements; (3) sector financing; (4) planning, monitoring and review; and (5) capacity development.



This section of the report provides a summary of UNICEF’s systems strengthening work. However, because most service delivery interventions are closely linked to systems-strengthening efforts (such as work related to the piloting of innovative approaches in the field) more details of systems work can be found in the ‘WASH results by subsector’ section of the report, below.

## Policy and strategy

UNICEF advocacy and support led to the development of major new policy instruments in over 30 countries in 2022, including national policies, strategies, standards, road maps and costed plans. The two most common thematic areas covered were safely managed sanitation, with several countries releasing new national strategies and plans (see ‘Sanitation’), and climate-resilient WASH, with the release of new strategies and national guidelines in several countries and the inclusion of WASH into broad climate adaptation policies and plans (see ‘Climate-resilient WASH’).

Other areas where UNICEF-supported policy instruments were finalized in 2022 include water safety (a new national plan in Tajikistan and an arsenic policy in Bangladesh), WASH and infection prevention and control (IPC) (in the Democratic Republic of the Congo), hand hygiene (national road maps and costed implementation plans in Bangladesh and other countries), water resource management (new national plan in Libya), WASH in schools (new national standards in Somalia) and sanitation and hygiene (the first ever stand-alone national strategy in Namibia). UNICEF support for policy and strategy development is provided over the long term, including ongoing support for roll-out and dissemination, and on related capacity-building efforts.

UNICEF regional offices support policy development in a number of ways. In the Middle East and North Africa region, UNICEF worked with the Stockholm International Water Institute (SIWI) to conduct an analysis of the existing enabling environment for addressing water scarcity and climate resilience in regional countries, and the findings are being used to guide UNICEF support for strengthened systems. In the East Asia and the Pacific region, UNICEF and the Government of Indonesia convened a multi-country ministerial meeting on commitments to action on WASH and formed a partnership with the Association of Southeast Asian Nations (ASEAN) to conduct a regional systems policy review. In the South Asia region, UNICEF is conducting progress and sector systems analyses in key subsectoral areas to help country programmes identify areas for support, including on menstrual health and hygiene (MHH) and on waste management in health-care facilities. And in sub-Saharan Africa countries, UNICEF continues to support the African Ministers' Council on Water (AMCOW) to roll out the African Sanitation Policy Guidelines (ASPG) to promote enabling policy environment for accelerating progress on safely managed sanitation across.

In partnership with WaterAid, UNICEF worked with the Southern African Development Community (SADC) on the development of the subregion's first hygiene strategy. Launched in November 2022, the [strategy](#) provides guidance for countries to develop and strengthen national strategies and road maps, while outlining the benefits of investing in hand hygiene for donors, development banks and the private sector.<sup>14</sup> The strategy was developed with a gender lens and includes a range of gender-responsive programming features (see *'Cross-cutting: WASH and gender'*).

The key internal strategy document launched in 2022 is the new [UNICEF Game Plan to Reach Safely Managed Sanitation](#), which will guide UNICEF contributions to meeting the SDG sanitation target (see *'Sanitation'*). UNICEF also developed a new WASH and IPC Strategy, which will be launched in 2023, launched a new Resource Mobilization Strategy for WASH, updated the Strategic Framework for WASH Climate Resilience and updated its Knowledge Management Strategy.

## Institutional arrangements

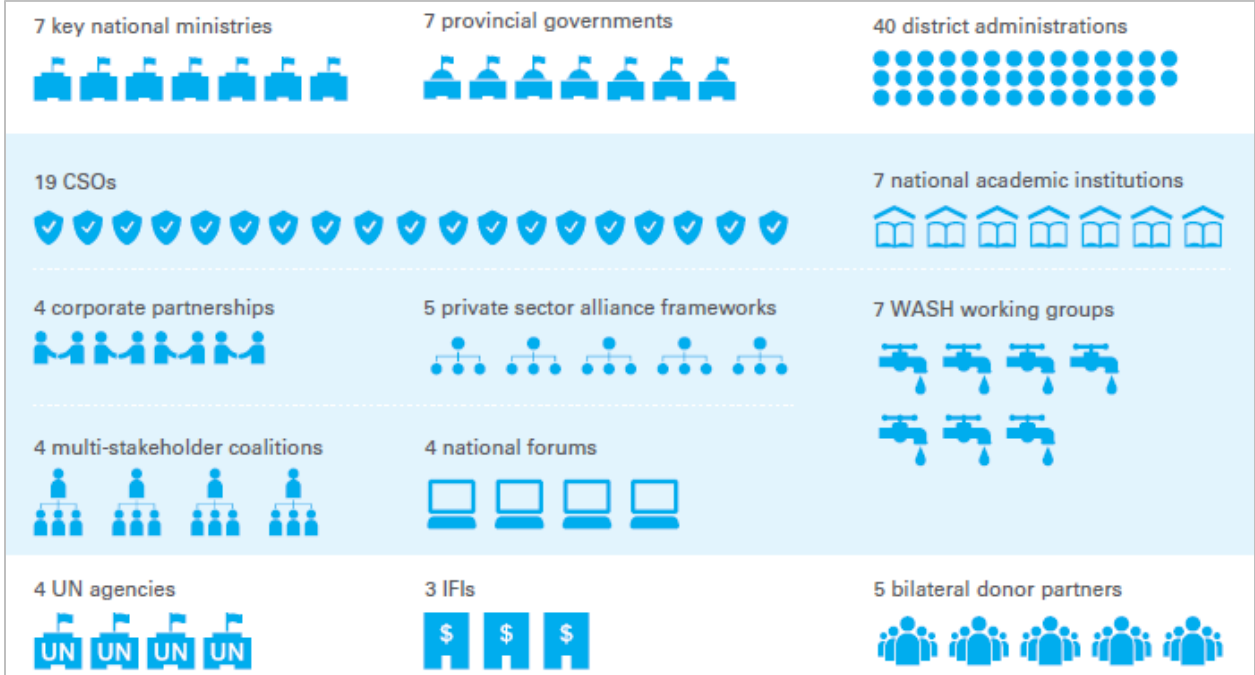
The SDG WASH targets can only be achieved through strong partnerships and collaborations. No single organization, including UNICEF, has a programme with the scope and scale to meet the targets working alone, especially in the context of the global climate crisis and increasing



scale of humanitarian crises and fragility. UNICEF works with thousands of partners at the global, regional, national and local levels. These include government bodies, donor partners, international finance institutions, United Nations partners, NGOs, companies, CSOs and a wide range of civil society organizations and coalitions. In 2022, at the country level alone, UNICEF worked on programming initiatives with over 500 national NGOs, civil society organizations and academic institutions; 100 international NGOs and 1000 government partners at the national and sub-national levels.<sup>15</sup>

In large country programmes, like Indonesia, UNICEF can work with dozens of partners (Figure 3).

Figure 3. Scope of partnership frameworks in programme countries, Indonesia example



Source: UNICEF Indonesia Country Office (2022).

UNICEF is active in a wide range of partnerships and coordination mechanisms at the global level. In many of these mechanisms UNICEF also assumes a leadership role. These include, but are not limited to, UN-Water, Sanitation and Water for All (SWA), the Global WASH Cluster, the JMP, the Global Handwashing Partnership, the Toilet Board Coalition, the Global Task Force on Cholera Control and the WASH in Schools and WASH in Health Care Facilities global networks. UNICEF is also active within partnership frameworks at the regional level including WASH sector-specific bodies such as the Africa Water Investment Programme and the African Ministers’ Council on Water (AMCOW), and WASH-related initiatives with broader regional coordination networks such as ASEAN, the League of Arab States and SADC.

The Government of the Netherlands continues to support UNICEF WASH programming on a large scale, including through the Accelerating Sanitation, Hygiene and Water for All (ASWA)

multi-country initiative in eight countries in sub-Saharan Africa: Côte d'Ivoire, Burkina Faso, Mali, the Niger and Nigeria in West and Central Africa; and Mozambique, Somalia and the United Republic of Tanzania in Eastern and Southern Africa. The programme is providing WASH services to millions of people in communities and institutions, while emphasizing WASH behaviour change, systems-strengthening, the leveraging of financial resources and partnerships, and climate-resilient WASH. In addition to work in these countries, the ASWA programme is used to develop innovative programming models that can be adopted by UNICEF and its government partners in other countries (specific examples of ASWA results are referenced later in this report).

UNICEF was very active at the COP27 meeting in Egypt in 2022 including in the area of WASH, organizing 11 high-level events on the links between WASH and climate, including Climate Resilience WASH Day and a range of support for youth engagement at the meeting. UNICEF was a core partner in the Water Pavilion initiative, which for only the second time at a COP meeting, was used by UNICEF and partners to emphasize the multifaceted links between WASH and climate. Pavilion programming included 59 events over 10 days, more than 450 speakers and over 3,500 in-person participants. It was also highly visible online on the COP27 website and on social media; the hashtag #Water4Climate received over 30 million impressions and 13,000 engagements on Twitter.

For the first time at a COP, UNICEF WASH representatives were able to successfully advocate for the WASH agenda to be included in several COP27 negotiation streams, including on the Global Goal on Adaptation, and this COP meeting was the first to highlight the importance of water for climate adaptation (*see 'Results: Climate, environment, energy and DRR' for additional information on UNICEF's broader participation at COP27*). UNICEF also contributed to development of the Action for Water Adaptation and Resilience (AWARE) initiative for the most vulnerable communities and ecosystems in Africa, and the call to action for acceleration of climate-resilient sanitation, both of which launched at COP27.<sup>16</sup>

UNICEF continues to host the SWA partnership and actively participate in partnership initiatives. UNICEF co-convened the biennial SWA Sector Minister's Meeting, which brought together more than 60 ministers of water, sanitation and hygiene, and their counterparts responsible for climate, environment, health and the economy. UNICEF also provided extensive preparatory support in programme countries to ministerial delegates and technical teams. Meeting delegates [agreed](#) on priority actions in four different areas as key to accelerating progress towards SDG WASH targets: political leadership, sector reform, innovative financing and improved transparency and inclusion.

UNICEF is a partner in the Oxford University REACH programme, funded by the Government of the United Kingdom, which works to improve water security for the poor through state-of-the-art science to inform policy and practice. In 2022, the initiative developed the SafePani water service delivery model in Bangladesh, and published the FundiFix service delivery model in Kenya and related models that aim at professionalizing service delivery.

UNICEF is working with the United Nations Office on South–South Cooperation (UNOSSC), the Government of Brazil and government partners in the Eastern and Southern Africa region on

urban and peri-urban sanitation. Activities in 2022 included a study tour for participants from nine countries from the region to Brazil, and the launch of a South–South initiative to introduce low-cost condominial sewage systems in Angola (see ‘Sanitation’).

UNICEF continues to serve on the steering committee of the [WASH4Work](#) global partnership, which works with global and national businesses active in the WASH sector. A key activity in 2022 was the formulation of the [COP27 Business Declaration for Climate Resilient WASH](#), which was launched at a COP27 side event on business and WASH. The declaration has 41 signatories who pledged to leverage their resources, influence and global reach to increase access to climate-resilient WASH and help meet SDG WASH and climate goals.

WASH4Work also launched the [WASH Pledge](#) for businesses that commit to providing safe WASH at all workplaces within three years of signing, and additionally commit to taking action on WASH across their value chains as well as in the communities that host their workplaces and where their workers live (guided by a new



WASH4Work resource package). To date, 488 businesses have signed the pledge, including some of the largest companies in the world.

UNICEF assumes a leadership role in the sector in countries where it has a significant presence and is often the co-convenor with government partners of coordination and consultation mechanisms and forums. This can include the WASH Cluster, donor partner groups, joint sector programming and pooled WASH funds, WASH and climate forums and a range of other sectoral and subsectoral mechanisms at national and subnational levels. Joint Sector Reviews are a key mechanism and in some countries UNICEF has been supporting government partners to undertake the reviews for many years (14 were held in 2022 with UNICEF support, including in Tajikistan where UNICEF coordinated the country’s first ever joint sector review). Such leadership and engagement in sector processes allows UNICEF to influence the WASH sector and leverage results.

## **Partnering with local universities in programme countries**

Universities and other academic institutions in programme countries are important partners for UNICEF WASH programming to institutionalize in-country capacity, to support WASH-related research initiatives, to develop locally informed innovation and to contribute to programme design and implementation.

UNICEF collaborates with local academic institutions in many different subsectoral areas, including these examples:

- **Climate-resilient WASH:** Collaboration with two universities in India to develop a knowledge base on climate-resilient WASH and preparedness systems.
- **Water quality:** Work with the University of Peshawar in Pakistan on rapid water quality testing technologies to support early warning of drinking-water contamination.
- **Water supply:** A partnership with Kwame Nkrumah University of Science of Technology in Ghana to install and assess locally assembled water vending units to reduce water losses and improve the reliability of systems.
- **MHH:** Work with students and faculty at the College of Micronesia in the Federated States of Micronesia and with the Medical Faculty of the University of Jaffna on MHH public awareness-raising activities.
- **Sanitation:** A research collaboration with the Autonomous University Gabriel Rene Moreno in the Plurinational State of Bolivia on the use of waste from sanitation systems in agriculture, and with the Jordan University for Science and Technology on a decentralized wastewater treatment innovation hub.
- **WASH programme design:** Work with postgraduate students from the Iraq University of Technology to conduct social and environmental impact assessments for planned WASH projects.
- **Hand hygiene:** Cooperation with the National University of Lesotho on the development and field-testing of three new, context-appropriate designs for hand hygiene stations.

UNICEF also works with universities to build national and regional capacity for local WASH education programmes. In 2022 this included support for a new institution at the University of Kinshasa in the Democratic Republic of the Congo that will offer certified IPC and WASH training with a focus on public health epidemic response, a new initiative with the Ethiopian Water Technology Institute to development of education materials for training staff at water and sanitation utility companies, and a collaboration with USAID and the German Jordanian University to set up the new Masters degree programme on humanitarian WASH designed for students across the Middle East and North Africa region.

UNICEF also encourages cooperation between Western universities and those in programme countries. In Bangladesh, for example, UNICEF brokered a knowledge-sharing agreement between KTH Royal Institute of Technology in Sweden and Dhaka University on safe water well drilling in arsenic-affected regions and related areas.

As a key component of its systems-strengthening work, UNICEF and its partners continued to use the WASH Bottleneck Analysis Tool (WASH BAT) to engage stakeholders in a process that assesses sectoral constraints and develops costed and prioritized plans with the aim of improving the efficiency of resource allocation and achieving more sustainable and equitable outcomes at scale. In 2022, the tool was applied by a national authority in a consultative process, with the support of UNICEF, in a total of 15 countries. UNICEF launched an update of the WASH BAT that incorporates climate resilience and incorporates other changes including in areas of sector financing and gender, and finalized a new country implementation guide (see '*Climate-resilient WASH*').

UNICEF continues to partner with young people at all programme levels. In 2022 UNICEF organized the Youth and Children's Forum at the 2nd International Decade Water Conference conducted in Tajikistan, attended by more than 200 delegates (including 67 international youth delegates from 33 countries), and is sponsoring similar forums at the 2023 UN-Water Conference. In programme countries, young people are sponsored and empowered to participate in a range of programming processes in the areas of climate-resilient WASH, MHH and other areas. In the South Asia region, UNICEF conducted a youth networks mapping exercise to identify opportunities for greater engagement with youth in the areas of WASH and climate. The ongoing [Duke-UNICEF Innovation Accelerator](#) focuses on youth engagement with the [2022 cohort](#) including 19 groups of young change-makers and social entrepreneurs in the areas of hand hygiene, menstrual hygiene, sanitation and water safety.

An expanding area of engagement for UNICEF is work with WASH utility companies and associations. Examples in 2022 include work in the area of capacity-building with the Arab Countries Water Utilities Association and support for establishing regional water utilities in accordance with new water legislation in the State of Palestine. In Iraq, UNICEF is working with water utilities to introduce smart-metering systems, and in Ethiopia UNICEF has signed an agreement with the national federation of water utilities to develop new monitoring systems. Water utilities are important partners in emergency responses, such as in Ukraine where UNICEF leveraged existing partnerships with utilities to accelerate repairs to war-damaged infrastructure, and in Burkina Faso where UNICEF was able to double the number of people reached in humanitarian response through a strategic partnership with the national water utility.



## Sector financing

### Taking action on financing for WASH

As described in more detail in this section and throughout the report, UNICEF promotes and supports efforts to increase sector financing through a wide range of programmes and initiatives. Examples from 2022 include:

- Training: Ensuring all WASH training programmes for staff and partners have sessions on sector financing, including the new course for all WASH staff on programming for WASH within the Strategic Plan, 2022–2025.
- Guidance: Launching a major new [guide on the development of national WASH financing strategies](#) with partners, which is a core component of UNICEF programming in this area.
- Collaboration: Working jointly with key partners and within WASH financing frameworks, such as the new high-level panel of the Africa Water Investment Programme.
- Advocacy and support: Using tools such as WASH budget briefs and sector finance studies to highlight issues and supporting government partners to develop strategies and access new funding sources.
- Getting results: Through advocacy and support in 2022, helping government partners to develop and launch new comprehensive WASH financing strategies to attract new sector financing.
- Assessing progress: Establishing targets and indicators to monitor UNICEF results in the area of sector financing.

UNICEF is working with partners to explore ways to increase financing for the WASH sector and better leverage existing funding sources to meet the SDG WASH targets. Sector financing is a core component of the UNICEF WASH Strategy 2016–2030 and UNICEF progress on catalysing new funding for the sector is, for the first time, explicitly included in a four-year Strategic Plan (2022–2025) in a result area with two targeted and monitored outputs: one on development of national WASH financing strategies, a key component of efforts to improve the finance situation in programme countries, and one assessing the number of countries that have actually increased financial resources for WASH from domestic public sources, external donors and the private sector.

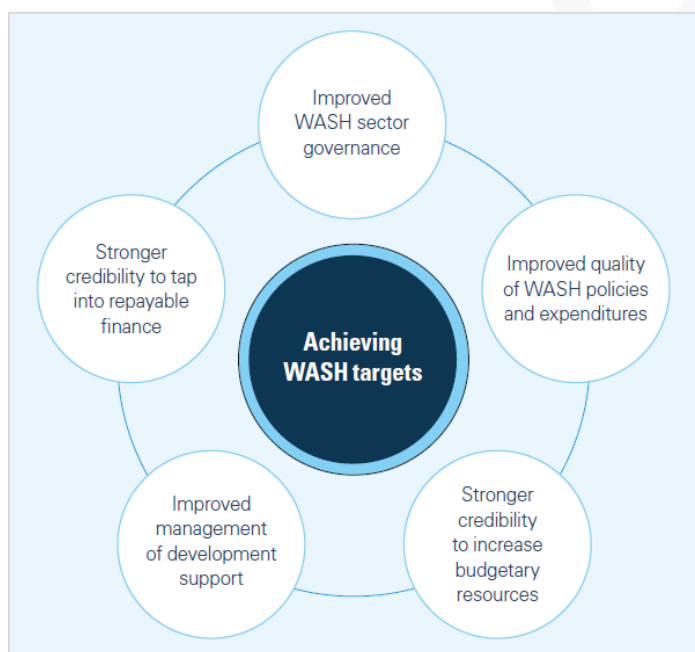
In preparation for this new result area, UNICEF developed a discussion paper for staff on WASH financing, *Strategic Directions for WASH Financing Thematic Area in the UNICEF Strategic Plan, 2022–2025*,<sup>17</sup> which outlines challenges and recent trends in WASH financing, and outlines four programmatic directions for UNICEF in its advocacy and support for sector financing: (1) global thought leadership; (2) demonstrating proof-of-concept of new models and approaches; (3) strengthening and convening partnerships at country, regional and global

levels; and (4) capacity development and technical assistance. UNICEF also offers a course on WASH sector financing, a course on public finance for WASH and a session on sector financing in the 2022 Essentials of the New Strategic Plan course for WASH and climate, environment, energy and DRR (CEED) staff. Sector finance material is also included in other courses including the foundational WASH course (which is obligatory for new UNICEF WASH staff) and in subsectoral courses such as the climate-resilient WASH course.

## Developing national WASH financing strategies

UNICEF launched a new guide on the development of national WASH financing strategies in partnership with SWA, Agence Française de Développement (AFD) and the International Water and Sanitation Centre (IRC) in 2022. The guide, [How to Develop a Water, Sanitation and Hygiene \(WASH\) Finance Strategy](#), provides a comprehensive tool set for senior government officials (including planners in WASH-related ministries, ministries of finance, regulators and public utilities), CSO representatives and experts from technical and financial development partners to develop national WASH finance strategies. It outlines key strategy components (an estimate of the finance gap, options to close the gap, a policy package to close the gap) and its goals and benefits (Figure 4). UNICEF is developing a companion training course for the guide in partnership with IRC, due out in 2023.

Figure 4. Benefits of developing a WASH finance strategy



**Source:** How to Develop a Water, Sanitation and Hygiene (WASH) Finance Strategy (2022).

Progress has already been made. According to data from UNICEF internal monitoring systems on WASH systems-strengthening (which covers this SP Indicator, 4.2.1, on financing strategy

as well as other indicators), nine countries have prepared and are implementing a costed and inclusive national WASH financing strategy with UNICEF support, including in the large population countries of Bangladesh, India and Nigeria. In each of these nine countries, all five criteria have been met (*Table 2*).

**Table 2. Number of countries that have prepared and implemented a costed and inclusive national WASH financing strategy with UNICEF support (SP Indicator 4.2.1, 9 countries in 2022)**

<b>Indicator criteria</b>	<b>No. of countries</b>
National WASH targets been costed across at least some subsectors	37
The country can quote a percentage of resources available to reach targets	16
A financing strategy has been prepared	18
Implementation of the strategy has started	13
Vulnerable populations are mentioned in the financing strategy	16
<b>Number of countries where all five criteria have been met</b>	<b>9</b>

**Source:** UNICEF CSIs (2022).

National finance strategies are often the culmination of a multi-year process and involve a wide range of sector stakeholders, such as the 2022 Rwanda Strategy, which has its roots in UNICEF budget briefs that started in 2018, and a 2019 sector finance study sponsored by IRC, WaterAid and Water for People. The 2022 [Malawi Climate Resilient WASH Financing Strategy](#), developed jointly by the Ministry of Water and Sanitation and UNICEF, originated in studies undertaken in preparation for the SWA Finance Ministers Meeting in 2020 and follow-up work by multiple stakeholders.

## **Increasing financing in programme countries**

UNICEF advocates and supports actions to increase overall funding for the WASH sector in programme countries. Under the SP Indicator for this result (4.2.2), these efforts are considered successful if four criteria are satisfied, and in 2022 this was achieved in 15 countries (*Table 3*). This is significantly below the 2022 target of 25 countries, which is an indication of the difficulty of this work, and the need for more concerted efforts by UNICEF (and other sector actors).

Table 3. Number of countries with increased annual sector expenditures from different funding and financing sources resulting from UNICEF support (SP Indicator 4.2.2, 15 countries in 2022)

Indicator criteria	No. of countries
UNICEF support has led to an increase in sector financing	35
UNICEF influenced government, donor or private sector funding	34
Some leveraged funding was provided by UNICEF	21
UNICEF country offices have documented indirect results related to increased sector funding	39
Number of countries where all four criteria have been met	15

**Source:** UNICEF CSIs (2022).

UNICEF's role in advocating for these increases is multifaceted: in Ghana, for example, UNICEF conducts and publishes annual budget briefs, conducts studies on sector financing,<sup>18</sup> engages with the Parliamentary Select Committee on Water and Sanitation and supports CSO partners in budget tracking processes. In other countries budget briefs are also used by UNICEF for assessing public expenditure patterns in the WASH sector: a 2022 UNICEF budget brief in Zimbabwe illustrated inconsistent expenditure performance against budgets and low expenditures in rural areas (among other issues), a budget brief in Zambia documented falling budgets for WASH despite rising budgets in other sectors, and a budget brief in Angola showed how sanitation and hygiene budgets are underfunded in relation to water budgets.

UNICEF advocacy is often based on UNICEF pilot projects, such as in Namibia where government funding has been provided for the CLTS approach country-wide and in Bangladesh where US\$240 million has been committed to scale up the UNICEF-supported approach to arsenic mitigation.

UNICEF also leverages its funding through participation in sector-wide WASH funds. In Mozambique the national pooled fund for rural WASH, which is coordinated by UNICEF, provided a total of US\$26.9 million to the sector in 2022, of which the UNICEF funding contribution is just 2 per cent. In Ethiopia UNICEF supports, along with other partners, the One WASH programme and pooled fund, which provides about US\$163 million annually.

Private sector funding sources remain under-utilized in the sector, but UNICEF has made headway in some countries. In Iraq, for example, a programme that pools funding from a local energy company, government sources and UNICEF is improving water systems in the city of Basra. In Angola, the UNICEF Business for Results strategy led to financing for the sector from a private bank and in Nigeria UNICEF support for the Organized Private Sector for WASH ([OPS-WASH](#)) umbrella body has helped to attract sector funding from several local companies. Globally, UNICEF continues to engage with the private sector such as through its shared-value partnership with LIXIL (see '*Sanitation*' and '*Hygiene*') and the WASH4Work partnership.

UNICEF is increasingly engaged in support to government partners to access climate funding sources for climate-resilient WASH programming. As a designated Global Climate Fund (GCF) delivery partner, UNICEF has supported national submissions in eight countries, two of which have been approved to date (see '*Climate-resilient WASH*'). This is a priority area for UNICEF, and headquarters and regional offices are heavily engaged in the provision of technical support to programme countries.

The Africa Water Investment Programme ([AIP](#)), launched in 2021, aims to mobilize investments for WASH from a range of sources with a target of US\$30 billion per year. In 2022, UNICEF supported the AIP high-level panel on water investments at COP27, with participation from current and former heads of state and other global leaders, the African Development Bank, UNDP and the Global Water Partnership (GWP). With the GWP, UNICEF also provided technical support for the development of the AIP Water Investment Scorecard, a new tool to track progress in mobilization of water investments, identify bottlenecks and enhance mutual accountability.

UNICEF continues support micro-credit initiatives in the area of sanitation. In Ghana, UNICEF-supported revolving loan schemes, including the Basic Sanitation Fund and the District Sanitation Fund, expanded into new districts in 2022 and signed up an additional four financial service institutions, bringing the total to ten. Work has now started on the launch of a national revolving fund. In Nigeria, over 95,000 households have improved their sanitation facilities through US\$1.2 million in private sector funding mobilized from sanitation revolving loans, sanitation pool funds and household self-financing in the two states where the system is operational, with support from UNICEF.

Beyond these focused efforts, UNICEF is also ensuring that sector financing is an inherent and core component of all advocacy and support programming, at all levels of the organization and across all subsectoral areas. Examples of this include:

- Ensuring all flagship publications highlight sector financing issues, such as the *2022 State of the World's Drinking Water* (published with WHO and the World Bank), which includes sections on financial requirements to achieve SDG water targets and on how to improve the effectiveness of public funding in the sector.
- Highlighting sector finance issues at key sector meetings and events, such as the launch of the AIP high-level panel on water investments and the Business Declaration on Climate-resilient WASH (with WASH4Work) at COP27, and ensuring that WASH sector finance is a core theme of the 2023 UN-Water Conference.
- Working with government partners to develop costed national hygiene road maps in several countries.
- Ensuring that sector financing is included in all capacity-building efforts at all levels, including not only specific courses and materials on sector financing but also all subsectoral courses and training materials, such as inclusion of a sustainable financing session at the 9th WASH in Schools International Learning Exchange in the Eastern and Southern Africa region.



- Building sector financing components into all programme activities, such as work within the ‘Make a Splash!’ initiative with LIXIL on developing micro-finance solutions for safely managed sanitation and the development of a strengthened sector financing module in the new WASH BAT implementation guide.
- Contributing to the knowledge base on sector financing through papers and publications that analyse related UNICEF experience, such as a 2022 results paper reviewing the UNICEF experience with Value for Money programming and its impacts in programme countries, and a peer-reviewed article on the identification of blended finance opportunities for WASH programming in the Eastern and Southern Africa region.

## Planning, monitoring and review

### WHO–UNICEF JMP progress

In 2022, the WHO–UNICEF JMP published [Progress on drinking water, sanitation and hygiene in schools: 2000–2021 data update](#) and [Progress on WASH in health care facilities: 2000–2021: Special focus on WASH and infection prevention and control](#). A detailed methodological note on WASH in schools was also published.

The JMP provided inputs to the United Nations Secretary-General’s 2022 SDG Progress Report and supported UN-Water Integrated Monitoring Initiative for SDG 6 (IMI-SDG 6) inputs to regional preparations for the 2023 UN-Water Conference.<sup>19</sup> The JMP contributed data and analysis to the WHO–UNICEF [State of the World’s Drinking Water report](#), and the WHO–UNICEF [background paper](#) for the interactive dialogue on Water and Health at the 2023 UN-Water Conference.

The JMP prepared updated estimates for WASH in households, which were circulated for country consultation and will be released in Q3 of 2023.

In collaboration with Emory University, the JMP launched the second phase of its review of opportunities for enhanced monitoring of gender in WASH (see ‘Cross-cutting: WASH and gender’). During 2022/2023, the JMP also convened experts to update the JMP core questions for monitoring menstrual health in household surveys, specifically in the questionnaire for individual women. The new questions will provide data to support national policy and programming changes, reflect the new views of menstrual



health programming as defined by MHH experts, and maintain comparability with previously used questions.

In 2022, the JMP additionally:

- Provided technical support for integration of water quality testing in national household surveys (see *'Water safety'*).
- Produced a synthesis report summarizing lessons from Phase 1 piloting of tools for monitoring safe management of onsite sanitation and developed guidance materials to support a second phase of pilots in Malawi, the Republic of Moldova, Nepal, Oman and Costa Rica.
- Contributed to ongoing development of the WASH Severity Classification, which aims to strengthen emergency preparedness and response.
- Provided inputs to a series of global and regional training on SDG monitoring, supported WHO–UNICEF training on safely managed sanitation and on WASH in Schools.
- Worked with the UNICEF Multiple Indicator Cluster Survey (MICS) team to update WASH questions, indicators and survey tools used in MICS surveys, in preparation for the launch of MICS7 at the end of the first quarter in 2023.<sup>20</sup>

## Evaluations

In 2022, UNICEF completed 18 evaluations of its WASH programming targeted at ensuring that every child, including adolescents, has access to safe and equitable water, sanitation and hygiene services. These evaluations were implemented in countries across six of UNICEF's seven programme regions (*Table 4*). About half of the evaluations focus exclusively on WASH and the other half has a strong WASH sector component. Two evaluations had a regional focus with data collected in multiple countries.

The most common themes of the 2022 evaluations were general WASH programming and humanitarian WASH response. Evaluations that examined WASH and cross-sectoral programming include an evaluation of the UNICEF WASH-nutrition-education programme in Ethiopia and an evaluation of the WASH-nutrition programme in Namibia.

In Cambodia, UNICEF completed a formative evaluation of the climate resilience of its WASH programme covering a range of interventions across five of the country's seven provinces as well as systems-strengthening work at the national level. In addition to assessing the relevance, coherence, effectiveness and sustainability of the programme itself, the evaluation also provides broader lessons that can be applied in other countries to inform UNICEF's ongoing shift to full climate resilience of its WASH programme (see box *'Pro-poor climate-resilient drinking-water in Cambodia'* under *'Safe water supply'* for more information on the Cambodia WASH programme).

The reports of these and other evaluations are available to the public from the UNICEF ['Evaluation reports' web page](#).

Table 4. Evaluations of UNICEF WASH programmes, 2022

Region	Office	Theme	Title
<b>EAP</b>	Cambodia	Climate change and WASH	Formative evaluation of the inclusion and mainstreaming of climate resilience in the UNICEF Cambodia WASH programme
	Philippines	WASH general	Evaluation of the UNICEF Philippines WASH programme between 2012 and 2020
<b>ESA</b>	Ethiopia	WASH cross-sectoral	Midterm evaluation of the UNICEF Ethiopia Adolescent Nutrition-WASH-Education Joint programme
	Madagascar	WASH general	Final evaluation of the Accelerating Sanitation, Hygiene and Water for All (ASWA) II programme in Madagascar
	Namibia	WASH cross-sectoral	Evaluation of the Namibia WASH and Nutrition programme
	Rwanda	Evaluation with WASH sector component	Endline Evaluation of the Developing Human Capital in Rwanda (DHCR) programme
<b>LAC</b>	Regional, multi-country	Evaluation with WASH sector component	Multi-country evaluation of UNICEF's response to the Bolivarian Republic of Venezuela Outflow Crisis
<b>MENA</b>	Iraq	WASH humanitarian	WASH Humanitarian Response programme evaluation in Iraq
	Jordan	WASH humanitarian	Evaluation of the WASH Humanitarian Response in Jordan between 2018 and 2021
	Lebanon	Sanitation systems	Evaluation of the Sanitation Technology Demonstration in Emergency Setting in Lebanon project
	Lebanon	Water systems	Evaluation of UNICEF support to water establishments in Lebanon
<b>SA</b>	Bangladesh	WASH institutional	Evaluation of the Water Safety for the Wellbeing of Women and Children in Bangladesh project
	Bangladesh	Evaluation with WASH sector component	Midterm evaluation of Building Resilience Among Rohingya Refugees and Host Communities in Cox's Bazar Programme in Bangladesh
	Nepal	WASH general	Evaluation of UNICEF's Sanitation programme in Nepal
<b>WCA</b>	Democratic Republic of the Congo	Evaluation with WASH sector component	Evaluation of UNICEF-led community approach to address social norms and practice and facilitate demand creation in the Democratic Republic of the Congo
	Gambia	Evaluation with WASH sector component	Evaluability assessment of the NSA Kenno – We can do It! programme in the Gambia
	Mauritania	Evaluation with WASH sector component	Evaluation of the Social Protection programme in Mauretania
	Regional, multi-country	WASH general	Multi-Country Evaluation of the Key Result for Children programme: Ending Open Defecation (including during the COVID-19 pandemic) in Chad, Guinea-Bissau, Guinea, Burkina Faso and Togo

## Sustainability monitoring

A key facet of efforts to improve accountability for the sustainability of water and sanitation systems is institutionalization of sustainability metrics within national monitoring systems in programme countries. UNICEF has been promoting and supporting efforts to achieve this for several years, including through the use of independent sustainability check surveys, completed in over 30 countries over the previous Strategic Plan period, and the development of the more comprehensive [Sector-Wide Sustainability Check Tool](#) in 2021.

In the current Strategic Plan, UNICEF continues to support the development and use of robust national sustainability monitoring systems, and, according to a new internal progress monitoring indicator, a total of four programme countries had such monitoring in place in 2022, as a result of UNICEF support. In each of these countries four indicator criteria were met (*Table 5*).

Table 5: Number of countries in which the national monitoring system incorporates sustainability data from within the past two years with UNICEF support (SP Indicator 4.2.3, 4 countries in 2022)

Indicator criteria	No. of countries
There are recent data on WASH coverage in the country	39
National data on WASH coverage has been published in a report within the previous two years	34
A WASH sector review or bottleneck analysis completed during the last two years	26
A sector-wide sustainability check has been conducted or included in sector performance reports	8
Number of countries where all four criteria have been met	4

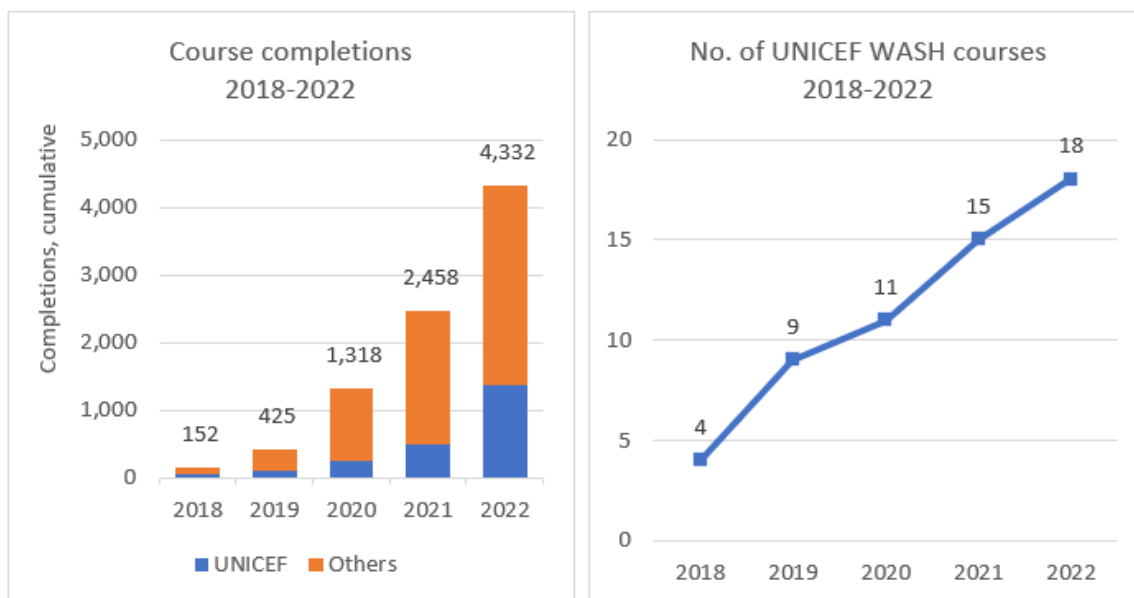
**Source:** UNICEF CSIs (2022).

## Capacity development and knowledge management

UNICEF has become one of the largest providers of WASH professional development training in the world outside of academic institutions, and this programme is growing. Many of the online courses it offers (mainly through the UNICEF Agora platform) are available to people from outside of UNICEF. Since 2018 a total of 4,332 participants have successfully completed UNICEF WASH courses, 68 per cent from outside of UNICEF (*Figure 5*). Courses range from the comprehensive, such as the [WASH Foundational Course](#) and the new [course for WASH staff on programming essentials in the new Strategic Plan](#), to subsector-specific courses like the new [course on safely managed sanitation](#), a course on [disability-inclusive WASH](#) and a set of courses offered jointly by UNICEF WASH and UNICEF Supply Division on [hand hygiene](#)

[markets](#) and on [bore-hole contracting](#). Some courses are run jointly with partners, including WaterAid, WHO and the World Bank.

Figure 5. Growth of UNICEF WASH professional development initiative, course completions by UNICEF and partner staff and number of courses through the UNICEF Agora platform, 2018–2022



**Source:** UNICEF Agora (2022).

In addition to these professional development courses, UNICEF also offers introductory courses and seminars focused mainly on non-UNICEF participants. One example, the short [Introduction to WASH course](#), has been completed by over 13,000 non-UNICEF participants from countries around the world since its launch in 2018.

UNICEF also sponsors a wide range of in-person courses and training opportunities for staff and partners. Examples include the multi-country WASH in Emergencies course, online and in-person training courses on solar pumping in the West and Central Africa region and a wide range of training opportunities at the country level. UNICEF also continues to offer diploma courses in partnership with universities including the WASH in Schools course with Emory University and the graduate-level diploma programme on humanitarian WASH with IHE Delft Institute for Water Education, a new Masters degree programme on humanitarian WASH in the Middle East and North Africa region with the German Jordanian University and, for a fifth consecutive year, the *Leaving No One Behind: Sustainable WASH Services in a Rapidly Changing Context* course in the East Asia and Pacific region course in partnership with the Government of Singapore. UNICEF also works extensively with universities in programme countries (see box ‘Partnering with local universities in programme countries’ under ‘Institutional arrangements’).

Another important contribution UNICEF makes to build sector capacity is through its publications and other knowledge products, which are developed and disseminated at the



global, regional and national levels, often in collaboration with sector partners. These range from flagship global advocacy documents like the 2022 [State of the World's Drinking Water](#) report to highly specific technical and guidance materials in programme countries, such as the [WASH and peace guidelines](#) published in 2022 in Ethiopia. In 2022, UNICEF released a total of 409 knowledge products, including 43 flagship publications (*Table 6*). The 2022 UNICEF WASH publication catalogue is available here. [placeholder for hyperlink]

Table 6. UNICEF WASH publications, 2018–2022

Publication type	2018	2019	2020	2021	2022	Total
Flagship and joint reports	5	7	23	37	43	115
Evaluation reports, policy briefs	16	11	6	14	8	55
Study reports	12	47	40	44	31	174
Peer-reviewed journal articles	40	25	29	15	21	130
WASH publications (briefing notes, fact sheets, field notes, case studies, technical papers and guidance)	40	67	94	62	40	303
Conference presentations	15	17	24	3	4	63
Books/book chapters	4	4	0	2	1	11
Other knowledge products (news features, op-eds, blogs, newsletters, websites, videos, training/learning publications)	65	173	172	253	261	924
<b>Total</b>	<b>197</b>	<b>351</b>	<b>388</b>	<b>430</b>	<b>409</b>	<b>1,775</b>

The Strategic Plan 2022–2025 highlights the importance of knowledge, its management and its sharing, as a critical element in collaborative efforts to meet the SDG goals and the need for UNICEF to be a global knowledge leader for children. In 2022, UNICEF updated its global [WASH Knowledge Management Strategy](#), and continued to strengthen its knowledge management capacity at global, regional and national levels. As part of this effort, UNICEF held its first global WASH Knowledge Fair for all staff with modules on the Knowledge Management Strategy, evaluations and global learning, and the role of UNICEF staff in contributing to the sector evidence base through academic publishing. A key UNICEF strength as a knowledge leader for the sector is its presence in countries around the world and the increasing number of publications that are highly specific to local contexts. In the South Asia region, for example, UNICEF published 39 WASH regional and national publications in 2022, including general knowledge products such as guidelines and reviews as well as peer-reviewed papers, field notes and discussion papers.

UNICEF has been publishing a monthly bulletin on WASH since 2018 providing subscribers from UNICEF and partner organizations with news of key events, publications, training opportunities and other information related to the UNICEF WASH programme. The South Asia and East Asia and Pacific regions also publish a joint monthly bulletin on WASH, and UNICEF supports a similar bulletin with partners in the Latin America and Caribbean region.



Women participants in a toilet construction training programme in the Democratic Republic of Congo

The Global WASH Cluster also publishes a bulletin, and some large programme countries also publish periodic newsletters.

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## WASH results by subsector

This section of the report details WASH results in the areas of climate-resilient WASH, safe water supply, sanitation, hand hygiene and menstrual hygiene, WASH in schools and health-care facilities, and emergency WASH. It also reports on the cross-cutting areas of WASH and gender and WASH and disability.

### Climate-resilient WASH

#### Climate resilience

UNICEF continues to shift its WASH programming towards full climate resilience guided by the UNICEF and Global Water Partnership [Strategic Framework for WASH Climate Resilient Development](#), which was updated in 2022. The update aligns the framework with changes in the global climate and WASH sectors, makes the link between climate-resilient WASH and health, highlights the potential of the



UNICEF-supported school solar-powered water system in Afghanistan

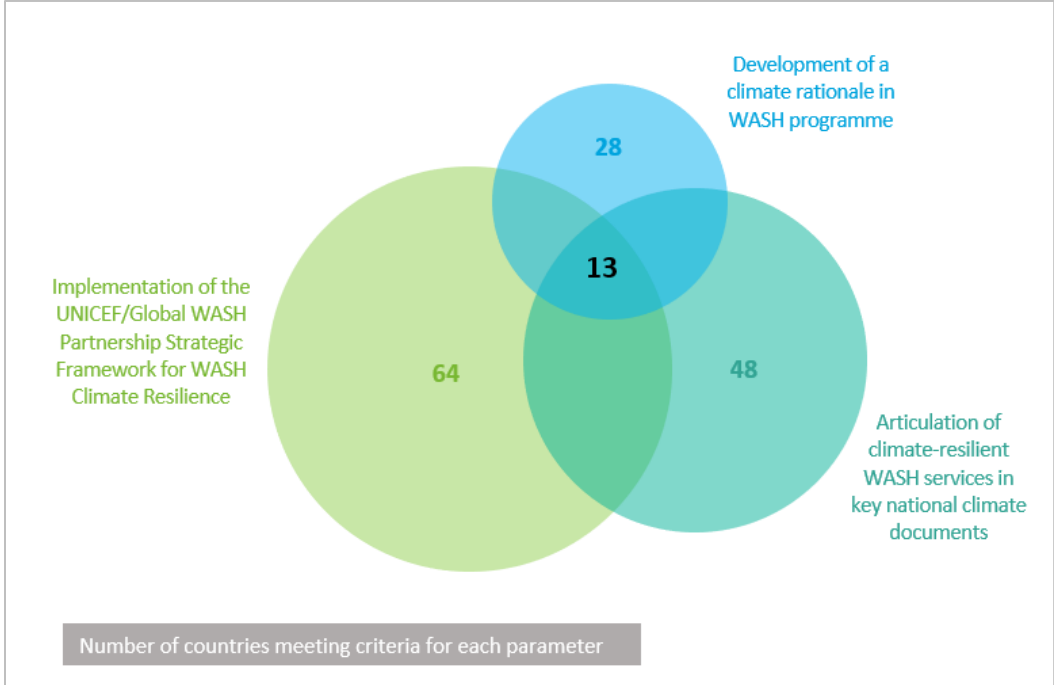
WASH sector for climate mitigation and emphasizes the shift towards climate resilience within sanitation, urban WASH programming and humanitarian interventions.

Under the Framework, UNICEF country offices follow a programming process to conduct an appraisal of the climate risks in the country (level 1), identify programming options for the risks identified (level 2), implement those options (level 3) and monitor and evaluate programme impacts (level 4). In 2022, a total of 81 countries were using the Framework, including 64 working at level 3 or higher. UNICEF climate-resilient work in programme countries cuts across a wide range of thematic areas, and, as collected in a new [compendium of case studies](#), supports initiatives at the national, subnational and community levels.

UNICEF works with government partners and other stakeholders to improve the climate resilience of the sector as whole and to highlight the importance of climate-resilient WASH services for children and their communities. It provides technical assistance and other support to ensure that climate-resilient WASH services are articulated as a national priority in key national climate documents including National Adaptation Plans (NAPs), Nationally Determined Contributions (NDCs), climate strategies and national WASH policies.

An important part of this process is the development of the Climate Rationale for the WASH sector and the engagement of key stakeholders in this process. The Climate Rationale is an agreed sector narrative that outlines climate change hazards; how these hazards impact WASH services and the communities which depend on them; and technical and programming solutions to address these inter-related risks. UNICEF monitoring systems assessing progress in this area monitor the development of the climate rationales and the extent to which they are being applied and implemented in the WASH sector. By the end of 2022, 13 programme countries had accomplished this, exceeding the milestone of 11 countries (Figure 6).

Figure 6. Countries that have developed a climate rationale for the impact of climate change and water scarcity on WASH services (SP output indicator 4.2.4, 13 countries in 2022)



Source: UNICEF CSIs (2022).

Launched in 2021 with funding from the Government of the United Kingdom, and from global WASH thematic funding, a multi-country and global leadership initiative for WASH climate resilience has supported accelerated action in 11 countries and encouraged similar moves across the entire WASH programme. Results to date from this initiative include WASH climate risk analyses in all 11 countries (some through climate-informed WASH BATs, see below), country-specific technical solutions packages in six countries, a new groundwater monitoring campaign (see below), a climate rationale narrative in six countries, climate finance capacity-building sessions in all countries, and readiness proposals for the Green Climate Fund (GCF) drafted for seven countries and approved in the State of Palestine. As anticipated, the experiences and lessons learned in the focus countries have led to similar actions in new countries, including Cambodia, the Comoros, Lao People’s Democratic Republic, Myanmar,

Timor-Leste and Viet Nam. UNICEF also contributed to the GCF sectoral guide on water security, released in 2022.<sup>21</sup>

UNICEF stepped up efforts to raise awareness and build capacity on climate-resilient sanitation in 2022. At COP27 in Egypt, UNICEF, the Bill & Melinda Gates Foundation and several other partners<sup>22</sup> hosted a session on climate-resilient sanitation and launched a [call to action](#) for stakeholders to enhance the resilience of sanitation systems and explore opportunities for reducing emissions along the sanitation service chain.<sup>23</sup> The call to action featured practical suggestions for different stakeholder groups including government, development partners, CSOs, donors, academic and research institutions, the private sector and young climate activists. (UNICEF was active elsewhere at COP27, including in the area of water systems adaptation, and was a core partner in the Water Pavilion initiative and on youth engagement at the conference (see ‘WASH systems-strengthening’ and the CEED section of this report for more on UNICEF at COP27)).

UNICEF and partners also launched at COP27 a new technical brief, [Climate-Resilient Sanitation in Practice](#), that outlines the rationale for climate-resilient sanitation, presents approaches for integrating resilience into sanitation programmes, provides guidance on accessing financial resources and lists existing technical resources.<sup>24</sup> UNICEF also released two new field notes describing experiences of implementing resilient sanitation programming in climate-vulnerable countries ([Pakistan](#) and [Bangladesh](#)). The field notes describe actions on systems-strengthening, including institutionalization of climate-resilient sanitation into national policies, as well as detailed descriptions of technical approaches in areas prone to flooding.

The UNICEF WASH BAT was revised to fully incorporate climate risk analysis in 2022, and a new country implementation guide was finalized.<sup>25</sup> The tool is widely used by UNICEF, governments and other stakeholders at national and subnational levels to analyse the sector constraints and challenges, and develop costed plans to meet SDG targets (WASH BATs were conducted in 15 countries in 2022). By the end of 2022, risk-informed WASH BAT exercises had been carried out in the Central African Republic, Chad, the State of Palestine and in the Amazonas state in Brazil.

UNICEF works to ensure that the WASH systems it constructs through direct support are climate-resilient, meeting criteria that include climate risk-informed design and siting, year-round reliability, including during extreme weather events, with operation and management systems that ensure sustainability and eliminate or minimize greenhouse gas emissions where possible. In 2022, 3.2 million people gained access to climate-resilient sanitation systems and 5.4 million to water services through UNICEF direct support.<sup>26</sup>

UNICEF also continues to work on the issue of climate-resilient solutions generally, including, in 2022, a new initiative through the WASH4Work partnership to deepen engagement with the private sector. The [Critical Business Actions for Achieving a Water Secure World](#) briefing paper, and, as the core member of the WASH4Work partnership, the launch of the [COP27 Business Declaration for Climate Resilient WASH](#) at COP27 (see ‘WASH systems-strengthening’ for more information on WASH4Work). UNICEF additionally worked with the World Meteorological



Organization (WMO) and the GCF, to design and facilitate technical sessions on the application of climate science data to WASH services.

## Water security

Through its WASH programming UNICEF works to address the growing threat of water scarcity due to climate change, intense competition for freshwater resources, over-use of water resources, poor water management and the pressures of urbanization. The scale of the problem is massive – an estimated 1.4 billion people, including 450 million children, already live in areas of high or extremely high water vulnerability – and all sector stakeholders, including UNICEF, must address the issue of water security as a core component of WASH programming.<sup>27</sup>

Groundwater is the mainstay of water supply systems accounting for half the water withdrawn for domestic use globally and a much higher percentage in rural and arid regions, and in fragile countries.<sup>28</sup> But groundwater aquifers are under increasing threat from over-abstraction, user competition, pollution and climate change. This trend is accelerating, with some aquifers receding at alarming rates, as highlighted by the groundwater theme of World Water Day in 2022, and will be further stressed at the United Nations 2023 Water Conference.

In support of national efforts to protect and better manage groundwater resources, UNICEF has accelerated remote groundwater monitoring initiatives including a capacity-building programme, the installation of remote groundwater data loggers and their integration into strengthened national early warning systems. Progress to date includes the drafting of new technical guidance material (on groundwater resource assessment, sustainable bore-hole yield assessment and groundwater monitoring), an assessment of the existing groundwater monitoring situation in target countries, new guidance on groundwater monitoring equipment issued by UNICEF's Supply Division, and the procurement of 85 remote groundwater data loggers. By the end of 2022, the data loggers had been installed in Malawi, Madagascar, Rwanda and Chad. In a related initiative, UNICEF is expanding its satellite and other remote sensing technologies to increase the accuracy of groundwater mapping (see '*Safe water supply*').

In the South Asia region, UNICEF has launched a regional groundwater resilience programme centred on six interlinked areas of action to drive national agendas in water scarcity, and continues to support government efforts to improve groundwater management at national and subnational levels.<sup>29</sup> Examples include an assessment of groundwater fragility in the Indian state of Maharashtra and a policy analysis on the scope for groundwater recharge programmes in Sri Lanka.

UNICEF is increasingly supporting efforts to identify the potential for aquifer recharge using rainwater and run-off capture including, in 2022, a community-based initiative managed by young people in Timor-Leste to construct rainfall harvesting reservoirs that significantly improved groundwater retention; a large pilot rainwater aquifer recharge project, with a real-time monitoring system, in two water-stressed governorates in Iraq; and an innovation hub launched at the Jordan University for Science and Technology on managed aquifer recharge assessment.

UNICEF also continues to work with partners to address water scarcity and climate change in the Middle East and North Africa, the most water-scarce region. Working with SIWI, UNICEF conducted a country-by-country analysis of existing national sector systems, identifying areas in which UNICEF support could contribute to quickly modify national policies, strategies and programmes. In Jordan, UNICEF partnered with the Economist Impact think tank on an analysis of the [economic costs](#) to people of water scarcity.<sup>30</sup>

## Solar-powered water systems

UNICEF promotes the use of solar power for water supply systems through direct support and advocacy with partners, and, increasingly, through a focus on technical assistance in programme countries.

A key example of this is the [Regional Solar Technical Hub](#) in the West and Central Africa region, a joint UNICEF-Water Mission initiative supported by the German Federal Ministry of Economic Cooperation and Development (BMZ). The hub supports the expansion of solar pumping in the region through free online and in-person courses on solar-powered water systems, in addition to remote technical assistance for personnel from governments, United Nations



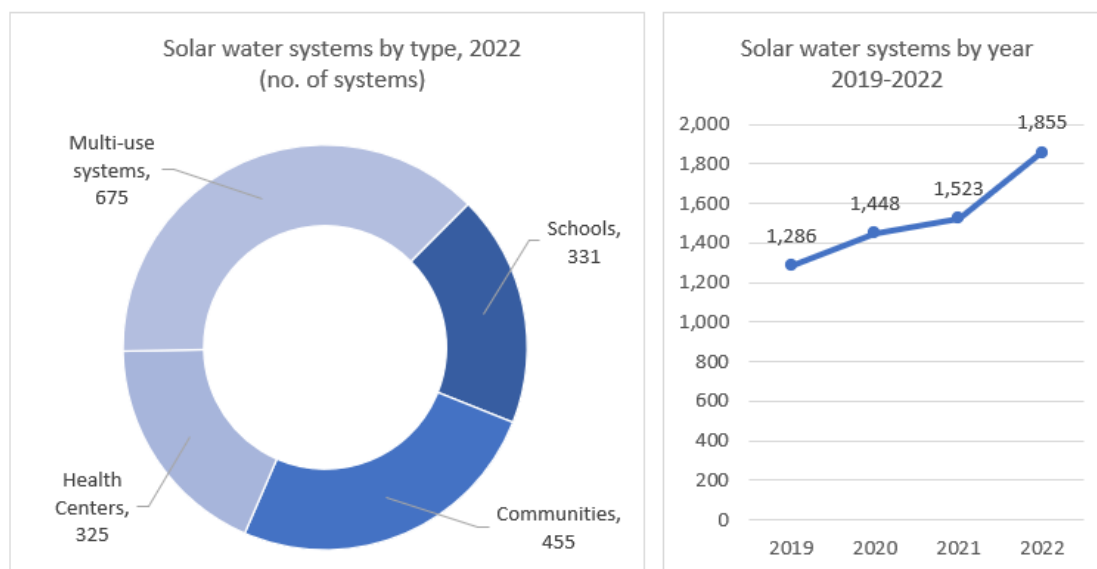
Solar-powered water system in southern Madagascar

agencies, NGOs and private companies. The support covers planning, design, procurement, operation and maintenance, and monitoring and evaluation. Since 2020 the hub has responded to 120 requests for technical assistance in regional countries, and has conducted 14 in-country workshops for 429 participants and six virtual courses for 370 participants. In 2022, an area of focus was institutionalization of training on solar pumping in national vocational training networks including the development of a new course in Ghana, which will run in 2023, developed together with the national Commission for Technical and Vocational Educational and Training.

The success of this initiative has prompted UNICEF to expand it globally, starting with a new solar hub for the East Asia and Pacific region in 2023, with support from the Government of Australia.

UNICEF directly supported the construction 1,855 solar-powered water systems in 52 countries across all UNICEF regions in 2022, the most ever in a single year. The systems provide water to communities, schools and health-care facilities and most are multi-use systems that serve both institutions and their host communities (*Figure 7*).

Figure 7. Solar-powered water systems constructed through UNICEF direct support, systems by type (2022) and by year (2019–2022)



**Source:** UNICEF SMQs and CSIs (2019–2022).

Solar-pumped water systems are increasingly used in fragile and resource-poor contexts where fuel prices and supply chain issues make diesel-powered systems (which are still common around the world) untenable in practice, as well as being sources of carbon emissions. In Afghanistan, for example, UNICEF now constructs solar or gravity-feed systems exclusively while in other countries, notably in sub-Saharan Africa, the replacement of diesel systems with solar systems has meant that communities have [re-gained access to safe water supplies](#) after years without. The falling costs and increasing reliability of solar equipment have accelerated this trend, as has increasing awareness among stakeholders of the very significant cost advantage of solar pumping over the life cycle of systems.

As in previous years, the highest number of solar systems constructed by UNICEF was in the West and Central Africa region. A total of 726 systems were constructed in the region in 2022, accounting for 39 per cent of the global total. This is partially due to the high suitability of solar systems in the arid Sahel parts of the region, but also to increasing solar system capacity in the region, driven with the help of the UNICEF-supported regional solar technical hub.

UNICEF also uses solar technology for other WASH-related purposes, notably for wastewater treatment facilities, including in Gaza, the State of Palestine for a [wastewater treatment and flooding control initiative](#) in poor communities, and in Mosul, Iraq where a joint UNICEF–

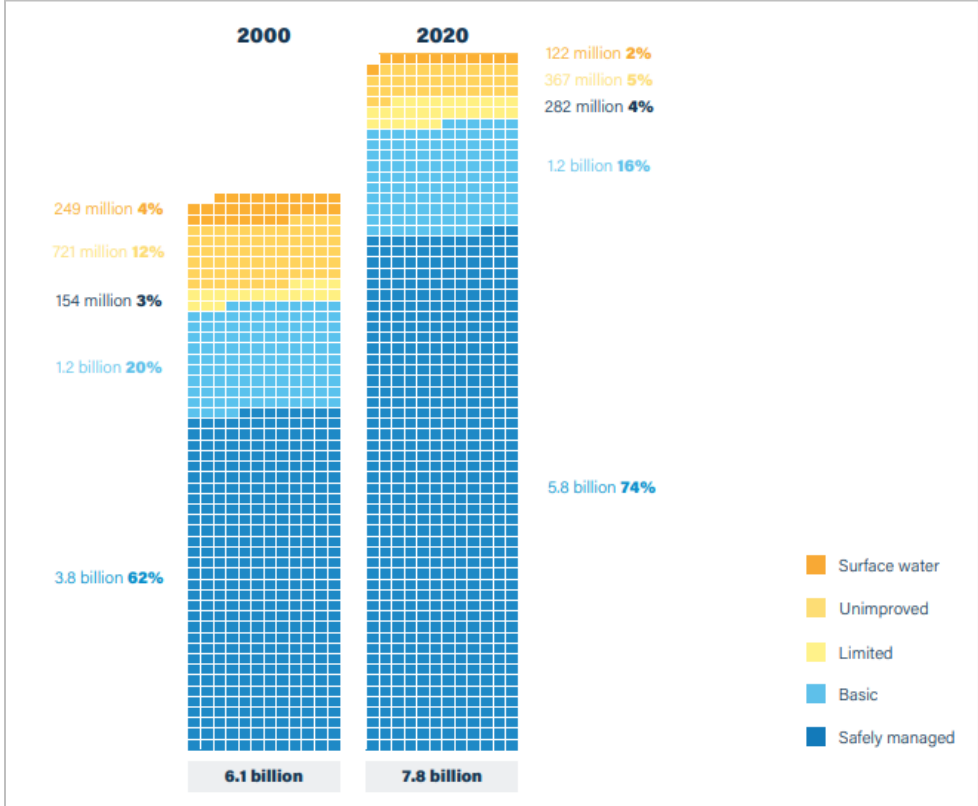
UNHABITAT project constructed a solar-powered system that treats wastewater and uses it for irrigation. UNICEF also uses solar power outside of the WASH sector in various ways (see the CEED section).

# Safe water supply

## Sustainable water supplies

The [State of the World's Drinking Water](#) report, launched in 2022 by WHO, the World Bank and UNICEF, is a call to action for accelerated action to meet the SDG drinking-water target by 2030. It shows that the world is not on track to meet the target and that there are very serious inequalities in access across and within countries. But it also shows the tremendous progress that has been made; in 2020 compared with 2000, over 2 billion more people now have access to a safely managed water system, and the proportion of the world's population with access to at least a basic drinking-water service rose to 90 per cent (Figure 8).

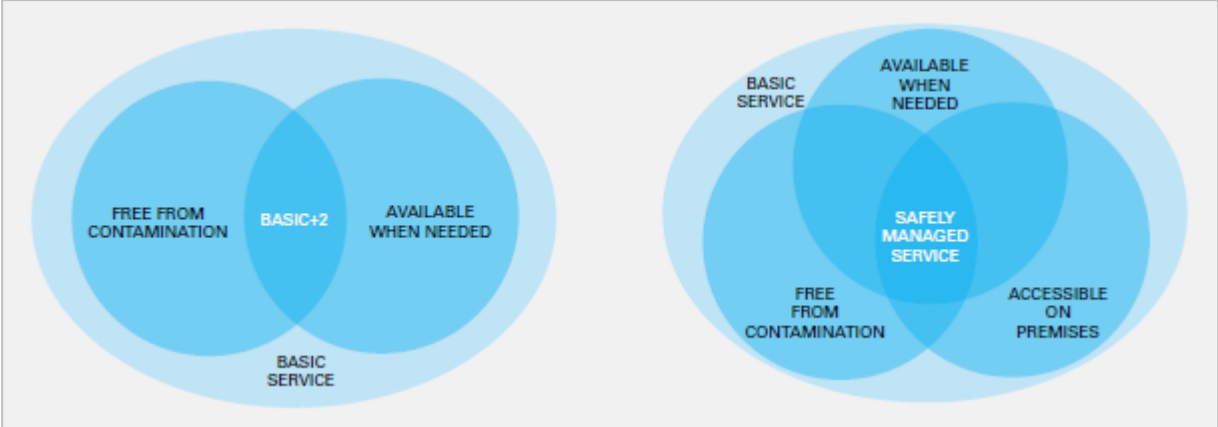
Figure 8. Progress in coverage of drinking-water services, 2000–2020, percentage of global population



Source: JMP, Progress on household drinking-water, sanitation and hygiene 2000–2020.

Through its direct support for constructing, rehabilitating and upgrading water systems, UNICEF has played a role in this progress, with a focus on the most vulnerable populations and in countries in crisis. In 2022 alone, a total of 30.6 million people gained access to safe water systems with UNICEF direct support. These systems meet the UNICEF standard of at least 'Basic+2', which ensures that programme resources reach the most vulnerable people first with water from an improved source that is free from contamination and available when needed (but not necessarily located on premises, as per the higher SDG 'safely managed' standard).

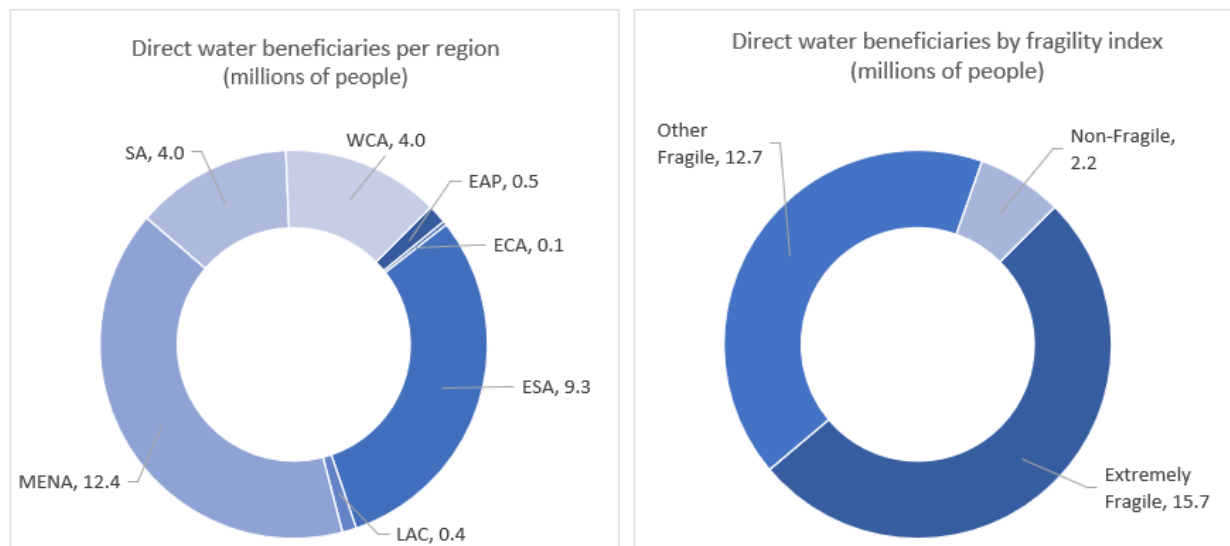
Figure 9. Drinking-water services – UNICEF Basic+2 standard and SDG 'safely managed' standard



UNICEF focuses its direct support on the most vulnerable communities, countries and regions. In 2022, 93 per cent of beneficiaries from UNICEF direct support live in fragile countries, and the regions with the most beneficiaries have the lowest drinking-water coverage levels or are impacted by situations of crisis and instability (Figure 10).



Figure 10. Safe water beneficiaries through UNICEF direct support, Basic+2 water services, by region and fragility



Total: 30.6 million people in 65 countries.

Source: UNICEF CSIs (2022). Fragility index as per OECD (2022).

In 2022, some 28 per cent of the systems that meet the Basic+2 standard were provided through UNICEF emergency response programmes. These are 'durable' long-term water systems, which are different from short-term services such as water trucking, part of the UNICEF focus on the humanitarian–development–peace nexus (see *'Emergency WASH'*). In many countries, humanitarian responses build on and complement existing UNICEF



New water system in the drought-affected region of Ainabo in Somaliland.

work in the development sphere. In Pakistan, for example, 1.4 million people gained access to water services at the Basic+2 or higher standard through the regular programme and an additional 865,000 people were reached in emergencies, mainly in response to catastrophic flooding. Other countries with large numbers of beneficiaries through combined development programming and humanitarian response include Ethiopia, Iraq, Kenya and Yemen.



Direct support is necessary, especially for reaching the most vulnerable populations, but neither UNICEF nor any other development partner can even come close to meeting global or national SDG targets by building water systems on their own. Progress at scale can only be made through multifaceted and long-term support to government partners for sector systems-strengthening, increased financing, innovative programming approaches and broad partnerships among development partners. When this happens, progress can be rapid and sustained. In Ethiopia, for example, the ONEWASH programme, supported by UNICEF and partners, helped 15 million people gain access to at least basic water service in just five years, and in India, in a government-led multi-stakeholder campaign that was also supported by UNICEF in various ways, over 80 million households have been provided with a tap water connection since August 2019.<sup>31</sup>

In 2022, UNICEF scaled-up its arid region groundwater mapping programme in the Eastern and Southern Africa region to more efficiently find areas of high groundwater potential in difficult water prospecting scenarios. The [‘More Water More Life’](#) innovation support initiative builds on earlier work in Ethiopia and Madagascar carried out with the support of the European Union, which helped to improve the accuracy of groundwater maps and increase bore-hole drilling success rates (from less than 50 per cent to greater than 90 per cent) using an innovative approach combining satellite-assisted geospatial imagery and data analysis, hydrogeological mapping and targeted geophysical surveying. The experience has also paved the way for \$US385 million in new World Bank funding for a similar initiative in Horn of Africa countries.<sup>32</sup>

In many parts of the world large numbers of households invest in their own water systems, usually by tapping shallow aquifers with bore-holes and handpumps, such as in Bangladesh and India where over a quarter of the population rely on ‘self-supply’ for drinking-water. This self-supply approach is thus an important segment of the water supply picture, but it can result in water access inequalities and substandard



Water Users Association members meeting with a UNICEF staff member

drinking-water services. To increase awareness of self-supply issues and contribute to efforts to incorporate self-supply within national policy and regulatory systems, UNICEF commissioned a survey of the self-supply situation in 21 countries in Asia covering prevalence of use, water quality and availability, equity dimensions and policy aspects.<sup>33</sup> In Indonesia, UNICEF released a new policy brief outlining the pros and cons of self-supply and the roles of government and regulatory stakeholders.<sup>34</sup> The sustainability of water (and sanitation) systems over time is a recognized weak point in the sector, and efforts to improve this have been a UNICEF focus for several years, through advocacy and support to government partners and other sector actors,

and by example using its own direct support programmes. Examples of efforts in 2022 to improve the sustainability of systems include the use of innovative tariffing systems such as in Iraq, through a new smart-metering system managed under a public–private partnership with water utilities; in the United Republic of Tanzania, through the use of prepaid water dispensers that have improved system reliability through low, but regular tariff fees; and in South Sudan, where a new water system in Juba, built with UNICEF support in partnership with the Government of Germany, is providing water to 60,000 town residents and internally displaced persons through water kiosk systems.

UNICEF also continues to provide extensive support for building the capacity of community management bodies in several countries, with an emphasis on gender-inclusivity. In Nigeria, for example, UNICEF, with support from the Government of the Netherlands ASWA programme, contributed to development of the new national Village Level Operation and Maintenance strategy, the establishment of management structures in 12 states, the training of community management bodies and the active promotion of efforts to ensure women are active participants and managers in these processes.

UNICEF also continues to support the institutionalization of sustainability parameters within national WASH sector monitoring systems (see ‘*Systems-strengthening*’).

## Water safety

The SDG standard of safely managed water, as well as the UNICEF standard of Basic+2, requires that drinking-water be free from faecal and priority chemical contamination. UNICEF builds national capacity to meet these standards in a number of ways, for example, technical assistance, support for new policy instruments and by ensuring that its own service delivery meets the Basic+2 standard, including in emergency contexts.

Building water quality testing capacity is a key part of this effort, and UNICEF supports this directly through its own programme, and through JMP technical support to governments, statistics bureau and other national stakeholders. In 2022, the JMP supported integration of water quality testing in national household surveys in a total of 11 countries: Azerbaijan, Burkina Faso, Ecuador, Guatemala, Lao PDR, Lebanon, Mozambique, Somalia, the Sudan and Tunisia.

UNICEF support for the institutionalization of water safety planning approaches



Trained volunteer testing water in a community in Syria

continued in 2022. Examples of results include a new national plan on drinking-water safety in Tajikistan, a technical circular on rural water safety planning in Viet Nam, the establishment of water safety plan committees and data centres in Iraq, a new urban water safety strategy in the province of Punjab in Pakistan, and the development, approval and public funding of provincial-level water safety plans in Mongolia.

Although microbial contamination (bacterial and other pathogens) of water supplies continues to be the major threat to the health of children, UNICEF also works with WHO and partners on the mitigation of chemical contaminants in water, both naturally occurring and from sources of pollution.

Lead is a greater, more widespread threat to the health of children than previously thought according to recent evidence,<sup>35</sup> including a UNICEF multi-country blood testing initiative.<sup>36</sup> Children are exposed to lead through various pathways such as paint and dust, but a significant source of exposure can be drinking-water contaminated with lead from pipes, plumbing fixtures, handpumps and natural sources. In 2022, WHO released a new technical brief on lead in drinking-water with inputs from UNICEF,<sup>37</sup> which was launched at World Water Week and discussed at other sectoral forums. UNICEF and WHO joined forces on a course for field staff on the issue, which included presentation of a new road map for action at the country level, and continued to work together through the working group on toxic metals in drinking-water. In Georgia, UNICEF commissioned the design of a lead surveillance system, which has been adopted by government partners and will be rolled out in 2023. Also in 2022, the UNICEF Supply Division released a new product guide on equipment for testing lead in drinking-water. UNICEF also continues to work with WHO and other partners in the working group on toxic metals in water.

In Bangladesh, where arsenic contamination of drinking-water supplies continues to be a major problem, UNICEF, with long-running support from the Government of Sweden, has been implementing the 'arsenic- and climate-safe villages and unions' programming methodology on a large scale. The approach is designed to eliminate arsenic contamination and improve the resilience of water systems across entire subdistricts (unions). In 2022, the Government of Bangladesh formally adopted the model as national policy and committed US\$240 million to scale up the programme country-wide, with continuing technical support from UNICEF.

UNICEF also continues to support the elimination of fluoride from water supplies in affected regions, including in the Indian state of Chhattisgarh where UNICEF worked with Tezpur University and CSOs on a comprehensive mitigation programme involving a locally developed filter within a community-led management and monitoring system. As countries expand capacity on water quality testing through JMP and UNICEF support, datasets are improving both on microbial and chemical water quality. In the United Republic of Tanzania, for example, a UNICEF-supported survey led by the National Bureau of Statistics resulted in the first-ever national dataset on the extent of fluoride contamination in drinking-water.

## Pro-poor climate-resilient drinking-water in Cambodia

In Cambodia, UNICEF is working with government partners and other stakeholders to develop and promote programmatic solutions to deliver WASH systems that can withstand climate-related flooding and drought, which are common in the country. UNICEF inputs are also helping to ensure that systems are accessible to the poorest households, which are sometimes excluded from services due to cost considerations.

To deliver safe, reliable water supplies for poor and climate-vulnerable households, UNICEF works in several different ways:

- Working with the government partners and Cambodian Water Supply Association, UNICEF supports targeted upgrades to small-scale rural piped water systems focusing on climate resilience, reliability and water safety. In Kampong Speu Province, for [example](#), this included support for a switch from a drought-affected and polluted surface water source to a solar-pumped groundwater sourced system.
- In Takeo province, UNICEF worked with local NGO to set up [solar-powered groundwater-sourced water treatment and bottling plants](#), run by local entrepreneurs under a social franchise model, who receive technical and business management training. The water is delivered in reusable bottles by motorcycle trailer, providing a reliable and inexpensive option for rural households.

UNICEF ongoing support for national systems-strengthening backstops initiatives like these. This includes work with the Ministry of Science, Technology and Innovation and local NGO partners to provide [subsidies for accessing piped water supply services](#) to families officially identified as poor, improved oversight systems for monitoring water quality in small systems, capacity-building on water safety planning and broader efforts to strengthen water supply markets.



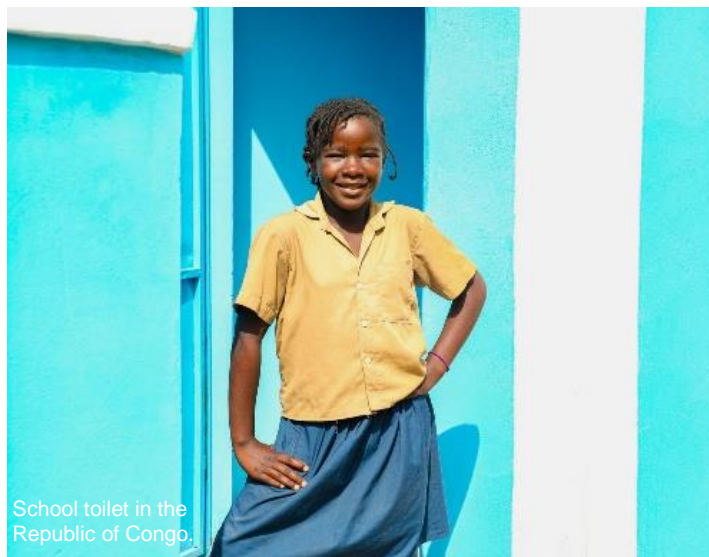
To ensure that systems constructed through UNICEF support remain climate-resilient over the long term, UNICEF conducted a formative evaluation of its WASH programme in the country with a focus on climate resilience. The lessons from the evaluation are being applied to ongoing programme and are additionally being used to inform resilience work elsewhere.

Note: Some UNICEF WASH activities in Cambodia were funded by the government of the United Kingdom through the multi-country Accelerating Sanitation and Water for All (ASWA) programme, which finished in 2022 (ASWA projects in other countries are ongoing, with funding from the Government of the Netherlands).



## Sanitation

Over the course of the Strategic Plan period UNICEF will continue to provide direct support to help ensure that the most vulnerable children and their families are not left behind, that they have access to at least a basic sanitation facility, in fragile contexts and in humanitarian crises. In 2022, as described below, 26 million people gained access to basic sanitation services through this support. At the same time, UNICEF is shifting in its sanitation programming towards



support to government partners to make the systematic changes required to meet the higher SDG standard of safely managed sanitation (*Figure 11*).

Figure 11. SDG service ladder for sanitation

SERVICE LEVEL	DEFINITION
SAFELY MANAGED	Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or removed and treated off-site
BASIC	Use of improved facilities that are not shared with other households
LIMITED	Use of improved facilities that are shared with other households
UNIMPROVED	Use of pit latrines without a slab or platform, hanging latrines or bucket latrines
OPEN DEFECATION	Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches or other open places, or with solid waste

Source: JMP (2021).

### Shifting to safely managed sanitation

The SDG target 6.2 of access to safe sanitation and hygiene for all is the furthest off-track of all the SDG targets. To hit the target the rate of progress would have to quadruple globally, and increase by a factor of 15 in least-developed countries.<sup>38</sup> UNICEF is responding by shifting its focus to programming that supports government partners to achieve the higher levels of sanitation service necessary to meet the target and fulfil the rights of everyone to safe sanitation and hygiene services.

This shift is articulated in the new [UNICEF Game Plan to Reach Safely Managed Sanitation 2022–2030](#). The Game Plan will help ensure that safely managed sanitation receives the deliberate and sustained attention it requires within UNICEF programmes, aligned with



UNICEF's WASH strategy and the SDGs sanitation target. The Game Plan goal is to help 1 billion people gain access to safely managed sanitation guided by six overarching principles through five programming pillars (Figure 12).

The Game Plan was developed through an extensive consultative process with UNICEF WASH staff and key partners, and was launched at the at various sectoral events including at World Toilet Day in New York, which was co-hosted by UNICEF, WHO and UN-Water.

Figure 12. At a glance – the UNICEF Game Plan to Reach Safely Managed Sanitation 2022–2030<sup>39</sup>

<b>One ambition:</b> Support governments to achieve safely managed sanitation and meet the sanitation target of the Sustainable Development Goals (SDGs)	
<b>One goal:</b> Help 1 billion people gain access to safely managed sanitation by 2030, through direct and indirect support, in collaboration with partners	
<b>Six guiding principles:</b>	
<ul style="list-style-type: none"> <li>• Think big and work at scale</li> <li>• Focus on equity and inclusion</li> <li>• Look for resilient, green, sustainable solutions</li> <li>• Work across humanitarian and development contexts</li> </ul>	<ul style="list-style-type: none"> <li>• Work with all stakeholders</li> <li>• Choose interventions consistent with UNICEF's comparative advantage, mandate for children and privileged position working directly with governments</li> </ul>
<b>Five programming pillars for UNICEF support to governments:</b>	
<ul style="list-style-type: none"> <li>• Governance and policy: creating a robust policy environment that leads to sustainable and equitable, safely managed sanitation solutions for all</li> <li>• Finance: achieving a fully funded, financially viable sanitation sector that provides affordable, safely managed services for everyone</li> <li>• Data and information: national monitoring systems along the entire sanitation service chain, with a focus on identifying exposure risks and tracking inequalities</li> </ul>	<ul style="list-style-type: none"> <li>• Capacity development: building a proactive, competent sanitation sector in which all actors have the skills and capacity needed to play their roles</li> <li>• Innovation: creating a vibrant and innovative sanitation sector that fosters new ideas, methodologies and products to achieve affordable and inclusive safely managed sanitation</li> </ul>

Source: UNICEF (2022).

This section of the report describes UNICEF progress on safely managed sanitation in each of the programming pillars of the Game Plan as well as its direct service delivery of sanitation services. Note that this includes discussion of systems strengthening work, which is at the core of the Game Plan.

## **Governance**

UNICEF support is helping governments in several countries refine national policy instruments towards the attainment of safely managed sanitation, including in Sierra Leone where both the Sanitation Policy Implementation Guidelines and the National Sanitation and Hygiene Game Plan were launched in 2022. In other countries policy development is ongoing, such as in Ghana where UNICEF sponsored a series of multi-stakeholder consultations on safely managed sanitation which led to drafting of a new national plan of action, in Nigeria with support to the National Task Group on Sanitation to revise ODF validation instruments to include safely managed sanitation requirements and in Côte d'Ivoire where a strategy for sludge management in rural areas was launched.

In an increasing number of sub-Saharan African countries efforts to update national policy frameworks on safely managed sanitation are guided by the AMCOW African Sanitation Policy Guidelines, which were developed with the support of UNICEF and partners and launched in 2021. UNICEF, in partnership with the Bill & Melinda Gates Foundation, is supporting these efforts in Cameroon, Ethiopia, Guinea-Bissau, Sierra Leone and Zimbabwe. In Ethiopia, UNICEF supported the review of the new Hygiene and Environmental Health Strategy, while in Kenya, support was provided for the development of the comprehensive new rural sanitation and hygiene costed road map, guidelines and monitoring framework. In Zimbabwe the development of national sanitation and hygiene policy is ongoing with UNICEF's support.

In Bangladesh, UNICEF worked with urban government bodies to develop the 'Climate Resilient, Sustainable and Safely Managed Sanitation' road map to improve inclusive sanitation services and freshwater pollution reduction in and around large cities. In a parallel initiative a new set of sanitation compliance guidelines was developed through a series of public hearings in coordination with city authorities.

Support for strengthening systems for urban sanitation is a focus of UNICEF programmes in other countries as well, such as in Ethiopia with a comprehensive review of the existing urban sanitation strategy and the development of a new strategic action plan, in the Democratic Republic of the Congo where UNICEF facilitated a national consultation workshop on the development of a national strategy for market-based sanitation approaches in urban and peri-urban areas and in Pakistan where UNICEF, government and the Islamic Bank for Development supported the development of a national City-Wide Inclusive Sanitation (CWIS) model.

As part of the efforts of promoting enabling regulatory environment for effective and sustainable delivery of WASH services in Bangladesh, UNICEF is providing technical support to government and other partners to create awareness and build consensus for the establishment of a Water Supply and Sanitation Regulatory Commission in the country. The process of establishing the

Regulatory Commission commenced in collaboration with relevant government institutions, the Bill & Melinda Gates Foundation, Asian Development Bank and other partners.

A UNICEF-sponsored regional learning event in South Asia (SanLearn 2022) brought together government and other actors from different countries to discuss and share lessons on the elimination of open defecation and improved sanitation programming. One outcome from the event was the launch of a process to develop a regional road map for fast tracking safely managed sanitation in both rural and urban areas across the region.

### **Financing**

SDG 6.2 is currently the most underfunded SDG target area and UNICEF is prioritizing engagement with partners, both existing and new, to rapidly increase financing for safely managed sanitation. This includes advocacy that highlights this underfunding (such as UNICEF budget briefs in Angola and Zimbabwe in 2022) and efforts to increase sector financing at global, regional and national levels. In addition, UNICEF is working to develop micro-credit systems to support the self-financing of new and improved household toilets, including in Ghana and Nigeria where UNICEF and partners support revolving fund systems for selected micro-finance institutions (see *'Sector financing'* for a full description of these activities).

### **Data and information**

Significant progress has been made in monitoring safely managed sanitation through household WASH surveys carried out under MICS, Demographic and Health Surveys (DHS) or national censuses and other surveys, and the JMP now has datasets on safely managed sanitation from 120 countries, up from 84 countries in 2015. However, there is a major gap in the availability of data in the area of safely managed on-site sanitation (SMOSS), which is an important and growing segment of the sector in many programme countries, especially in urban and peri-urban areas. To adequately monitor SMOSS (to determine if a system qualifies as being safely managed or not), national monitoring systems must cover not only the containment, treatment and disposal of excreta on-site at the household, but also the emptying and treatment of excreta off-site (faecal sludge management). Since 2020 the JMP has been working on this with funding from the Bill & Melinda Gates Foundation, including a first phase of pilots in six countries (Bangladesh, Ecuador, Indonesia, Kenya, Serbia and Zambia), publication of a synthesis of findings from these pilots and development of a guidance manual for Phase 2 pilots that will be conducted in 2023.

In pilot countries the surveys have provided the first comprehensive information on SMOSS and have contributed to additional action on strengthening monitoring systems, including in Bangladesh where results contributed to development of the new safely managed sanitation road map and in Kenya where the information is being used to develop national indicators and design a new real-time monitoring systems for sanitation progress.

UNICEF continues to support government partners on institutional sanitation monitoring in programme countries in various ways. In Sri Lanka this included support for a data cleaning and analysis exercise in preparation for SDG 6.2 monitoring. In Indonesia, UNICEF partnered with local universities and students on design of a tool to monitor on-site sanitation containment devices, and worked with youth groups and municipal authorities on sanitation progress monitoring.

At the global level, UNICEF provided training on existing tools that can be used to assess the status and strengthen monitoring of the implementation of the safely managed standards as a module in the 'Putting Safely Managed in Sanitation' training series in 2022.

### **Capacity development**

UNICEF prioritized training and technical support in 2022 on building capacity in programme countries for adoption and utilization of the Game Plan for sanitation programming. The 'Putting Safely Managed in Sanitation' course, first launched in 2021, continued in 2022 with global and regional webinars for UNICEF staff and other stakeholders from government, development partners, academia and the private sector. The course includes three modules: one on defining safely managed sanitation, one on the embedding of safely managed sanitation into national programmes, policies and plans, and one on strengthening monitoring systems. In 2022 the course was adapted for the West and Central Africa region and a version was developed for AMCOW and delivered across two days in Abuja, Nigeria after the World Toilet Summit.

In programme countries UNICEF provided a wide range of training and technical assistance for



various target groups. In the Sudan and Uganda, for example, training sessions were held for government and civil society partners in the area of sanitation marketing. In India, UNICEF supported government training programmes for over 6,100 sanitation master trainers, while in Bangladesh UNICEF directly supported the training of 1,717 toilet entrepreneurs who ultimately went on to construct over 160,000 latrines.

Building on the global online CWIS training programme conducted in 2021 in collaboration with UN-Habitat and ITN-BUET, UNICEF Ethiopia has signed an agreement with African Water Association (AfWA) to develop the capacity, tools and experience necessary to promote CWIS in the country. In Bangladesh, UNICEF is providing strategic and technical support to ITN-BUET

for development of a CWIS training package to bridge the capacity gap of City Corporations in addressing the urban sanitation challenges, and a subregional training workshop co-hosted by the World Bank for participants from Botswana, Eswatini and Lesotho.

Work continued on disseminating UNICEF field experience and innovations in sanitation programming in 2022. Two linked field notes documenting the [successes](#) and the [pitfalls](#) of the UNICEF-supported market-based sanitation programme in Bangladesh<sup>40</sup> were published in a learning partnership with iDE, and two field notes on climate-resilient sanitation Bangladesh and Pakistan (see '*Climate-resilient WASH*').

## **Innovation**

UNICEF and the LIXIL Corporation initiated Phase II of their '[Make a Splash!](#)' shared-value partnership on sanitation and hand hygiene marketing, with programming in six countries (Ethiopia, India, Indonesia, Kenya, Nigeria and the United Republic of Tanzania). The partnership continues to provide direct support through the supply and sale of aspirational and affordable sanitation and hygiene products, reaching just over 1 million people in 2022, but focuses also on systems-strengthening work that has helped an estimated 2.2 million people gain access to sanitation services at the basic standard or higher. This included training of 340,000 stakeholders on market-based sanitation and safely managed sanitation, distribution of US\$2.4 million of consumer financing for sanitation products, and advocacy and support to government partners on several fronts including demand creation activities, development of innovative financing models, support for new faecal sludge management policy, and advocacy with national and subnational governments for increased financing for sanitation programming.

The 'Make a Splash!' initiative was featured in a UNICEF-hosted session at the 2022 World Toilet Summit in Nigeria, which focused on scaling up innovative programming approaches. UNICEF also co-hosted a session with AMCOW on strengthening systems for safely managed sanitation, which introduced the UNICEF Game Plan and the AMCOW African Sanitation Policy Guidelines.

UNICEF continues to work with government and private sector partners on strengthening sanitation markets in programme countries to provide consumer-driven solutions for safe sanitation that address all contexts and incomes. This includes work with LIXIL and other initiatives.

Often a first step in the introduction of market-shaping programming in a programme country is a comprehensive sanitation market assessment study, which provides critical information for the design of context-specific programmes. In 2022, UNICEF-sponsored market assessments were completed and ongoing in eight countries, including national and subnational surveys, and lessons from these studies are being used by regional offices to help additional countries conduct assessments in 2023.

UNICEF engages the private sector on sanitation market shaping in a variety of ways, including by inviting company representatives to Joint Sector Reviews and other sector meetings, and



sponsoring focused events with existing and new partners. In the United Republic of Tanzania, for example, UNICEF facilitated the first national roundtable meeting with private sector partners on sanitation markets, including local and international companies, while in Bangladesh UNICEF hosted a technology fair to introduce at-source faecal sludge treatment technology.

The need for innovation is particularly acute in challenging programming contexts in cities, especially in slums and other low-income urban areas. UNICEF work through CWIS initiatives in Bangladesh, Ethiopia and India has developed a package of innovative approaches that are now being applied more broadly. In other countries, UNICEF is working with the private sector to pilot specific techniques. In Kenya, a large-scale pilot to install container-based toilets in urban informal settlements to ensure the safe removal and reuse of excreta has provided over 100,000 people with safely managed sanitation services. In Angola, UNICEF is working through a South–South technical support initiative with the United Nations Office on South–South Cooperation (UNOSSC), local partners and four Brazilian government agencies to introduce low-cost [condominial sewage](#) in the city of Luanda, with an emphasis on intensive engagement with the community at all stages of project design and implementation.

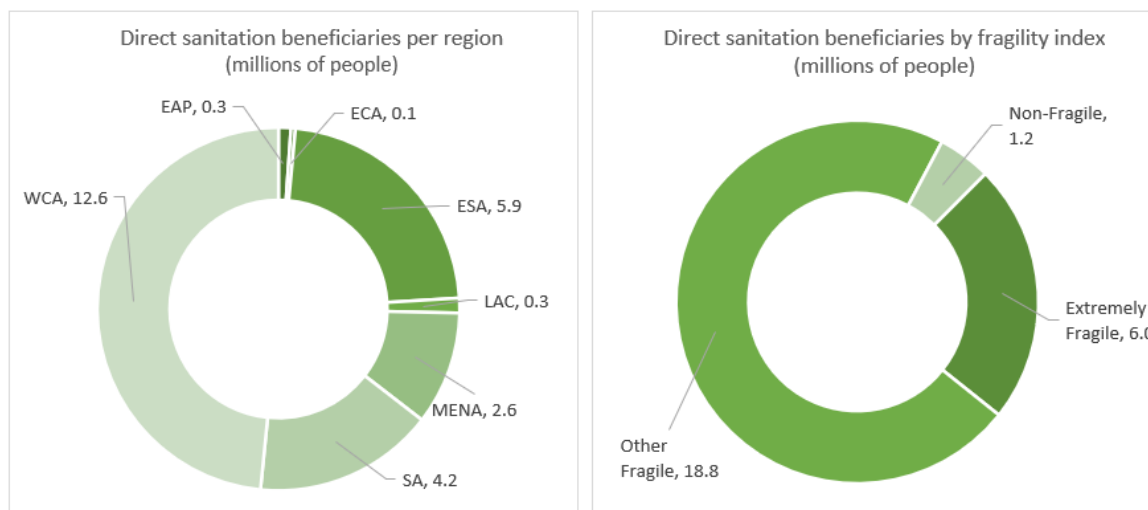
## Basic sanitation for all

As UNICEF shifts its programming towards strengthening systems for safely managed sanitation it continues to provide direct support on a large scale to help ensure everyone gains access to at least basic sanitation, with a focus on the most vulnerable including in fragile and humanitarian contexts, low-income and marginalized communities and high climate-risk areas.

In 2022, UNICEF reached more people than ever before through this direct support: a total of 26 million people. The vast majority – 95 per cent – are in fragile countries and in the regions with the greatest need, notably in the West and Central Africa region which has the lowest sanitation coverage levels of any of the UNICEF regions (*Figure 13*).

More people were reached in Nigeria, the most populous country in Africa, than in any other country, a total of 8.1 million people. Even though funding for UNICEF direct support has decreased over the last two years in the country, the momentum created through foundational work by governments at all levels, backstopped by UNICEF with the support of its largest WASH donor partner in the country, the European Union, has led to this result.

Figure 13. Basic sanitation beneficiaries through UNICEF direct support, by region and fragility index



Total: 26 million people in 70 countries.

**Source:** UNICEF CSIs (2022). Fragility index as per OECD (2022).

Seventeen per cent of the beneficiaries from direct support gained access to sanitation at the basic service standard with facilities designed to last and be used over the long term. Others were reached with temporary sanitation measures employed in disasters and other acute emergencies (see *'Emergency WASH'*).

Although much progress has been in eliminating the practice of open defecation, JMP 2020 datasets show that 494 million people are still without any other option, and that in some countries, the practice is actually increasing. UNICEF continues to prioritize both direct and systems-strengthening support for government partners to eliminate the demeaning and unhealthy practice, which is especially dangerous for women and girls. In 2022, this direct support helped communities with a total population of 26.2 million people in 50 countries become open defecation free (ODF), as verified by government-led certification processes.

In many countries UNICEF and its partners are using established community-led total sanitation (CLTS) approaches and systems for the elimination of open defecation as a way to jumpstart efforts to help households move quickly up the sanitation ladder to safely managed sanitation services. The UNICEF Game Plan to Reach Safely Managed Sanitation describes pathways for achieving this. One example is in India where UNICEF is supporting government efforts to transform the national Swachh Bharat programme from ODF to ODF+, which brings households much closer to the safely managed standard. In Uganda, a UNICEF-supported market-based sanitation initiative focused on communities that have recently reached ODF status has accelerated the pace at which households are moving up the sanitation ladder.

# Hygiene

## Hand hygiene

The '[Hand hygiene for all](#)' initiative, a global advocacy campaign launched in 2020 by WHO and UNICEF to accelerate progress on hand hygiene in response to the COVID-19 pandemic, has evolved into a global programme of support for action on hand hygiene at the national level.<sup>41</sup> As part of this effort, UNICEF and WHO developed the Hand Hygiene Acceleration Framework Tool in 2022, which helps to assess existing national plans for hand hygiene promotion, track progress and identify programming barriers and opportunities.<sup>42</sup> On Global Handwashing Day, UNICEF hosted a webinar with WHO, Water Aid and the Global Handwashing Partnership to launch the tool and report on its use in pilot countries. Also in 2022, UNICEF and WHO initiated the development of a comprehensive new Normative Guidance for Hand Hygiene in community settings, which will focus on systems-strengthening at the national level, including in the area of regulatory frameworks.

A key component of the 'Hand Hygiene for All' initiative is development of national road maps and related instruments for promotion of hand hygiene. UNICEF continued to support these efforts in over 60 countries in 2022, in collaborative processes



involving many different stakeholders. In Ghana, for example, UNICEF worked with six development partners and government agencies across multiple sectors to finalize the new national hygiene strategy with a set of operational guidelines, and train over 280 stakeholders for its roll-out at district level. In Bangladesh, UNICEF provided technical support for the development of the road map, which includes a costed workplan of over US\$1 billion. UNICEF also supported development of the first hand hygiene strategy in SADC (see '*Systems-strengthening*').

UNICEF supports national hand hygiene market assessments to study local supply and demand dynamics and market vulnerability to shocks to provide information to inform preparedness plans and generate evidence around market opportunities to attract and incentivize private sector engagement. Market assessments have been completed in four countries to date (Eswatini, Indonesia, Kenya and Nigeria), and new assessments are ongoing or planned in several countries. In 2022, the UNICEF South Asia office developed a hand hygiene market assessment guidance note, the first for the region, to guide UNICEF and partners in designing and running context-specific market assessments.<sup>43</sup> The guidance note is based on previously

conducted UNICEF market assessments and draws on a set of market mapping toolkits and technical briefs. Through its shared-value partnership with LIXIL in six countries, UNICEF helped to strengthen markets for affordable hand hygiene products, and helped over 2 million people gain access to basic hygiene through direct support (see 'Sanitation').

In India, UNICEF hosted a national workshop to disseminate and discuss a series of papers produced with IRC and local partners examining the enabling environment for the promotion of hand washing at national and subnational levels: national- and state-level policy and budget mapping analyses, a state-level stakeholder capacity assessment, a bottleneck analysis for hand hygiene promotion focusing on rural areas and a report on innovative products and solutions from participants in the 2022 Hand Hygiene Hackathon run by the India Sanitation Coalition.<sup>44</sup>

UNICEF also continues to build capacity on hand hygiene programming in 2022 in various ways. At the global level, the '[Engaging in hand hygiene markets](#)' course outlines methods for the support the development of locally sourced and produced hand hygiene products. The LAC regional office hosted an online course with partners on the 'WASH EM' methodology to promote hand hygiene in emergency contexts, and the South Asia regional office produced a series of 'Job Aids' guidance notes for hand-washing promotion for non-WASH UNICEF professionals.

In many sub-Saharan African countries, home-built tippy-taps are common, often promoted through CLTS programmes. UNICEF also promotes, when appropriate, other local hand-washing technologies and innovations, for example, as part of a multi-country ASWA programme funded by the Government of the Netherlands, in the United Republic of Tanzania the inexpensive and durable *ndoo chirizi*, a plastic bucket with a built-in faucet, is now being used in over 110,000 households. In Lesotho, UNICEF supported the National University of Lesotho Innovation Hub in development of three final designs for locally produced hand hygiene stations, through a design and field-testing programme.

In addition to working with governments and other partners to strengthen systems for hand hygiene, UNICEF also provides direct support to increase the number of people with access to hand-washing facilities and supplies in programme countries. These efforts focus strongly on reaching the vulnerable populations including in humanitarian crises.

For the first time, UNICEF has set a goal for this work based on the SDG definition of basic hygiene, the highest level (*Figure 14*).<sup>45</sup> By the end of the Strategic Plan period, UNICEF will have directly contributed to hand-washing facilities for 50 million people.

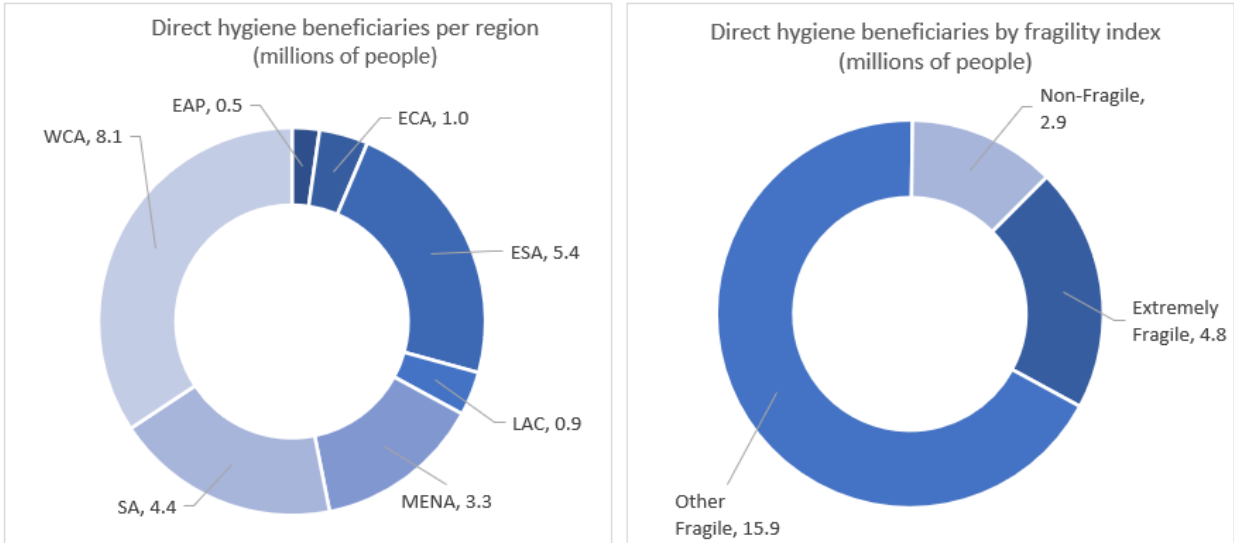
Figure 14. SDG service ladder for hygiene

SERVICE LEVEL	DEFINITION
BASIC	Availability of a handwashing facility with soap and water at home
LIMITED	Availability of a handwashing facility lacking soap and/or water at home
NO FACILITY	No handwashing facility at home

Source: JMP (2021).

A total of 23.6 million people gained access to basic hygiene facilities through UNICEF direct support in 2022. Just under half (48 per cent) of the people reached are in the West and Central Africa region, in many cases through the large government-led CLTS programmes in the region that include household hygiene promotion as well as the elimination of open defecation community-wide. These CLTS programmes in the region and elsewhere are often supplemented by community hygiene promoters, often volunteers, who receive training with UNICEF support in [Nigeria](#), [Sierra Leone](#) and other countries. As is the case for UNICEF direct support for water and sanitation, the majority of the beneficiaries are in fragile countries (Figure 15).

Figure 15. Basic hygiene beneficiaries through UNICEF direct support, by region and fragility index



Total: 23.6 million people in 80 countries.

Source: UNICEF CSIs (2022). Fragility index as per OECD (2022).

Just over half of the people (54 per cent, 12.7 million people) were reached through UNICEF humanitarian action for basic hygiene services. This includes over 1.7 million people in



Bangladesh, 860,000 in Ukraine and 2.5 million in Yemen where UNICEF continues to provide support for the large internally displaced population and for cholera prevention programmes (see 'Emergency WASH').

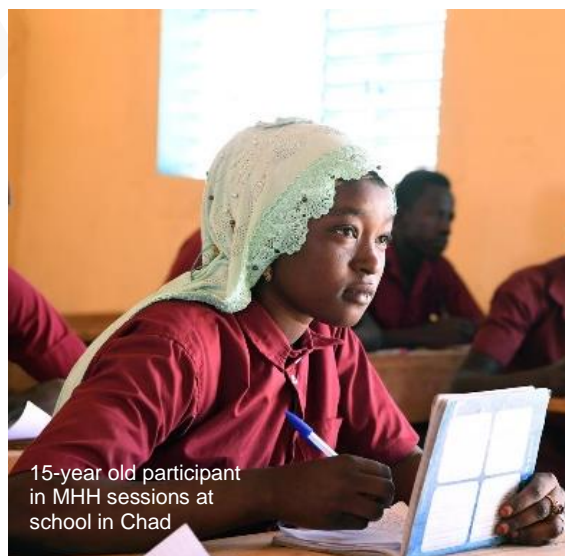
Global Handwashing Day, on 15 October, continues to be a key opportunity for advocacy with decision makers and for raising public awareness, and in 2022 was especially important for keeping hand hygiene on the agenda as people begin to look beyond the COVID-19 pandemic. UNICEF is a core member of the Global Handwashing Partnership, which leads Global Handwashing Day events globally and provides promotional materials including *The Handwashing Handbook*, now available in six languages. In 2022, an estimated 2 billion people were reached through virtual or in-person events and mass media campaigns.<sup>46</sup>

UNICEF sponsors a wide range of Global Handwashing Day events in programme countries including messages through mass media, social media and SMS; public events featuring political and opinion leaders; sports tournaments and mass hand-washing events (including one with 6,000 people in the Indian state of Orissa).<sup>47</sup> The day is also used as an opportunity to reach large audiences for the launch of new programmes and knowledge products such as in Pakistan where the new national WASH Behaviour Change Strategy was presented and a national dialogue on hand hygiene was co-sponsored by Deutsche Gesellschaft für Internationale Zusammenarbeit, UNICEF, Unilever and WaterAid; and in Sri Lanka with the release of a major new study on hand-washing behaviour in poor urban areas and agricultural estates.

## Menstrual health and hygiene

Working to ensure that the MHH needs of girls, women and all people who menstruate is a core part of the UNICEF WASH programme. The challenge is significant: MHH services are still non-existent or substandard in many places with far-reaching consequences for people who menstruate, affecting school attendance, mobility, participation in community life and social services, and compromising safety and well-being. Direct support for MHH and systems-strengthening work are a focus of both UNICEF emergency response and development programmes, in schools, health centres, communities and households.

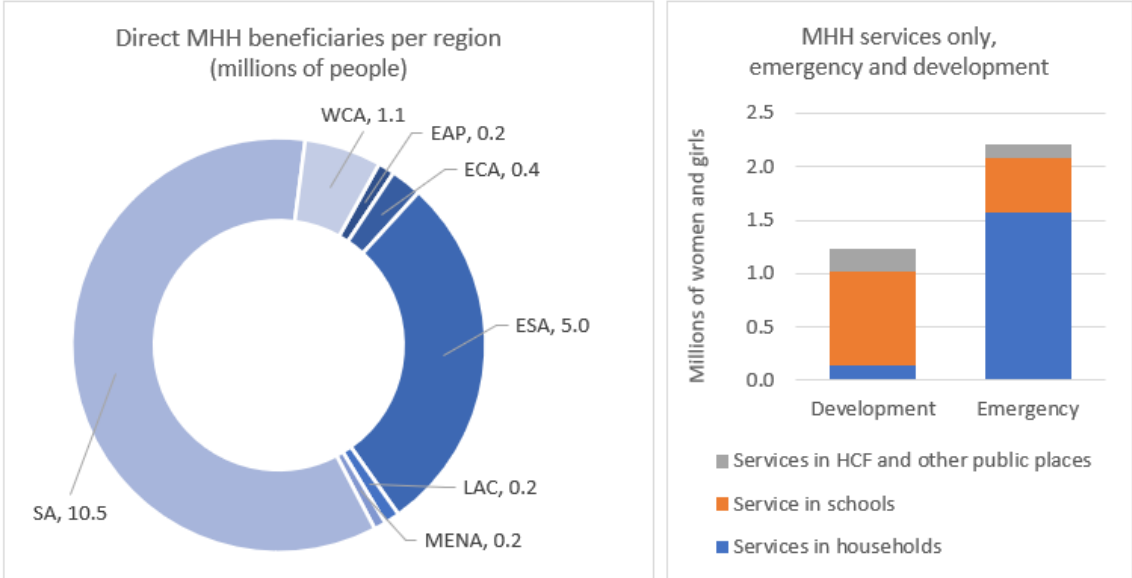
With the 2022–2025 Strategic Plan, UNICEF has adjusted its MHH direct support monitoring methodology to better track progress, and improve disaggregation by type of intervention. Using this new system, UNICEF country offices report that a total of 17.5 million women and girls<sup>48</sup> were reached with MHH services and information,



15-year old participant in MHH sessions at school in Chad

13.9 million through development programming and 3.7 million through humanitarian response (Figure 16).

Figure 16. MHH beneficiaries through UNICEF direct support, by region and fragility index



Total: 17.5 million people in 78 countries (services and information, development and emergency).  
**Source:** UNICEF CSIs (2022). Fragility index as per OECD (2022).

Other beneficiaries are reached through the provision of services in households, schools and health-care facilities and other public places. These MHH programmes are usually delivered as a package including education programmes, targeted information packages, mentorship initiatives, and services such as private washing facilities and disposable pad incinerators. The package sometimes also includes distribution of menstrual pads and other supplies (especially in emergencies). As shown in Figure 16, the focus of these MHH programmes is very different in development and emergency contexts: in development programming about 70 per cent of the beneficiaries are girls in schools, whereas in emergencies the majority (also about 70 per cent) are women and girls reached in camps and communities. Other beneficiaries are reached in health-care facilities and other public spaces. The largest emergency MHH intervention programmes in 2022 include responses in Afghanistan, Pakistan, Uganda and Ukraine.

The scale of the global information and advocacy campaigns on Menstrual Health Day continues to grow, with an estimated 687 million people reached through a wide range of media, social media and in-person events around the world, the most ever recorded.<sup>49</sup> UNICEF supports the global campaign in several ways, such as providing [content](#) and other support to the media, support to its MHH partner WASH United and participating in the new MHH [Action Cycle](#). UNICEF also leverages its presence in countries around the world to sponsor a wide range of events, for example, in India where UNICEF supported a large-scale government-led programme that included media campaigns, engagement of celebrities and social media

influencers, recurring social media campaigns including the Red Dot Challenge and the '[Pass the Pad](#)' challenge, webinars and a film festival.

UNICEF also uses Menstrual Health Day as an opportunity to disseminate information on UNICEF-supported programmes and initiatives to a wider national audience, including these examples:

- A [photo essay](#) on how UNICEF and government partners are supporting schools in Cambodia.
- An [interview](#) with a student participant in school MHH programmes in the Plurinational State of Bolivia.
- An [article](#) about teacher mentors for MHH in Indonesia.
- A [video](#) on MHH-friendly toilets in the Indian state of Maharashtra.
- A new [partnership](#) with a local company in Pakistan.
- An 'unboxing' [video](#) of a MHH kit in Darien, Panama.
- New MHH-themed music videos in [India](#) and [Nepal](#).
- An [article](#) on empowering adolescent girls through 'Girls' Rooms' in Mongolia.

UNICEF is the founding partner of the [Okya](#) period tracker and MHH information app, and continues to support its roll-out and localization with a range of local and global partners, including the Duke-UNICEF Innovation Accelerator (see '[Systems-strengthening](#)'). The app was first launched in Indonesia and Mongolia, and is now expanding into other countries in the East Asia and Pacific region (Papua New Guinea, the Philippines, Viet Nam) and other regions, including new roll-outs in Burundi, Kenya, Kyrgyzstan, Mexico, Nepal and the United Republic of Tanzania in 2022. The Okya localization process involves identifying and partnering with local organizations, testing the app (e.g., in [the United Republic of Tanzania](#)), user experience assessments, surveys and focus group discussions with girls and boys, and a highly participatory app adaptation process. Local versions of the app include context-specific functionality, language translations (e.g., into Swahili in 2022 for East Africa) and an information base on MHH and sexual reproductive health relevant to the national context.

UNICEF support helped to strengthen national systems on MHH in 2022. In Brazil, a multi-year campaign in partnership with UNFPA involving a large-scale survey, an advocacy document and direct engagement with policymakers has resulted in the passing of a period poverty law. Similar laws are being proposed and developed with UNICEF support in Ecuador, Mexico and Peru. In the United Republic of Tanzania, UNICEF sponsored a national study of adolescent girls' perceptions about the provision of WASH and MHH services in schools that initiated a policy dialogue with the Ministry of Health. In the Indian state of Odisha, a new state MHH policy was passed. In Liberia, UNICEF supported the development of national guidelines on MHH in schools, and new national strategies were launched in Columbia and Eritrea. In South Asia, UNICEF conducted a regional policy review on MHH and worked with national, provincial and local governments in eight countries in support of policy change on inclusive MHH services.

The JMP launched its first set of draft questions for use in national household surveys to monitor different aspects of MHH as a step in an ongoing process to expand the number of countries with national datasets on MHH (see ‘*WASH Systems-strengthening*’).

To increase the quality and variety of menstrual products offered by humanitarian actors, UNICEF and UNHCR have been participating in a UNFPA-led initiative to develop global quality specifications for menstrual products in emergency contexts. By the end of 2022, specifications for reusable menstrual pads, menstrual cups, disposable menstrual pads and tampons, had been finalized and published, including in the [UNICEF supply catalogue](#), which is widely used by many organizations and by governments. Other humanitarian actors including large NGOs and the International Red Cross and Red Crescent Movement are also committed to mainstreaming these standards, and there is an expectation that the combined purchasing power of all these organizations will help to shape the menstrual products market, improving the quality of products globally. UNICEF also continues to support local initiatives for producing and distributing menstrual hygiene products.

## WASH in institutions

### WASH in schools

The JMP released a [data update on WASH in schools](#) in 2022, which tracks gains made to date but also highlights how efforts must be sharply accelerated – 14x for water, 3x for sanitation and 5x for hygiene services – to achieve universal coverage by 2030 and meet the SDG target. The update also illustrates the persistent inequalities in access to WASH in schools between countries and SDG regions.<sup>50</sup>



The data update package also included thematic reports, one on [pandemic preparedness in schools](#) and one on [disability-inclusive WASH services](#).

In response to the need for accelerated action, UNICEF consulted with partners, staff and other stakeholders to refine its approach to WASH in Schools. The new WASH in Schools Acceleration Framework, which will be formally launched in 2023, is guided by the SDG Acceleration Framework and the UNICEF WASH Strategy and stresses the need for programming at scale, broader partnership frameworks, climate sustainability of school WASH systems and the imperatives of equity and inclusion.<sup>51</sup>

At country level, UNICEF continues to help government partners strengthen national systems for WASH in schools. In 2022 this support included the integration of climate resilience into existing national standards and plans in the Democratic Republic of the Congo, the introduction of a new national policy in Papua New Guinea, policy reviews and revised policies in Solomon Islands and Kiribati, a national workshop and training programme in Viet Nam, new national guidelines and a minimum services package in Nigeria, and new standards for disability-inclusive WASH facilities in schools in Kenya.

The German Agency for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit) and UNICEF carried out a joint global review of their Three Star Approach to WASH in Schools in 2022. First launched in 2013, the approach encourages incremental and cost-effective steps to ensure that schools provide facilities for hand washing with soap, safe drinking-water clean, gender-segregated and child-friendly toilets. Over that time it has been used, in various ways, in over 50 countries. The review analysed implementation of the approach in countries where it has been adopted (and adapted) by Ministries of Education and other government bodies, in countries where its institutionalization is ongoing, and in countries where the approach has not been successfully applied. Its key output is a set of six recommendations for successful adoption of the approach into national systems which will be applied in new guidance materials and programme designs: (1) clear responsibilities within Ministries of Education for WASH, (2) high-level political will, (3) the need for coordinated technical working groups, (4) multifaceted capacity development efforts, (5) national and subnational plans and (6) transparent datasets on WASH in schools.

At country level, UNICEF continued to support government partners on the institutionalization and implementation of the Three Star Approach. Examples include the launch of a Three Star pilot initiative with government and NGO partners in Mali; direct support to schools in Guyana, Madagascar, the United Republic of Tanzania and other countries; the inclusion of the approach into the national School Education Sector Plan in Nepal; the roll-out of Three Star monitoring guidelines in the Lao People's Democratic Republic; and the release of the new national disability-inclusive Three Star Approach guidelines in Lesotho targeting practitioners at all levels.

### **The Unilever/UNICEF partnership on WASH in Schools in India**

UNICEF and Unilever completed a four-year partnership on WASH in schools in India in 2022. The Partnership for a Clean India programme provided direct support for hygiene and sanitation facilities in schools, strengthened demand for services through behaviour change initiatives and engaged with government partners to strengthen the enabling environment for WASH in schools, with a focus on capacity-building.

The programme delivered results on a large scale. Over the four year programming period, a total of 154,414 schools in 14 states (nearly 10 per cent of schools in the country) were provided with a package of WASH interventions enabling them to upgrade to the national



Three Star standard, benefiting over 30 million children. The improvements most commonly involved upgrades to hand hygiene facilities and hand-washing practices at school, and improvements to sanitation facilities and their operation and maintenance systems.

The programme also supported related government-led initiatives including the launch of the Swachh Vidyalaya Puraskar, which rewards schools that make progress on WASH, and the national school re-opening campaign following COVID-19 closures. The programme was also able to leverage an estimated US\$424 million in additional funding for WASH in schools from public and private sources.



The greatest reach of the partnership was in the area of capacity-building. The comprehensive training package developed under the programme with the Ministry of Education was rolled out country-wide and, to date, has been used to train a total of 2.2 million stakeholders on WASH in schools including schoolteachers, government officials, elected representatives, school management committees, youth leaders and janitors. The experiences and lessons of this ongoing training initiative will be used to design similar programmes in other countries.

A total of 6,554 schools now have a complete set of basic WASH services as a result of UNICEF direct support in development contexts. This was through support for improved water in 2,998 schools, with sanitation in 2,971 schools and/or with hand hygiene in 5,958 schools. UNICEF interventions focus on lifting schools to the SDG basic WASH standard (see *Figure 17*), and thus in some cases interventions are required in just one or two areas not all three. However, in over 75 per cent of reporting countries, UNICEF support in development contexts includes interventions in all three areas. In many cases UNICEF interventions provide a complete package of support in some schools, and reach additional schools in specific areas, often to bolster hygiene standards. In Myanmar, for example, UNICEF supported a complete package of water, sanitation and hygiene facilities in 330 schools and reached an additional 1,115 schools with a hand hygiene and menstrual hygiene package.

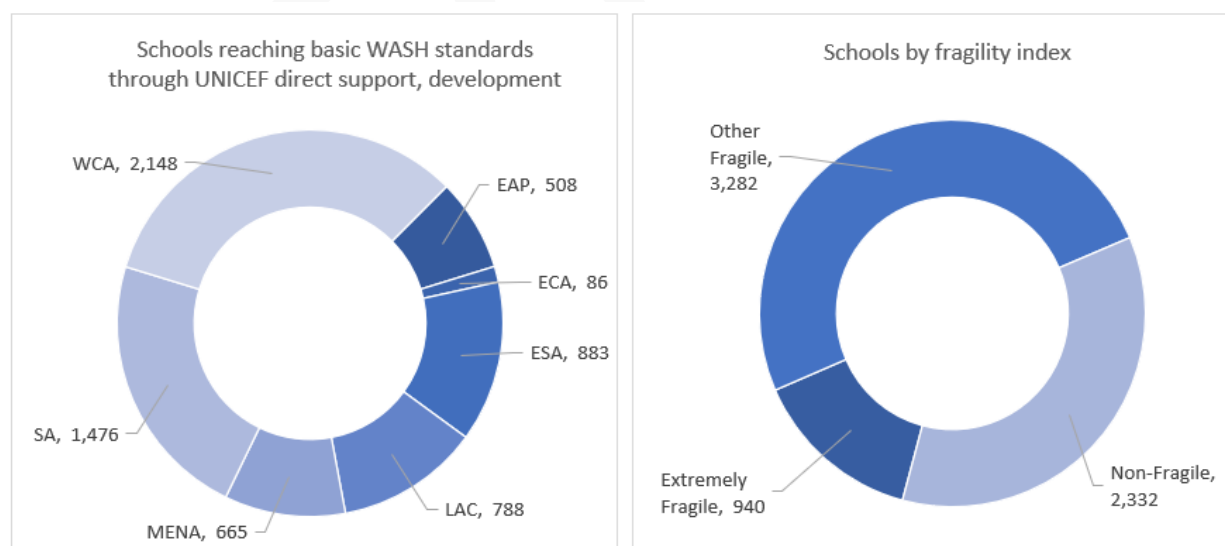
Figure 17. JMP service ladders for WASH in schools

SERVICE LEVEL	DRINKING WATER	SANITATION	HYGIENE
<b>BASIC SERVICE</b>	Drinking water from an improved source and water is available at the school at the time of the survey	Improved sanitation facilities at the school that are single-sex and usable (available, functional and private) at the time of the survey	Handwashing facilities with water and soap available at the school at the time of the survey
<b>LIMITED SERVICE</b>	Drinking water from an improved source but water is unavailable at the school at the time of the survey	Improved sanitation facilities at the school that are either not single-sex or not usable at the time of the survey	Handwashing facilities with water but no soap available at the school at the time of the survey
<b>NO SERVICE</b>	Drinking water from an unimproved source or no water source at the school	Unimproved sanitation facilities or no sanitation facilities at the school	No handwashing facilities or no water available at the school

Source: JMP (2021).

UNICEF support for schools in development programming contexts occurs across all regions, with the most schools reached in the West and Central African region in 2022. The majority of schools reached are in fragile countries (see Figure 18).

Figure 18. Schools reaching the SDG standard for basic WASH services through UNICEF direct support in development programmes, by region and by fragility index, 2022



Total: 6,554 schools in 76 countries, through development programming.

Source: UNICEF CSIs (2022).

Far more schools were reached through humanitarian interventions: a total of 30,827 schools in 59 countries. UNICEF direct support ensured that they reached the same SDG standard for

basic WASH services. However, in these emergency situations, UNICEF interventions were more often in just one or two areas. In India, for example, UNICEF installed touchless hand-washing stations and provided hygiene education as part of continuing COVID-19 back to school campaigns and in response to flooding emergencies, while in Ukraine institutional hygiene kits and related supplies were provided to war-affected schools.

UNICEF is a founding member of the global WASH in Schools Network, which promotes alignment among the many development partners and NGOs that support government efforts to improve WASH in schools. In 2022, with the financial support of the Xylem company (which also supports related knowledge management initiatives and programming at the country level), the Network's [website](#) was revamped and a comprehensive user practices and needs survey was completed.

The 9th WASH in Schools International Learning Exchange for the South Asia and East Asia and Pacific regions was held through a series of virtual events from 31 August to 21 September 2022 co-organized by UNICEF, Deutsche Gesellschaft für Internationale Zusammenarbeit, WaterAid and Save the Children. More than 350 people participated from ministries of education, health and WASH, and a wide range of development partners in sessions covering climate-resilient WASH, lessons from the COVID-19 pandemic, financing models and other areas. Based on the Asian experience, the first-ever African WASH in Schools International Learning Exchange will be held in Abidjan, Côte d'Ivoire in 2023.

UNICEF continued to cooperate with Emory University on the WASH in Schools Distance-Learning Course, which has been running for more than a decade, with over 740 participants from more than 75 countries completing the course to date. The course was revamped in 2021, and in 2022 a total of 42 people from 12 countries completed the course including Emory graduate students and international professionals from government departments, NGOs and development agencies.

## **WASH in health-care facilities**

The JMP published a [progress update](#) on WASH in health-care facilities (HCF) with a special focus on WASH and IPC in 2022. The update provides new baseline data in the five components of the JMP service ladder for health-care facilities: water, sanitation, hygiene, waste management and environmental cleaning. A key finding from the analysis is that just half of health-care facilities (51 per cent) globally have basic hygiene services with water and soap or alcohol-based hand sanitizer at points of patient care and at toilets. The situation is especially alarming in least-developed countries (LDCs) where only one-third (32 per cent) of health-care facilities have a basic hygiene service.

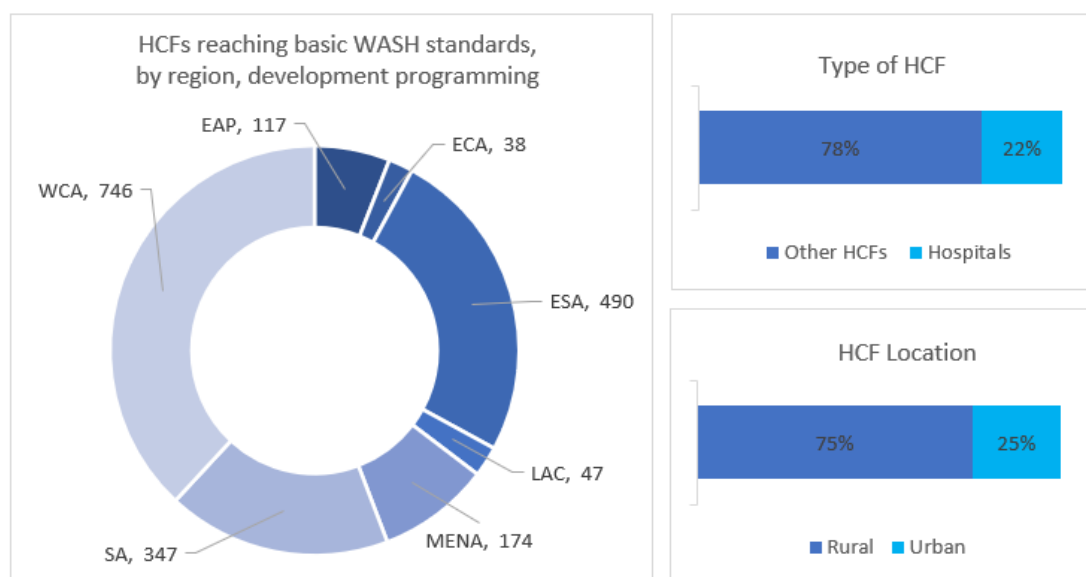
A joint UNICEF, World Bank, WHO paper published in *The Lancet* in 2022 shows how universal access to all basic WASH services in health-care facilities is financially feasible, with an estimated annual mean cost of US\$0.24–0.40 per capita.<sup>52</sup> The paper notes that these costs (along with recurrent costs) are modest compared with current overall health and WASH spending, and universal WASH in health-care facilities would yield substantial health benefits.



UNICEF continued to play a key role in the area of WASH and health both by partnering with governments to strengthen national systems in the health and WASH sectors, and through direct support for improved WASH services in health-care facilities, which in 2022 was provided in a total of 73 countries through both emergency and development programming.

In development contexts, a total of 1,959 health-care facilities now have a complete set of basic WASH services as a result of UNICEF direct support through interventions in five different areas: water, sanitation, hand hygiene, waste management and environment cleaning. As is the case with school WASH, UNICEF interventions are in the specific areas needed to bring a HCF to the basic WASH standard. The majority of UNICEF support is for rural, smaller facilities, usually primary and maternal health-care centres as opposed to larger hospitals in cities (*Figure 19*). In many cases new UNICEF-supported systems provide safe water supplies in surrounding communities, in addition to within the health centres themselves.

Figure 19. Health-care facilities reaching the SDG standard for basic WASH services through UNICEF direct support in development programmes, by region, type and location, 2022



Total: 1,959 health-care facilities in 59 countries, through development programming.

**Source:** UNICEF CSIs (2022).

More health-care facilities were reached in the West and Central African region than in other regions, and UNICEF interventions in this region are often required in all five areas to reach the basic WASH standard. In the Democratic Republic of the Congo, for example, 212 health-care facilities gained access to basic WASH services in 2022 through the construction of climate-resilient water supply systems, gender-sensitive toilets for patients and health-care workers and biomedical waste facilities with incinerators, grinders and placenta pits managed by a trained health-care management committee.

An even greater numbers of health-care facilities were brought up to basic WASH standards through targeted interventions in emergencies, a total of 8,868 health-care facilities in 2022. In many countries this includes large-scale interventions that focus on hand hygiene, such as in the Republic of Moldova where UNICEF provided hygiene supplies to all the primary care health-care facilities and regional peri-natal centres in the country. Elsewhere, more comprehensive interventions are often needed, such as in:

- Afghanistan, where a comprehensive emergency programme resulted in 116 health centres meeting basic WASH standards, some of which are also used as community hygiene promotion hubs.
- Pakistan, where 81 flood-affected health centres were brought up to basic WASH standards through a range of interventions.
- The Bolivarian Republic of Venezuela, where 64 health centres received a package of WASH and IPC inputs, along with hygiene promotion in surrounding communities as part of an integrated health, nutrition and WASH response.



- Zimbabwe, where 95 health centres received a full package of basic water, sanitation and hygiene facilities including 56 with climate-resilient solar water systems.

New or rehabilitated WASH systems in health-care facilities not only improve the quality of care for inpatients, but can also improve the effectiveness and reach of outreach programmes. In Uganda, for example, upgraded WASH facilities, including solar water systems that also serve communities and refugee camps, have contributed to significantly higher numbers of outpatient visits to peri-natal and maternal health centres.

WHO and UNICEF launched the second edition of the WASH health-care facility improvement tool (WASH FIT) in 2022.<sup>53</sup> The tool, which has been used in 64 countries, helps national stakeholders work towards universal access to WASH services in health-care facilities through a set of eight practical programming steps.<sup>54</sup> The new edition expands the programming indicator set and places a greater emphasis on climate resilience, gender inclusion and linkages between WASH and infection prevention, antimicrobial resistance and quality of care. The WASH FIT web portal and resources guide were also upgraded in 2022, and UNICEF expanded its global in-house monitoring systems, knowledge tools and consultation platforms.

Training on WASH FIT implementation was expanded in 2022, with UNICEF facilitating national and subnational in-person training sessions in several programme countries (including Benin, the Central African Republic, Malawi, Malawi, the Bolivarian Republic of Venezuela and subregional training in South Africa). UNICEF also ran multi-country virtual training sessions in the South Asia and Latin America and Caribbean regions with participants from 23 countries, including UNICEF staff, government health-care workers and NGO partners. In Indonesia, the lessons learned using WASH FIT as part of the COVID-19 pandemic response efforts have informed the ongoing large-scale roll-out of the tool, and its institutionalization within government systems, including the national medical waste management and environmental health information system.

The amount of waste generated by health-care facilities grew substantially during the COVID-19 pandemic, with the wide-scale use of disposable personal protective equipment (PPE) equipment, highlighting the need for adequate facilities to safely dispose medical waste. The scale of the need is not fully known and so UNICEF is working with partners to better understand requirements, including through the JMP. In the South Asia region, UNICEF helped to clarify the picture by sponsoring country-level situation analyses with strategic recommendations along with a regional situation summary.<sup>55</sup>

UNICEF continues to support government partners in strengthening national systems for WASH in health-care facilities through WASH FIT processes and other mechanisms. Examples include new national norms and standards in Côte d'Ivoire, new national standards for in the State of Palestine, a WASH in health-care facilities and schools investment case in Tajikistan, a WASH in HCF strategy in Punjab province in Pakistan and the formation of a new HCF task force in the Ministry Of Health in Zimbabwe. In Ghana, UNICEF support helped institutionalize WASH facility management planning systems into the national health system, integrated more comprehensive WASH indicators in the national District Health Information System, contributed

to a review of the national WASH and IPC policy and piloted low cost institutional toilet blocks designs.

## Emergency WASH

The lingering effects of COVID-19, other public health crises, global economic disruption and instability, conflict, fragility and the increasing frequency and intensity of emergencies due to climate change is impacting the lives of more people than ever before, including millions of vulnerable children across all regions of the globe.

The UNICEF WASH programme responds in different ways. It responds directly with life-saving relief efforts on a large scale, reaching, in 2022, people in 98 countries across all regions of the world, including water, sanitation and hygiene interventions, and interventions in the areas of WASH in schools, learning spaces and health-care facilities. This included ongoing relief efforts in long-running complex emergencies, urgent relief to conflict-affected communities in Ukraine and other countries, response to flooding and other climate emergencies, and support to partners in the large number of countries affected by cholera in 2022. The type of response ranges from comprehensive response efforts (such as in Ukraine, the Horn of Africa and Yemen) to small one-off responses in response to local disasters.

UNICEF also amplifies its own efforts by coordinating global responses as the sector lead agency through the Global WASH Cluster. Additionally, and perhaps most importantly over the long term, UNICEF continued to work with partners on the humanitarian–development–peace nexus to increase the resilience of countries, communities and WASH systems to better withstand acute and complex emergencies through efforts by strengthening capacity and systems and use WASH programming as a catalyst for peacebuilding efforts.

UNICEF relies heavily on the generous support of funding partners for its WASH humanitarian response, especially government donors, who collectively provided over 85 per cent of funds used for UNICEF expenditure on emergency responses in 2022. This includes the governments of the United States of America (see box), the United Kingdom, Japan, Germany and Sweden, and the European Union, all of which donated US\$10 million or more for 2022 expenditures.

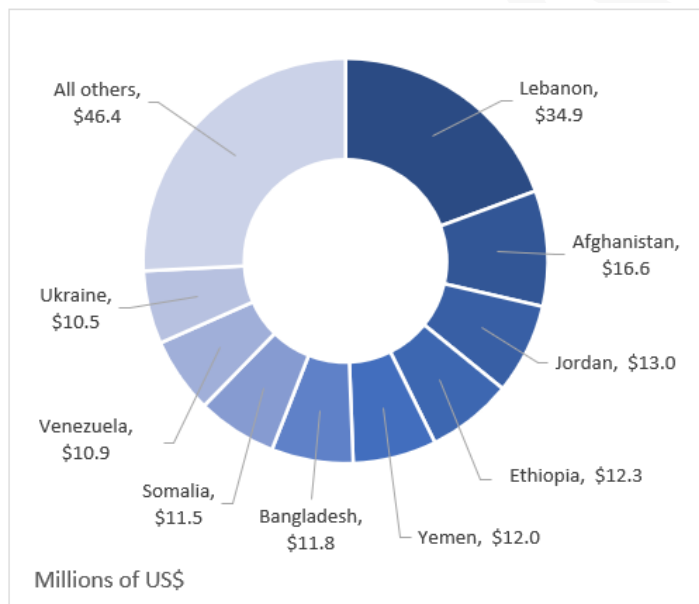


## Support for emergency WASH from the government of the United States of America

In 2022, funding provided by United States of America government agencies amounted to US\$179.9 million, accounting for one-third of all UNICEF WASH humanitarian expenditure in 2022. The majority of these funds are from the United States Agency for International Development, USAID (through both the United States Bureau for Humanitarian Assistance and the Office of Food for Peace) and the Bureau of Population, Refugees and Migration (PRM) of the US State Department. This figure does not include funds for development programming or funds from non-government sources such as the United States Fund for UNICEF (the UNICEF National Committee).

The funding supported a wide range of UNICEF humanitarian responses in the areas of water, sanitation, hygiene and WASH in institutions in a total of 83 countries in 2022, across all regions. In nine of the countries, the funding was greater than US\$10 million (*Figure 20*). This emergency WASH section of the report provides details on UNICEF humanitarian responses in these countries.

Figure 20. Funding for UNICEF emergency WASH programme expenditures from United States government sources, by country, 2022

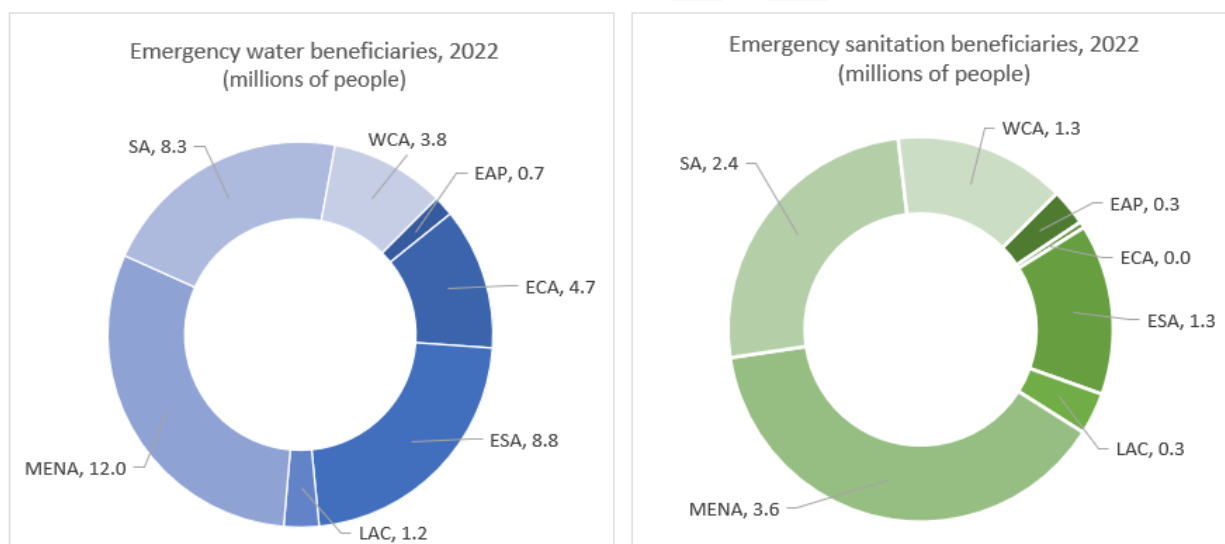


## Humanitarian response

UNICEF emergency response programmes helped 39.4 million people gain access to water and 9.3 million to sanitation in 2022, with the largest numbers of people reached in the Middle East and North Africa region through ongoing large-scale responses in the Syrian Arab Republic and its neighbouring countries, and in Yemen (*Figure 21*). In these response programmes, and increasingly in other regions as well, a large proportion of the people reached reside in cities: in 2022, 49 per cent of water emergency beneficiaries and 44 per cent of sanitation beneficiaries were in urban areas.

The majority of these beneficiaries are reached through services not designed to be permanent, such as water trucking, but a significant proportion (23 per cent of water beneficiaries and 45 per cent of sanitation beneficiaries) were provided with durable services, designed to remain functional over the long term. UNICEF remains committed to strengthening humanitarian–development–peace nexus processes to continue to reduce the need, as far as possible, for long-term water trucking and similar crisis interventions.

Figure 21. UNICEF emergency water and sanitation beneficiaries, 2022, by region

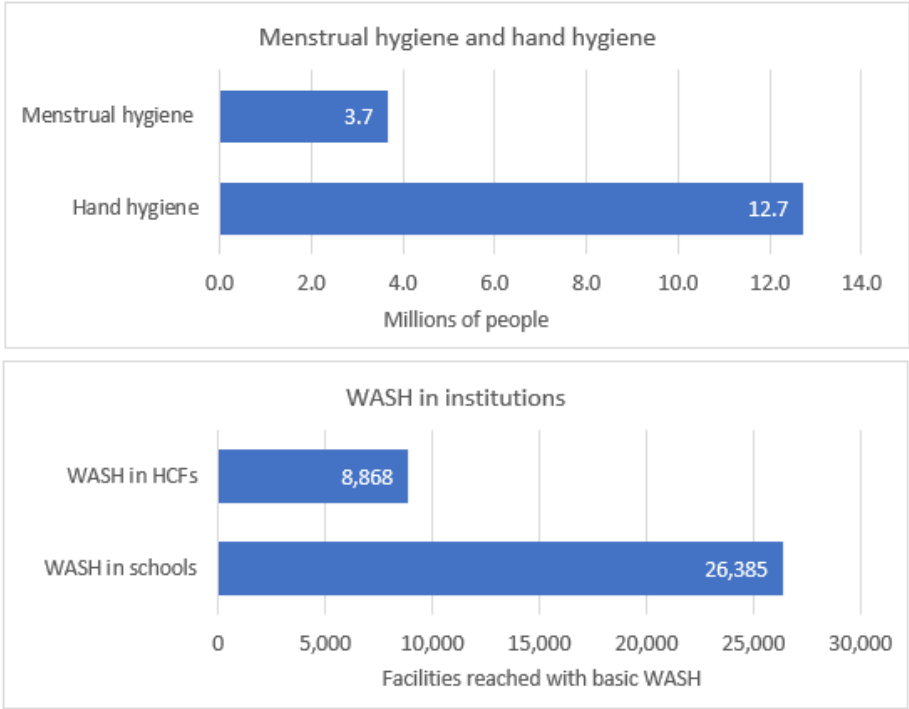


Total: 39.4 million water beneficiaries and 9.3 million sanitation beneficiaries.

Source: UNICEF CSIs (2022).

UNICEF reaches millions of other people through its hand hygiene, menstrual hygiene and WASH in institutions emergency response programmes (*Figure 22*). For WASH in institutions, UNICEF emergency support focuses on bringing institutions up to the basic WASH standards, often through multiple types of interventions. In all cases these response programmes are part of broader efforts in UNICEF across both development and humanitarian response contexts, as described in the 'Hygiene' and 'WASH in institutions' sections of this report.

Figure 22. UNICEF emergency response for hand hygiene, menstrual hygiene and WASH in institution, 2022



Source: UNICEF CSIs (2022).

In Ukraine, UNICEF acted quickly to launch a large-scale response immediately after the war broke out in February 2022, ultimately reaching 4.6 million people through a wide range of emergency WASH interventions. This included the repair and rehabilitation of damaged water and sanitation infrastructure; the procurement of supplies and equipment including hygiene kits and purification tablets, water trucking and bottled water for critically affected communities; and comprehensive WASH services for shelters, learning facilities and health centres. Close collaboration with local authorities and water utilities, with which UNICEF has been working for years, can facilitate quick and effective responses in critical situations, such as the provision of equipment to repair key infrastructure in the bomb-damaged Karachunivske Dam, and comprehensive WASH supports in the front-line regions of Donetsk, Kharkiv, Kherson and Mykolaiv. UNICEF additionally helped to ensure safe WASH and menstrual hygiene services for refugees in neighbouring countries, notably in the Republic of Moldova where support was provided in 32 reception centres, border crossing points and refugee accommodation facilities.

In Pakistan, UNICEF responded to the unprecedented flash flooding with emergency WASH supplies and services directly reaching over 1.5 million people, including water trucking, hygiene kits, gender-segregated latrines and installation of emergency water filtration units. As flood waters receded and people began to return to their communities, the focus shifted to working with government authorities and other partners on repairing and strengthening the climate-resilience of water and sanitation systems.



UNICEF response to the conflict and severe drought in Ethiopia reached over 2.5 million people with emergency water supplies and others through the construction of toilets and distribution of critical supplies. UNICEF prioritizes and promotes sustainable and climate-resilient emergency WASH solutions in the country, including expansion of the pilot approach that provides an economically sustainable water service to camps and host communities using a self-sustaining business model (with some users paying for water services and some users subsidized). UNICEF also supported large-scale emergency WASH operations in neighbouring drought-affected countries including Somalia and the Sudan.

In Afghanistan, where WASH services have been severely disrupted by political upheaval, drought and other crises, UNICEF continued to provide emergency WASH services to vulnerable communities throughout the country including water trucking, emergency latrine construction, and the delivery of hand hygiene and menstrual hygiene supplies. UNICEF also rehabilitated existing water supply systems



including the installation of new solar-pumping systems to improve sustainability and resilience. In neighbouring countries, UNICEF provided WASH services for refugees, including in the Islamic Republic of Iran where large new water and sanitation systems are being constructed to serve camps and host communities.

Other major emergency WASH response programmes included multi-country relief efforts in the Sahel region, support for WASH services and supplies in reception and transit centres for people on the move in central America, and ongoing large-scale programming in Yemen that in 2022 rehabilitated 71 water and sanitation systems country-wide, improved WASH services in 277 schools and provided urgent WASH services in 435 camps for internally displaced persons.

The timely procurement of appropriate supplies is critical in emergency responses, and UNICEF delivers a large volume and wide range of WASH supplies around the world. One example is the WASH & Dignity Kit, which includes soap, buckets, menstrual pads and other hygiene items that vary across countries. In 2022, a total of 66,968 of these kits was shipped directly from UNICEF's global and regional hubs, and more (likely to be triple that amount) through local procurement in programme countries. UNICEF also delivers large amounts of treatment chemicals for water systems, large numbers of water purification tablets for household use (over 2 billion in 2022), water tanks and other water system components, and solar-pumping systems. UNICEF also continues to deliver disability-accessible toilet add-ons (see '*Cross-cutting: WASH and disability*').

## Response to public health emergencies

The most serious public health emergency in 2022 was cholera, with cases in an unprecedented 30 countries, including the Syrian Arab Republic, Lebanon and other countries that have not experienced outbreaks for years. Haiti also reported cases in 2022, after being cholera-free for more than three years. There were severe and protracted outbreaks in 16 countries, and a significant increase in case fatality rates signalling weakened prevention and response systems in countries, many of which are impacted by crisis, conflict and climate-related weather events.<sup>56</sup> The key underlying factor, however, remains poor WASH services. A recent UNICEF analysis of 11 years of cholera and WASH data shows that 97 per cent of cholera cases are in 34 countries with the lowest coverage levels (Basic+ water services less than 70 per cent and Basic+ sanitation services less than 55 per cent).

UNICEF is a member of the Global Task Force on Cholera Control (GTFCC) and works closely with WHO, the Global WASH Cluster and a wide range of partners in programme countries. Through a strategic multi-year partnership with United States Centers for Disease Control (CDC), UNICEF is helping to strengthen responses to cholera (and other public health emergencies) at the global level. This includes support for regional coordination and preparedness activities, development of national costed cholera action plans and establishment of dedicated community outbreak response teams in endemic countries. The partnership stresses capacity-building and technical support to national partners, including targeted regional and national training courses in Lebanon, Nigeria, Senegal and Turkey in 2022.

UNICEF is also a leading agency for cholera response programmes, which were stepped up in 2022 in response to the surge in cases. Responses integrate health and WASH activities and target interventions in cholera outbreak hot spots. UNICEF's long experience in endemic cholera countries allowed for provision of strategic support to government partners in countries that have not had outbreaks in years. Major responses were carried out in more than 20 countries in four regions. In the Syrian Arab Republic, which reported over 70,000 cases and 98 deaths in 2022, UNICEF's comprehensive response included the delivery of acute watery diarrhoea (AWD) kits to health-care facilities, the distribution to water treatment tablets, new water supply facilities reaching 70,000 people in hot spots and support to regional incident management teams. In Somalia, which reported a threefold increase in cases over previous years, a country-wide effort to accelerate ongoing efforts ultimately reached over 1.9 million people with improved water services. The UNICEF response to the severe outbreak in Malawi reached 1.4 million people in the most severely affected regions.

In spite of these efforts, and the efforts of other stakeholders, the cholera crisis is continuing. The scale of the problem is outstripping currently available resources and capacity to reach everyone, especially the most vulnerable children and their families in difficult to access communities, people in camps and in conflict-affected countries.

UNICEF conducted a Humanitarian Action Review for UNICEF WASH response to the COVID-19 pandemic in 2022, which found that programming was largely timely, appropriate and effective and yielded a set of recommendations now being employed in programme design. The review also highlighted the need to strengthen UNICEF capacities to better respond to

outbreaks in general, and the need for a robust IPC strategy in particular. Accordingly UNICEF embarked on a deep dive to assess experiences over the pandemic and develop a new institutional IPC strategy to define how UNICEF can most effectively support national governments, institutions and communities to prevent and respond to infectious threats. The draft strategy was released in 2022 and will be finalized in 2023. It includes new guidance on WASH responses in these settings as part of an integrated UNICEF approach encompassing the strengthening of health systems, community engagement, supply procurement and emergency responses.

Just 13 cases of Guinea Worm disease were recorded in 2022, the lowest number ever, and the disease has been certified eradicated by WHO in one more country (the Democratic Republic of the Congo).<sup>57</sup> The debilitating and painful tropical disease is caused mainly by contaminated drinking-water and UNICEF has been working with the CDC, the Carter Center and a wide range of partners in programme countries for years by focusing efforts to improve water supplies in Guinea Worm endemic areas. If trends continue (cases in animal hosts are also on the decline), the disease could be just the second after smallpox to be eradicated globally.

## **Humanitarian WASH coordination and capacity-building**

### ***UNICEF support for coordination and capacity-building***

As the impact of climate change becomes more severe, and in a world where conflict and fragility are already affecting millions of people, it is important to strengthen national WASH sectors to become more resilient and better able to respond in times of crisis. Working with the Stockholm International Water Institute (SIWI), UNICEF is developing the Global WASH Sector Resilience Index that will benchmark WASH sector resilience against a set of standardized indicators and use the information to prioritize investments for strengthening service resilience in the countries with the greatest need. The index will be launched in 2023.

UNICEF and UNHCR continued its joint programming under the Blueprint for Joint Action for Refugee Children in the areas of child protection, education and WASH in ten countries. Under the initiative, the two agencies collaborate on provision of direct support for WASH services in camps and host communities, and work with governments to explicitly include the rights of child refugees into national plans, budgets and service delivery systems. Examples of this include Ecuador, where WASH for migrant populations has been incorporated into the national emergency response plan, and Indonesia where the national WASH road map now includes provisions for emergency preparedness and response for all refugees.

Protracted crises present especially steep challenges and, in recognition of this, UNICEF completed a global evaluation of its WASH responses in these situations over the 2014–2019 period. The evaluation report and the management response plan were presented to the UNICEF Executive Board in 2021 and, by the end of 2022, all ten action points in the plan were completed including in the areas of improvements to the UNICEF WASH Core Commitments for Children, improved coordination mechanisms and strengthened links between development and

emergency programming (see *'Planning, monitoring and review' for more information on evaluations*).

UNICEF continues to act as an advocate for a greater focus by policymakers on the safeguarding of WASH services during armed conflict and for the need to strengthen the resilience of WASH systems in fragile contexts. This includes advocacy efforts related to water and peace initiatives (see below), through media channels, publications and at sectoral meetings, including at a side session on preventing the reversal of the SDGs in countries in crisis conducted with partners at the 2022 World Water Forum.<sup>58</sup> UNICEF is co-sponsoring a side session on safeguarding WASH in fragile, conflict-affected and vulnerable settings with the Global WASH Cluster, UNHCR, ICRC and the World Bank.

UNICEF continued to train staff and partners through the long-running WASH in Emergencies course, which was revised in 2021. Four in-person regional sessions were held in Nairobi (for the Eastern and Southern Africa region), New Delhi (South Asia), Dakar (West and Central Africa) and in Panama (Latin America and Caribbean) with a total of 113 people trained. The Office of the United Nations High Commissioner for Refugees (UNHCR) and the International Organization for Migration (IOM) collaborated with UNICEF in some sessions both as participants and facilitators. A related shorter training session was held virtually for 36 participants in the Europe and Central Asia region and at country level in various regions (including in Guyana and four Caribbean countries in the Latin America and Caribbean region).

In-country UNICEF WASH staff members with both development and emergency programming experience and training, who know the local context and are already working with key partners are the backbone of UNICEF response in situations of crisis. However, in large complex emergencies these local teams are supported by UNICEF in various ways including the UNICEF WASH Emergency Response Team, which was deployed to four countries in 2022 (Kyrgyzstan, Somalia, the Syrian Arab Republic and Ukraine) and the WASH in Emergencies and Fragile Contexts unit, which was also deployed to four countries (Pakistan, the Syrian Arab Republic, Uganda and Ukraine). These deployments are from two weeks to two months. The Global WASH Cluster also supports local partners in emergencies through its Field Support Team (see below).

### ***WASH cluster leadership and support***

UNICEF is the lead organization of the Global WASH Cluster (GWC), which strengthens system-wide preparedness and coordinates WASH humanitarian response capacity, by providing leadership and accountability, advocating for greater humanitarian WASH funding collaborating with other sectoral clusters to improve strategies and overall response effectiveness.

The GWC Field Support Team provided 890 person-days of operational support in nine countries in 2022 and an additional 534 person-days of remote support. The Ukraine WASH Cluster received extensive support for coordination and information management, and for the establishment of the new Accountability Working Group and the development of guidance on

integrating gender equality in humanitarian needs assessments.<sup>59</sup> In Somalia, comprehensive support was provided in the two regions of Puntland and Somaliland, as well as in Mogadishu. Other deployments supported national stakeholders in drought response in Ethiopia, flood response in South Sudan and cholera response in Haiti. The GWC also contributed to advocacy campaigns including on the WASH response to the crisis in the Horn of Africa and the multisector response to the global food and nutrition crisis.

The GWC works to foster active participation, meaningful representation and decisive leadership of local and national actors in humanitarian coordination processes. The GWC has contributed to the roll-out and launch of a new multisector guidance note for national coordination teams, to promote engagement with local and national actors.<sup>60</sup> This is central in the GWC's Strategic Plan 2022–2025 and its Implementation Plan and Monitoring Framework, which were launched in 2022.

The GWC provided WASH Operational Coordination and Leadership training for 108 participants in Senegal, Haiti, Kenya and Somalia, and a separate training course for 12 WASH Cluster Information Managers, in addition to ongoing online courses. The GWC launched an Agora Learning Channel in coordination with the UNICEF WASH Talent Management Initiative. The GWC training programme now consists of seven distinct courses offered at the incoming, general and expert levels, most available on the Agora platform, with an additional five under development. The GWC additionally provides an extensive set of guidance, tools and field examples on cluster coordination, information management and assessments through the Cluster Coordination Tool Kit.

## **Water as a catalyst for peace**

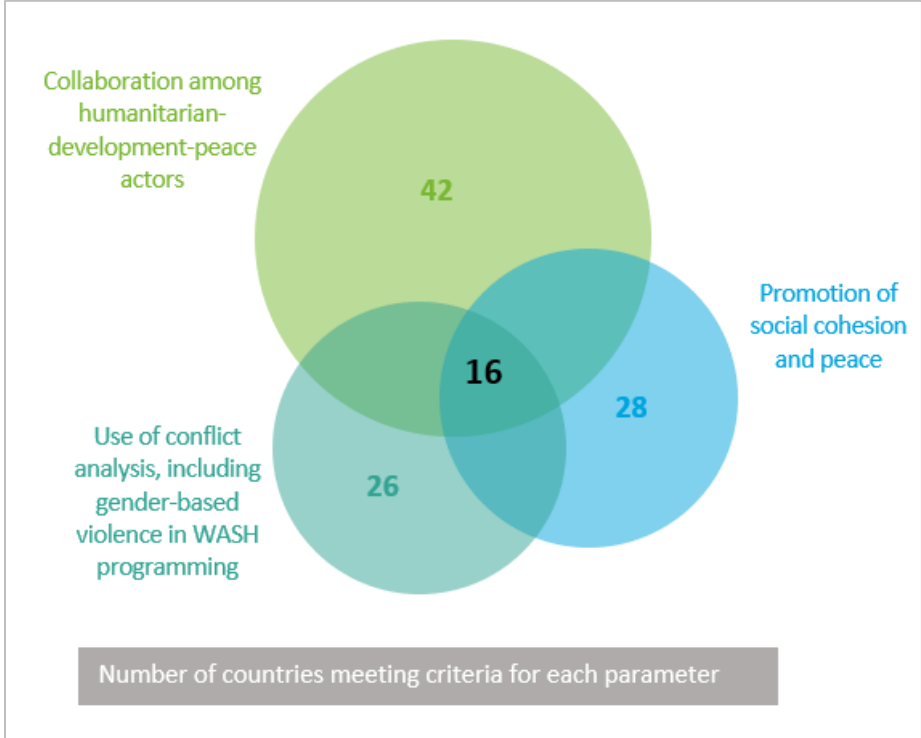
WASH services are frequently interrupted in conflict situations, resulting in the extreme vulnerability of people caught in conflict zones, children most of all. However, WASH services can also be leveraged to promote peace both within and between communities. In conflict-sensitive countries and regions, UNICEF is adjusting both its humanitarian and development WASH programming modalities to promote social cohesion, integrated into wider multisectoral UNICEF humanitarian–development–peace nexus approaches.

This is a relatively new area of programming for UNICEF, and a priority in 2022 was the development of guidance material. In Ethiopia, one of UNICEF's largest WASH programmes, guidelines were finalized and published. The Conflict Sensitivity, Peace Building and Social Cohesion Guideline for WASH Programming in Ethiopia provides a detailed road map for identifying opportunities to promote peace and strengthen social cohesion through UNICEF-supported WASH programmes in conflict-affected parts of the country, through both humanitarian and development programming activities. Based on the Ethiopian experience and experience in other countries, notably Lebanon and other countries in the MENA region, UNICEF also developed a comprehensive Conflict Sensitivity and Peacebuilding Guidance package for the global level, which will be published in 2023.



UNICEF follows a multi-step process to develop country-specific integrated humanitarian–development–peace nexus WASH programmes. It conducts a conflict analysis study to assess the programming landscape; builds a multi-stakeholder collaboration mechanism involving humanitarian and development WASH partners including peace and security actors; and develops WASH strategies or programmes to promote social cohesion and peace. This process had been carried out in 28 countries by the end of 2022. In 16 of those countries, comprehensive humanitarian–development–peace nexus approaches have been fully incorporated into the WASH programme, up from the baseline of 13 (Figure 23).

Figure 23. Countries integrating a humanitarian–development-peace nexus approach on WASH programming through the participation of affected populations (SP Indicator 4.2.5, 16 countries in 2022)



Source: UNICEF CSIs (2022).

In many of these countries, programmes are under preparation or ongoing. Examples include:

- Bangladesh, where community-managed water supply networks involving both host communities and refugee camp participants are providing safe water to over 18,000 people.
- Benin, with a project that uses CLTS activities to strengthen social cohesion among conflict-affected communities through the common goal of achieving ODF status.

- Ethiopia, where an integrated host community-refugee WASH service delivery approach implemented in Gambella region is now being replicated in other regions.
- The Central African Republic and Papua New Guinea, where findings from participative action research to analyse the sources and dynamics of conflicts linked to WASH have been incorporated into the new WASH country programme designs.

In Lebanon, UNICEF and its local partners have worked on several projects to build horizontal social cohesion by leveraging the need for improved WASH services and rebuilding trust between sectarian groups and neighbourhoods. In one example, the rehabilitation of a well in a split sectarian community led to increased community dialogue and a reduction in tension. This has led to other initiatives, including the Water as a Tool for Defusing Socio-Political Tension study conducted with the American University of Beirut that provides a framework for upscaling.

## Cross-cutting: WASH and gender

UNICEF ensures that its work on systems-strengthening within the WASH sector promotes gender-transformative approaches and that WASH policies, strategies and plans contribute to broader efforts to promote gender equality and the empowerment of women. In 2022, UNICEF systems-strengthening work resulted in a wide range of new national policies, strategies, legislation and other instruments in dozens of countries across all regions, all of which include new or strengthened gender-responsive elements (see ‘*Systems-strengthening*’).



School benefiting from a UNICEF-supported urban sanitation programme in Uganda

An example of how gender is incorporated into the WASH enabling environment through UNICEF support is the new Southern African Development Community Hygiene Strategy, which UNICEF helped develop in collaboration with SADC and WaterAid. Examples of gender-focused elements in the strategy include:

- An emphasis on the need to include gender-related issues in formulation of the national enabling environment for hygiene programming.
- The promotion of gender-appropriate toilets in institutions.
- An emphasis on the importance of MHH within the hygiene framework.
- The recognition of the cross-cutting nature of gender and its impact on other sectors.
- An analysis of hygiene in the context of specific gender issues in the SADC region.

- The inclusion of gender outcomes as core indicators for monitoring the performance of the strategy.

UNICEF direct support for WASH services and facilities is gender-responsive by design. Service delivery programmes for households and communities take into account the needs, preferences, safety and dignity of girls and women, and help to ensure that women are active participants in planning processes and in community WASH management groups. WASH in Schools programmes ensure that sanitation and hygiene facilities are private, safe and gender-segregated, as do WASH in HCF programmes. All service delivery programmes work to incorporate menstrual hygiene and health requirements into designs. Humanitarian responses are also gender-responsive and follow the WASH Cluster guidelines on [WASH Minimum commitments for the safety and dignity of affected people](#) and on [integrating gender-based violence interventions in humanitarian action](#). This gender-responsive direct support serves tens of millions of people every year: in 2022 over 30 million were reached through development programming and over 39 million through humanitarian action (see details on beneficiaries throughout this report).

Many UNICEF country programmes also have stand-alone MHH programmes that complement and reinforce direct support for services and systems-strengthening work. As report above, the scale of these programmes are large: in 2022, 17.5 million women and girls were directly reached through these programmes and in several countries advances were made on incorporating MHH into national governance and policy frameworks (see *'Menstrual health and hygiene'*). MHH programming can lead to broader outcomes for the empowerment of adolescent girls, such as the ['Girls' Rooms' initiative](#) in Mongolia and a MHH, sexual and reproductive health, and human rights [programme](#) in Bangladesh.

The new UNICEF [Gender Action Plan](#), which runs concurrently with the 2022–2025 UNICEF Strategic Plan, re-affirms the centrality of the WASH programme for gender-positive outcomes. Two of its nine priority areas for children and adolescent girls are WASH programming areas: Equitable water, sanitation and hygiene systems, and Accessible, dignified menstrual health and hygiene.

The [Gender-Responsive Programming on WASH course](#), launched in 2021, has become the second-most popular UNICEF WASH professional development course offered on the Agora platform (after the Climate-resilient WASH course). Over the two-year period, 568 people have completed the course, 123 UNICEF staff and 445 people from other organizations. The course includes modules on gender equality, gender analysis, gender in implementation and gender in monitoring and evaluation. Many other UNICEF WASH courses include material on WASH and gender, including the WASH Foundational course, which is completed by all UNICEF WASH staff and staff from many other agencies, and the WASH in Emergencies course, with a new module on gender-responsive emergency response (see *'Capacity development and knowledge management'* for more information on WASH courses).

UNICEF also develops guidance on WASH and gender. Examples in 2022 include a briefing note on [mitigating risks of gender-based violence in emergencies through WASH programming](#)

and new material on WASH and gender in the updated WASH FIT manual for WASH in health-care facilities (see '*WASH in health-care facilities*').

The JMP continued its work with Emory University to enhance the monitoring of gender-specific outcomes in WASH. The work, which started in late 2020, included formulation of a [Conceptual Framework](#) to inform national and global monitoring of gender equality in WASH, definition of four inter-related monitoring domains (ability to meet wash needs; ability to exercise agency; access to resources; and the multi-level enabling environment) and a comprehensive literature [review](#) of measures and indicators in the WASH sector. Based on this work, the JMP Gender WASH Indicator Core Group initiated development of a new set of indicators that will be used to improve gender monitoring in monitoring systems and process at all levels.

Increasing gender diversity in the WASH sector workforce expands the talent pool, provides new employment opportunities for women, improves the performance and innovative capacity of private and public sector institutions and, ultimately, will lead to better WASH outcomes. With this goal, UNICEF continues to work with government and civil society partners to increase the number of women in the sector. In one example from Viet Nam, UNICEF worked with government partners to create a new network for women professionals to promote women's participation and leadership in the sector while providing a platform for experience sharing, skills development and career development opportunities. Similar initiatives are under development in Papua New Guinea and Timor-Leste.

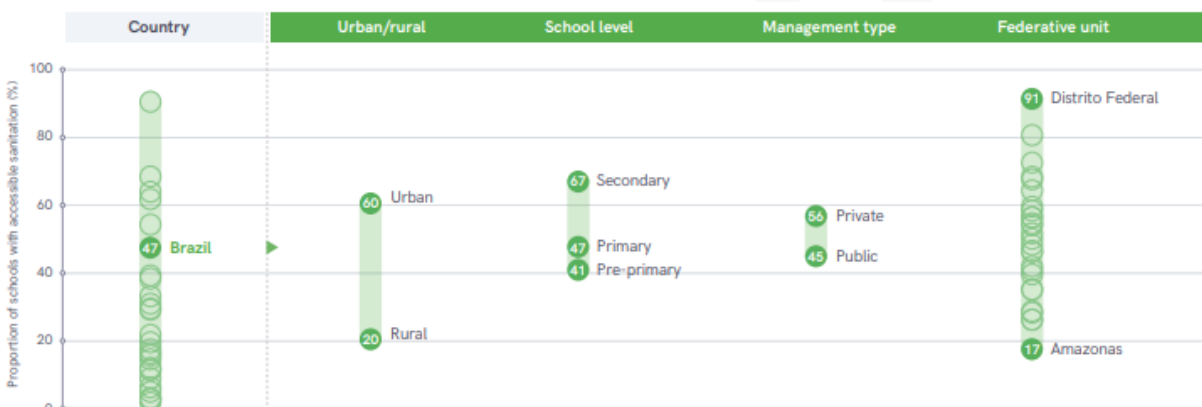
The work in Viet Nam is one outcome from the regional and global Women in WASH initiative that promotes gender diversity within UNICEF and in the sector. The initiative is a component of the broader Talent Management initiative, which works to increase diversity and inclusion within the UNICEF WASH programme through staff surveys and meetings, a mentorship programme, career development meetings, enhanced mobility processes and other measures. Other Women in WASH related activities in 2022 include:

- A webinar on practical actions to support women in the WASH workforce in Asia with the University of Technology Sydney and the World Bank with over 100 attendees.
- A series of leadership initiatives in the East Asia and Pacific region including gendered clinics for male managers, an eight-week leadership training course female managers and one-on-one leadership coaching clinics for female professionals.
- The launch of new Women in WASH initiatives in the Middle East and North Africa region and within the Global WASH Cluster (female representation among emergency WASH specialists is especially low).

## Cross-cutting: WASH and disability

Persons with disabilities can be excluded from WASH services due to a lack of physical infrastructure as well as attitudinal barriers in society. New data from the JMP provide an example of how prevalent this is, in the area of WASH in schools. The analysis, using a still-limited global dataset, shows that disability-accessible WASH coverage is very low generally, and it varies widely between and within countries. In Brazil, for example, coverage levels vary between urban and rural schools, level and type of school, and by subnational region (*Figure 24*).

Figure 24. Subnational inequalities in disability-accessible WASH in schools, Brazil sanitation example



**Source:** Progress on drinking-water, sanitation and hygiene in schools: 2000–2021 data update, JMP (2022).

Data on disability-inclusive WASH are limited not only for WASH in schools, but also for WASH in health-care facilities and WASH in communities. UNICEF continues to work to improve the quality and availability of data in programme countries, guided by the 2021 *'Make it count!'* publication on data collection, monitoring and reporting for inclusive WASH programmes (developed with the support of the Government of Norway). Examples of work in 2022 include an in-depth analysis of existing data on WASH and disability in support of the DHS study process in Cambodia, support for WASH and disability questions in the school census questionnaire in Sri Lanka and improved data-disaggregation in monitoring systems in several countries. In Indonesia, UNICEF supported the WASH4Work landscape analysis of WASH conditions in the workplace (showing that just 15 per cent of workplace toilets in the country are disability-friendly) and additionally conducted a study on people with disabilities working as professionals in the national WASH sector.

Through its direct support programming, UNICEF helped an estimated 1.4 million persons with disability gain access to inclusive safe water services, 894,000 to basic sanitation facilities and 1.1 million to basic hygiene facilities in communities and households in 2022. These figures do not include UNICEF work in all programme countries, only from countries where data are available on actual number of disabled persons reached or where the number can be estimated



using rigorous methodologies.<sup>61</sup> However, in 2022, over half of UNICEF country offices that reported beneficiaries from direct support were able to provide disability-disaggregated data.

Direct support for inclusive facilities is also provided in humanitarian contexts. In Bangladesh, for example, over 1,500 people with disability gained access to inclusive toilet facilities in the Rohingya camps and in host communities, in part through the reconstruction and upgrading of facilities affected by fires.

UNICEF direct support for new disability-inclusive facilities hand-in-hand with

systems-strengthening work. In Kenya, for example, new standards and guidelines for disability-friendly WASH facilities were developed with UNICEF technical support drawing on years of experience constructing disability-inclusive WASH facilities. In schools, this direct support has reached 168 schools in 10 countries and includes water supply systems, gender- and disability-responsive sanitation facilities and inclusive hand-washing stations. In Bhutan, UNICEF is constructing inclusive sanitation and hygiene facilities in schools and monastic institutions, and using that experience in its technical support to government partners on the development of new national designs for inclusive facilities.

The UNICEF [disability-accessible emergency toilet add-on](#), developed through a multi-country collaborative design process with users, attaches to standard latrines making them accessible for children and adults with disabilities. The devices are used most frequently in emergency settings, including in camp households, health-care facilities, temporary learning centres and child-friendly spaces. Since its launch in 2019, a total of 1,529 have been procured and delivered to 16 countries. UNICEF also supports other solutions for accessible toilet facilities depending on the context. In Mali, for example, under the ASWA programme funded by the Government of the Netherlands and in partnership with LIXIL, UNICEF supports the construction of accessible toilets by trained local masons using the SATO stool insert.

UNICEF worked with the World Bank and WaterAid to develop a new [training course on disability-inclusive WASH](#), launched in 2022 on the UNICEF Agora platform. The course, which is open to everyone, introduces disability-inclusive WASH and covers key intervention at all stages of the programme cycle in development and humanitarian programmes. UNICEF also released a new [checklist](#) on essential actions on disability-inclusive in humanitarian action for WASH, a component of the UNICEF Disability-Inclusive Humanitarian Action Toolkit.<sup>62</sup> UNICEF



work in programme countries is also guided by the [Disability Inclusive WASH Practices](#) guidance note.

In partnership with SIDA, WaterAid, the World Bank, the Special Olympics and the International Disability Alliance, UNICEF supported sustained advocacy for accelerating progress on disability-inclusive WASH programming at the 2022 Stockholm World Water Week and the University of North Carolina 2021 Water and Health Conference.

UNICEF also provides training opportunities and develops context-specific guidance material in programme countries, including capacity-building on mainstreaming disability into WASH humanitarian response in the Philippines, training for partners on disability-friendly latrines in Bangladesh, and development of a disability-inclusion guidance module for the national CLTS guide in the Niger. Globally, the capacity of 191 WASH staff on disability-inclusive WASH programming was enhanced through six regional webinars.

In Lesotho, UNICEF released the new national disability-inclusive Three Star Approach [guidelines](#) in Lesotho for WASH in schools in partnership with government ministries and the Lesotho National Organization of People with Disabilities. The roll-out of the guidelines included training of stakeholders in all ten districts of the country, and development of an information package for learners with disabilities and a set of disability-friendly hygiene promotion materials.

### **Inclusive WASH in schools in the Bolivarian Republic of Venezuela**

In the Bolivarian Republic of Venezuela there are an estimated 140,000 schoolchildren with at least one type of disability and, according to a recent UNICEF-supported survey of 420 schools, just 9 per cent have inclusive WASH facilities.

UNICEF partnered with two national associations of people with disabilities (FUNVAPE and CONSORVEN) in an inclusive WASH in schools initiative that included the engagement of over 400 schoolchildren with disabilities in safe engagement forums as 'inclusion ambassadors' to document barriers, suggest modified WASH and MHH facilities, supplies and education materials, and to contribute to capacity-building activities with WASH stakeholders.

The initiative has led to a redesigned list of standard WASH supplies and equipment in the country, a new system for hygiene promotion in schools that fully engages children with disabilities, a new training of trainers package on inclusive WASH in schools and a programme of direct support for 600 children with disabilities and their caretakers in focus communities.

# Results: Climate, environment, energy and DRR

UNICEF is proactively responding to the global climate crisis, biodiversity loss, environmental degradation, pollution and increasing disaster events in the areas of climate, environment, energy and disaster risk reduction (DRR), or CEED. Under the Strategic Plan 2022–2025, UNICEF is focusing its resources on three areas in support of children and young people:



- Improve the resilience of children, young people and their communities by adapting essential social services to a changing climate, disasters and a degrading environment.
- Empower every child and young person with the education, skills and opportunities to be a champion for the environment.
- Drive sustainability within UNICEF and its global network of partners, government and suppliers, including through climate financing for children and young people.

The UNICEF Strategic Plan elevates sustainability and climate action to a cross-cutting priority, with results within each goal area including, but not limited to, support for more resilient national health-care and education systems, ensuring that the most vulnerable children and young people are not left behind and working with partners to make social protection systems more shock-responsive. Highlights of this work are reported below, and in more detail in the other Strategic Plan goal area reports.

The Strategic Plan additionally builds on the leadership of the UNICEF WASH programme in the area of sustainability and climate action over the previous Strategic Plan period. See the WASH sections of the report, above, for details of progress in 2022.

The Strategic Plan additionally has a dedicated cross-sectoral set of results in Goal Area 4. This cross-cutting result area has a set of three output monitoring indicators for CEED (*Table 7*). Results against these indicators, and other results, are reported below. UNICEF is also working to ensure that its operations and programmes are as green as possible and is encouraging partners and suppliers to do the same.

Table 7. CEED Strategic Plan output indicators

<b>Goal Area 4 indicators</b>
<b>Result Area 3: Increased and enhanced child-sensitive programmes to address climate change, disaster risks and environmental degradation that meet the rights of all children and adolescents, particularly the most disadvantaged and those in humanitarian and fragile contexts</b>
4.3.1. Number of countries implementing child-sensitive programmes that enhance the climate and disaster resilience of children, reduce environmental degradation and promote low carbon development and environmental sustainability, with UNICEF support
4.3.2. Number of countries engaging children, adolescents and young people in action and advocacy to address climate change, unsustainable energy use and/or environmental degradation, with UNICEF support
4.3.3. Number of countries in which UNICEF supported the updating of government frameworks for preparedness and/or early/anticipatory action to be child-sensitive at the national and local levels
<b>Sustainability, internal greening and cross-cutting indicators</b>
H1.1. Number of countries that took advocacy action that triggered policy change related to the UNICEF Global Advocacy Priorities: Increase access to clean water, and address environmental degradation and climate change
H8.1 (Risk-informed humanitarian and development/cross-sectoral nexus programming). Percentage of countries in which UNICEF contributed to the articulation of humanitarian-development-peace nexus priorities through engagement in common country assessment and United Nations Sustainable Development Cooperation Framework
H8.1 (Risk-informed humanitarian and development/cross-sectoral nexus programming). Percentage of country offices that meet organizational benchmarks on: (a) Updated preparedness plan (b) Risk-informed programming
E.3.6. Percentage of country offices applying environmental, disability-inclusive and social standards in UNICEF programmes in line with UNICEF/United Nations standards
E.3.7. Percentage reduction in carbon footprint
Output 4.2.4 (WASH). Number of countries that have developed a climate rationale for the impact of climate change and water insecurity on WASH services based on a comprehensive risk analysis
Output 1.4.4 (Health). Number of countries: (a) Addressing environmental health risks in primary health care, (b) Strengthening climate-resilient and environmentally sustainable health-care facilities, with UNICEF support
Output 2.1.2 (Education). Percentage of countries with a resilient education system that can respond to humanitarian crises
Output 2.2.6 (Education). Percentage of countries institutionalizing holistic skills development to support learning, personal empowerment, environmental sustainability, active citizenship and/or employability and entrepreneurship
Output 5.2.4 (Social Protection). Number of countries with social-protection systems, including cash transfer capacities that are able to effectively and rapidly respond to humanitarian crises



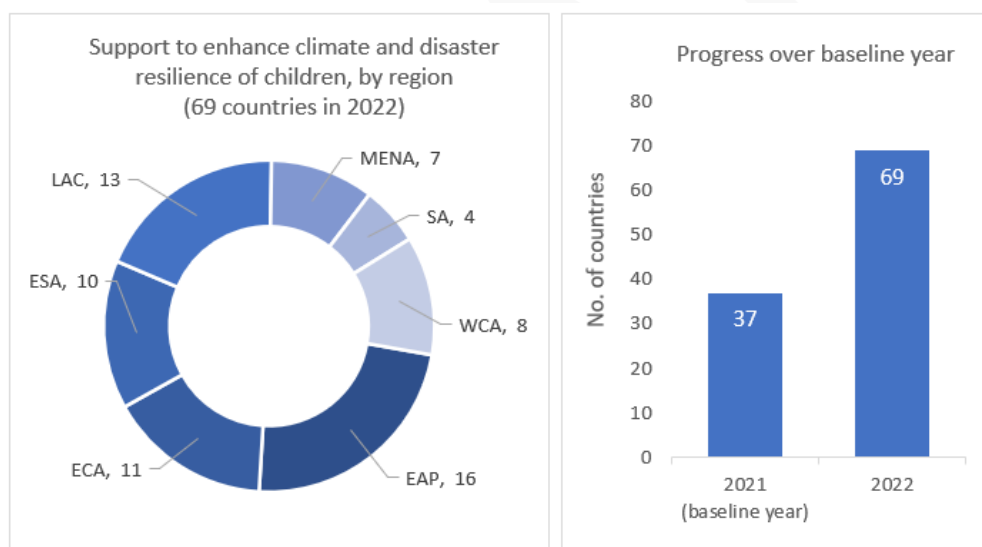
Under the Strategic Plan, UNICEF is working with partners to help implement child-sensitive, multifaceted programmes that enhance the climate and disaster resilience of children and young people, reduce environmental degradation and pollution impacts and promote low carbon development and environmental

Child-sensitive policies and programmes:

- Strengthen child-critical social services to be more climate- and disaster-resilient.
- Make inclusive of all children’s and young people’s rights, participation and roles as stakeholders and drivers of change.

sustainability. According to data from the new set of monitoring indicators being used to track UNICEF progress in these areas, a total of 69 countries is supporting such programmes across all regions, more than in the baseline year (2021) and exceeding the 2022 target of 40 countries (Figure 25). In each of these 69 countries, UNICEF supported programmes to study the impact of climate change on children and/or implement interventions on climate or DRR in at least one sector or across multiple sectors.

Figure 25: UNICEF country offices implementing child-sensitive programmes to enhance the climate and disaster resilience of children and promote environmental sustainability, by region in 2022 and progress over baseline year (2021) (SP Indicator 4.3.1)



Source: UNICEF CSIs (2022).

To meet Strategic Plan goals, UNICEF is also strengthening its internal capacity and that of its partners, including through an Agora course on CEED and WASH essentials on the UNICEF Strategic Plan and a public course on integrating climate change in UNICEF’s planning and programming.<sup>63</sup> UNICEF also provides guidance materials for staff and partners in a wide range of related programming areas, including climate-resilient WASH, environmental and social standards, healthy environments for healthy children, comprehensive school safety, shock responsive social protection, innovation, internal sustainability, gender, disability, migration and other topics (see selected publications list at the end of this section).



# Ensuring essential services for every child are resilient and sustainable

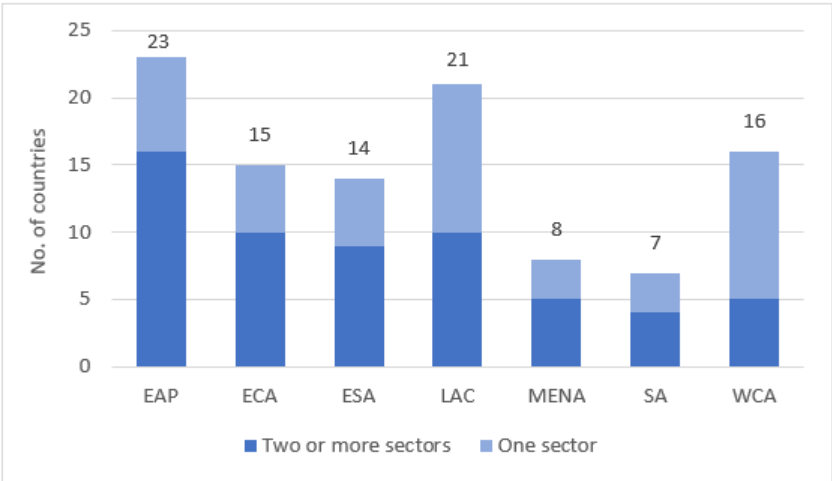
UNICEF is working to strengthen the national services and systems that children need to survive, grow and thrive in the face of climate threats and disasters. This is an organization-wide imperative that is essential to protect critical services for children and young people in the future and to ensure that decades of child development progress are not lost. While the scope of this work is significant, UNICEF is well-placed to leverage results through its in-country capacity and partnership networks within national social sectors in programme countries, and its expertise and experience in the areas of child-sensitive DRR and humanitarian response.



Solar-powered vaccine fridge in Somalia

In most programme countries, UNICEF is already doing this: in 104 countries, across all regions, UNICEF is actively implementing programmes on climate, environmental sustainability, sustainable energy or DRR in at least one sector, and in 59 countries it has programming in two or more sectors (Figure 26).

Figure 26. UNICEF support for climate, environment, energy or DRR programming, 2022



Source: UNICEF CSIs (2022).

Systems-strengthening for climate- and disaster-resilient social services for children and young people is a key part of UNICEF support in programme countries. Across sectors, a core component of country programmes is to work with government and civil society partners to adapt existing national policy and strategy frameworks to fully incorporate resiliency elements. UNICEF also supports related systems-strengthening support at national and subnational levels, including in the areas of capacity-building, finance, monitoring and institutional development.

## Protecting children, young people, communities and social services through DRR

In its DRR programming, UNICEF works to reduce the specific risks faced by children and young people before, during and after emergencies, while ensuring they are meaningfully involved in efforts to reduce disaster risk and build resilience. In doing so, UNICEF equips communities with the knowledge, skills and supplies they need to protect themselves before disaster strikes by working with government partners to strengthen national and subnational preparedness systems. In many countries UNICEF involvement is multifaceted, with high levels of activity in disaster-prone countries. For instance, in 2022:

- UNICEF the Plurinational State of Bolivia provided training sessions on disaster contingency plans, evacuation drills and biosecurity measures in 476 of the most vulnerable schools in 7 districts of the El Chaco region. This led to an improvement in the emergency preparedness and response capacities of 14,735 children and adolescents, 1,821 teachers and 220 district administrators.
- UNICEF Eastern Caribbean and other United Nations partners reviewed internal emergency preparedness actions and conducted an After-Action Review (AAR) of Hurricane Fiona to identify gaps and actions to address for the 2023 hurricane season.
- UNICEF India supported five states to establish real-time monitoring mechanisms to stimulate demand for child-centred DRR actions; and linked 2,600 families (including those with children and young people with disabilities) with government social protection schemes.
- UNICEF Kyrgyzstan and Red Crescent Society of Kyrgyzstan improved school safety through service delivery and supply procurement action; enabling 600 schools in disaster-prone areas to be better equipped with essential DRR supplies and equipment. Additionally, 247,852 students participated in emergency skills development through simulation exercises.
- UNICEF Pakistan support contributed to a new national school safety framework, provincial monsoon contingency plans for WASH, the Parliamentarians Caucus on Disaster Risk Management (DRM), and to a wide range of capacity-building and training initiatives at subnational levels.
- UNICEF Nepal prioritized child-centred DRR in its programming (*see box*).

### **Comprehensive child-centred DRR programming in Nepal**

Nepal is highly prone to flooding, landslides, earthquakes and other disasters, and children and young people are affected disproportionately. In 2022 alone, thousands of households were impacted by severe monsoon rains, a 6.6 magnitude earthquake, and cholera and dengue outbreaks. UNICEF has been working with government partners on child-centred DRR since 2013 at national and subnational levels, focusing on three areas of action:

- Strengthen knowledge, skills and capacities of children, young people, communities and systems.
- Increase child-centred DRR integration into district, regional and sectoral policies and plans.
- Promote the meaningful participation of children and young people in DRR and climate change adaptation decision-making processes.

Significant progress has been made in each of these areas in 12 highly vulnerable districts. This includes the formation of over 240 DRR and school safety child clubs, and the embedding of child-centred DRR into 23 municipal disaster management policies and plans. Nationally, DRR and climate change adaptation have been incorporated into the school curricula and teacher training, into the School Sector Development Plan and the Health Sector Strategic Plan.

UNICEF has also helped improve the national government DRR information systems and provided training on systems management for staff from 38 local governments. In 2022, through a joint programme with UNDP and UN Women, 100 Community Emergency Response Team volunteers and more than 1,500 community leaders and volunteers (the majority of whom were women) were trained on earthquake simulation and rapid vulnerability mapping. This work will continue into 2023 and beyond, with DRR, climate resilience and environmental sustainability designated one of four focus areas in the new UNICEF Nepal country programme.

## **Improving resilience across UNICEF programming areas**

Under the Strategic Plan 2022–2025, UNICEF works to improve resilience through its day-to-day programming across all its sectoral and programming areas. Examples of this work in the areas of WASH, education, health, nutrition, child protection and social protection are described below. See the other four Strategic Plan Goal Area results reports for additional analysis and examples of this cross-sectoral work.

## WASH

WASH systems are critical for children and are especially vulnerable to climate shocks. UNICEF has prioritized a shift towards full climate resilience throughout its WASH programme, and advocates with partners to do the same. In 2022, activities included updating of the UNICEF–Global Water Partnership Strategic Framework for WASH Climate-resilient Development,<sup>64</sup> release of new technical guidance on climate-resilient sanitation,<sup>65</sup> co-hosting the first-ever dedicated session on climate-resilient and low-emissions sanitation at a COP meeting (at COP27) and revising the widely used national sector Bottleneck Analysis Tool (WASH BAT) to fully incorporate climate risk analysis. UNICEF also expanded its work in water scarcity, including a multi-country remote-sensing initiative to identify climate-resilient groundwater resources, the launch of a regional groundwater resilience programme in South Asia and a country-by-country analysis of national policy frameworks to address the water scarcity crisis in the Middle East and North Africa region.

Through direct support alone, an additional 5.4 million people are now using climate-resilient water systems and 3.2 million climate-resilient sanitation facilities in 2022, and progress was made institutionalizing resilience into national WASH policies and plans in countries across all UNICEF regions (see '*Climate-resilient WASH*').

## Education

In education, UNICEF promotes the Comprehensive School Safety Framework<sup>66</sup> on safe learning facilities, school disaster management, risk reduction and resilient education. These actions provide a unified focus for child-centred and evidence-based efforts to promote DRR and climate resilience throughout the education sector and to assure universal access to good-quality education. Examples of this support in 2022 include integration of climate into school safety plans in El Salvador, Honduras and countries in the Caribbean, and work with partners to upgrade disaster resilience in schools including in Tajikistan where UNICEF is engaging young people, teachers and community members in an ongoing programme to improve school resilience.

UNICEF initiated a region-wide process to examine national education systems through a resiliency lens in South Asia and promote and support the kind of systemic changes that will be necessary to ensure continuing education services for children in the face of the climate emergency. The '[Heat is On!](#)' study, examines national systems in detail. It presents a series of recommendations and a self-assessment tool to increase the climate and disaster resilience in education systems. Additional studies aimed to inform policy and programming in [Bangladesh](#), [India](#), [the Maldives](#), [Pakistan](#) and [Sri Lanka](#).

## Health, nutrition and air pollution

UNICEF works to reduce the health impact of climate and environmental degradation on children by addressing related risks in primary health care (UNICEF programmes in 20

countries in 2022) and by strengthening climate-resilient and environmentally sustainable health care facilities (in 59 countries in 2022). UNICEF has also been a pioneer in the use of solar energy in health care, including for immunization cold chains (see below).

In nutrition, UNICEF protects the nutritional status of young children, young people and their mothers by integrating disaster risk into nutrition assessments, developing climate-smart nutrition actions that aim to protect diets and nutrition services from climate impacts, addressing additional health needs that may occur during a crisis and promoting young champions for food and climate justice. For instance, in some of Ethiopia's most inaccessible regions and drought-affected areas in the country, UNICEF implemented the life-saving 'Find and Treat' campaign in 2022. The campaign linked a rapid nutrition assessment to a multisectoral rapid response to reduce severe acute malnutrition (SAM) in children.

To address air pollution in 2022, UNICEF promoted awareness-raising and training. For example, in Serbia, 976 young people collaborated to create the first Youth Declaration for Air Quality, and 3,342 students and 396 teachers in 45 schools were trained on the usage of low-cost air pollution sensor devices. In Mongolia, the Youth for Climate and Clean Air Network and Teen Parliament advocated for improvements in indoor air quality, leading to standardization of monitoring of air quality in kindergartens. UNICEF also promoted innovation in addressing air pollution, and engaged children in Kyrgyzstan, Belarus and North Macedonia to develop solutions such as a nanosatellite to measure air quality and a low-cost air purifier. Air pollution solutions such as improved eco-cookstoves were distributed in Burundi, Myanmar and Nepal.

## **Child protection and social protection**

In the area of child protection, including migration, no matter the circumstance, every child and young person has the right to be protected from violence, exploitation and abuse. This includes providing care to the most vulnerable children and young people on the move, including children and young people uprooted by climate change and disasters. In 2022, UNICEF launched the [\*Guiding Principles for Children on the Move in the Context of Climate Change\*](#) to advocate safeguarding the rights and well-being of children regardless of their location or migration status.

To advance this agenda, in 2022 UNICEF brought together nearly 200 young people from across Africa to develop the African Youth Declaration on Climate Mobility, which calls for an African Youth Climate Fund to support innovative, youth-led solutions to the climate crisis and human mobility nexus. In response, the Robert Bosch Foundation announced seed funding for a youth-led climate action fund. In another example, in 2022, UNICEF supported the Ecuadorian Government to include the issue of migration as a scenario for WASH response in its National Education Risk Reduction and Emergency Response Plan.



### Spotlight on shock-responsive social protection

UNICEF works with government partners to ensure that national social protection services have the flexibility to adjust to disasters and climate shocks and ensure that the most vulnerable children and households can continue to access basic goods and services.

In Mongolia, in 2019, UNICEF and the government worked together to pilot shock-responsive cash transfers in poor communities to mitigate climate risks. When the COVID-19 pandemic hit in 2020, UNICEF conducted a rapid social impact assessment showing the severe challenges for vulnerable households to purchase food. The experience from the 2019 pilot and the 2020 impact assessment findings provided the evidence needed for government to top up the national cash transfer programme fivefold. In 2022, the programme has been made permanent and now reaches 96 per cent of eligible households in the country.

In Indonesia, UNICEF helped to expand the Adaptive Social Protection initiative, through evidence-based advocacy, a United Nations joint social protection pilot initiative and a separate but related child cash grant initiative. The findings prompted new government regulations linking Adaptive Social Protection with climate change and disaster management, and UNICEF provided additional support in the form of capacity-building at the subnational level.



In Kenya, the Energy Cash Plus initiative tops up the national safety net cash transfer system to enable impoverished households vulnerable to climate shocks to purchase solar lanterns or household solar systems. To date, over 4,100 households have been reached through the programme with positive outcomes in the areas of education, disaster resilience and improved local markets for solar systems.

## Strengthening social services with sustainable energy

UNICEF increasingly supports and promotes the use of solar energy (and other clean energy sources) in its programming for children in recognition of the links between equitable access to energy and child rights, and because clean, sustainable sources of energy improve the quality, accessibility and reliability of essential services for children. For example, from 2019 to 2022, UNICEF has constructed 6,112 solar-powered water systems (1,855 in 2022), which often replace polluting diesel-powered systems, providing safe and reliable water service to communities, health-care facilities and schools.<sup>67</sup>

UNICEF support often focuses on fragile countries such as Afghanistan and the Democratic Republic of the Congo, and in isolated communities throughout sub-Saharan Africa. This is where solar energy is often the only viable pumping option as groundwater levels drop due to climate change. UNICEF also expanded its regional-level solar hubs technical assistance programmes in 2022 and provided a range of training opportunities and technical support for solar water-pumping in programme countries.

The use of solar energy in other sectors is also increasing. In health care, where reliable energy is critical for vital life-saving medical equipment, UNICEF has supported solarization initiatives in over 80 countries including off-grid energy systems for vaccine cold chain networks and electrification, heating and cooling at health-care facilities and medical warehouses in more than 80 countries (in 2022 alone, UNICEF procured 16,887 solar refrigerators). In education, solar power enhances education opportunities for children and young people, especially those vulnerable and experiencing marginalization. In Bangladesh and Jordan, for example, UNICEF has installed solar PV systems in more than 200 safe learning centres in refugee camps and host communities. In the Sudan, UNICEF has provided solar lighting in both schools and homes, providing 62,100 children and adolescents with improved education opportunities. A 2022 UNICEF [report](#) details these activities and other energy-related initiatives for children.

## Strengthening budgets to improve sustainable programming

UNICEF works with civil society and government partners in programme countries to assess national budgets through a climate change lens, and to provide support for climate-inclusive budgeting processes. Examples in 2022 include the Climate Public Expenditure Review carried out with United Nations partners in Jordan, a similar review in Angola as part of an ongoing CLAC process and a WASH and Climate Change budget review in Eswatini. In Kenya, UNICEF helped develop improved national budget monitoring systems that facilitate public reporting by climate and related thematic areas. At the global level, UNICEF released a [report](#) on climate change provisioning within social sector budgets and partnered with UNDP to [study](#) and recommend improved tools and systems to facilitate national climate and social inclusion goals through budget processes.

## Evaluations related to CEED

In 2022, UNICEF completed five evaluations focusing on CEED-related programming, covering multiple countries across three regions (*Table 8*). Many other evaluations contain some CEED elements, including most of the WASH evaluations listed in the WASH section of the report.

Two of the CEED evaluations had a regional focus with data collected in multiple countries. The most common themes of the 2022 evaluations were disaster risk resilience and response efforts including climate change adaptation. This includes four evaluations addressing climate change and another four evaluations focusing on disaster risks. In Kenya, UNICEF completed an impact evaluation of its Energy for the Poor programme. This pilot project aims to enhance access to

energy for the most vulnerable segment of the population to improve their well-being and develop markets for solar energy while increasing the penetration of solar products to previously underserved communities. Assessing the relevance, effectiveness, impact, efficiency and sustainability of the project, the evaluation presents specific recommendations for the project's second phase of implementation, during the scale-up, or for other programmes with similar objectives or implementation modalities.

Aiming to better integrate climate and sustainability into the child rights agenda, UNICEF will complete a global evaluation of its work on DRR and climate in 2024.

The reports of these and other evaluations are available to the public on the UNICEF [Evaluation reports web page](#).

Table 8. CEED-focused evaluations, 2022

Region	Office	Theme	Title
EAP	Cambodia	Climate change and WASH	Formative evaluation of the inclusion and mainstreaming of climate resilience in the UNICEF Cambodia WASH programme
ESA	Kenya	Climate change and environmental degradation	Impact evaluation of the Energy for the Poor programme in Kenya
LAC	Haiti	Disaster risks	Real-Time Evaluation (RTE) of the UNICEF's response to the Haiti 2021 earthquake
	Regional, multi-country	Climate change and disaster risks	Evaluation of Joint Programme Enhancing Resilience and Acceleration of the SDGs in the Eastern Caribbean
	Regional, multi-country	Climate change and disaster risks	Multi-country evaluation of UNICEF's response to hurricanes Eta and Iota in Central America

### 2022 UNICEF publications

UNICEF produced multiple global and regional advocacy and knowledge products on climate, environment, energy and DRR, with a sample of key publications here:

#### **Strategy and programme design**

- [A Liveable Planet for Every Child – Climate, environment, energy and disaster risk reduction strategy](#)
- [Climate, environment, energy and disaster risk reduction in UNICEF's 2022–2025 Strategic Plan](#)
- [UNICEF DRR in Action: Every country protected; every child resilient](#)

- [A brighter life for every child with sustainable energy](#)
- [Guiding Principles for Children on the Move in the Context of Climate Change](#)
- [Budgets for climate, sustainability and social inclusion\\*](#)
- [Linking Disaster Risk Reduction \(DRR\) and Mental Health and Psychosocial Support\\*](#)
- [Responsible Data for Children \(RD4C\) Case Study: INFORM\\*](#)
- [Towards Climate Resilient Education Systems | South Asia](#)
- [Working with Women and Girls to Centre Gender Equality in Climate Resilience | Eastern and Southern Africa](#)
- [Legal Empowerment to Advance Climate and Environmental Justice | East Asia and Pacific](#)

### **Evidence and advocacy**

- [Child-sensitive climate policies for every child](#)
- [The coldest year of the rest of their lives](#)
- [Actions for a Liveable Planet for Every Child – Advocacy Brief](#)
- [A brighter life for every child with sustainable energy](#)
- [Bring In the Girls! | Girls and young women’s views on climate change\\*](#)
- [Adolescent Girls’ Voices on Climate Action](#)
- [Monitoring the Social Costs of Climate Change for Low- and Middle-income Countries](#)
- [The Heat is On! | South Asia](#)
- [Children’s Climate Risk Index: Egypt Report | Middle East and North Africa](#)
- [Early Childhood Development and Climate Change Advocacy Brief | East Asia and Pacific](#)

### **For young people and their supporters**

- [A young person’s guide to sustainable energy](#)
- [Green Words: 15 ideas for taking care of the world](#)
- [A COP Fit For Children: How to support children’s participation\\*](#)
- [The Young Climate Activists Toolkit | Middle East and North Africa](#)
- [De las palabras a la acción: El rol de las personas jóvenes en la acción climática | Latin America and the Caribbean](#) (*From words to action: The role of young people in climate action*)

\* Co-published with partners

# Child-focused studies, advocacy and innovation on climate and disaster resilience

Attaining the goal of a liveable planet for every child starts with building evidence and advocating and innovating for and with children and young people. UNICEF sponsors a wide range of child-focused studies and data analysis exercises to backstop advocacy campaigns, advance policy engagement and offer technical advice on systems design. For example, a 2022 [child-sensitivity study](#) of Nationally Determined



Youth climate leader and hydroponic entrepreneur in Jordan

Contributions (NDCs) submitted between September 2019 and October 2022, researched countries' commitments to meeting their climate targets under the Paris Agreement.<sup>68</sup> The study documents countries' progress on child-sensitive commitments in their NDCs, with a call for greater funding that is often lacking to turn commitments into action.

Evidence generation activities are often the first, critical step to kick-start concrete action for children and young people across sectors. In 2022, UNICEF sponsored such studies in 54 countries across all regions; examples include child risk impact assessments in Cameroon and the Central African Republic; a climate finance study with UNDP in Indonesia; a renewable energy market assessment for UNICEF's key sectors in Sierra Leone; a study on the economic costs of climate inaction in the Maldives; an analysis on the potential of climate-smart schools in Viet Nam;<sup>69</sup> a study on the impacts of climate change on nutrition and food security with the Food and Agriculture Organization of the United Nations (FAO) in Mongolia; and a climate risk-informed analysis of the WASH sector in the State of Palestine.

To advance programming and policy, UNICEF country offices have developed Climate Landscape Analysis for Children (CLAC) reports. CLACs are national comprehensive assessments of climate change- and disaster-related issues and children and young people; and how they relate to the local policy and systems environment and UNICEF programming. To date, CLACs have been completed by UNICEF in 34 countries, including five in 2022:

- The Brazil CLAC, the first of its kind, showed how 60 per cent of the country's children are exposed to multiple climate and environment hazards.
- The Djibouti CLAC was prepared during an acute humanitarian crisis (drought), which made it timely and relevant. Based on the CLAC, UNICEF and the Ministry of Environment and Sustainable Development also agreed to appoint a youth



committee in the country; three reps of which were invited to join the government delegation at COP27.

- The Guinea CLAC illustrated how children, half the country's population, are the most severely impacted.
- The Sierra Leone CLAC found that at least 80 per cent of children are at a high risk of both environmental hazards and the poverty that makes them vulnerable to these hazards. More than 90 per cent of young people polled during the recent U-Report Poll stated that they care deeply about the state of the environment and want their government to do more.
- The Sudan CLAC findings are currently informing policy and programme design, including the new Climate-resilient WASH Rationale for the Darfur region.

At the global level, the 2021 Children's Climate Risk Index (CCRI) – the first-ever comprehensive global analysis of climate risk from a child rights perspective – continues to backstop UNICEF advocacy campaigns. Its datasets were the basis of the 2022 report [The coldest year of the rest of their lives](#), which highlights the escalating impacts of debilitating and dangerous heatwaves on children. The CCRI shows that 559 million children are already affected and that that by 2050 many more will be exposed to more frequent, longer lasting and more severe heatwaves even under low emission warming scenarios (*Figure 27 – under a high emission scenario of 2.4 degrees of warming, all children in every country in the world will be affected*).

Figure 27. Areas exposed to heatwave frequency, 2050, low emission scenario (an estimated 1.7 degrees of warming)



**Source:** UNICEF, *The coldest year of the rest of their lives* (2022).

The CCRI is also the main reference for a UNICEF-led child risk data initiative that began in 2022, and is currently developing a subnational assessment model and interactive geospatial platform that can be used for informing decision-making and planning. This includes the areas of emergency preparedness and response, DRR and climate change adaptation.

Building on the CCRI, UNICEF, in partnership with USAID's Bureau for Humanitarian Assistance (BHA), is leading on a child risk data initiative to develop a subnational assessment model, as a common tool to support child-centred, multi-hazard analysis of children's climate and disaster risks. The children's risk data will be presented on an open source, interactive

geospatial platform that can be used to strengthen risk-informed programming and planning processes, and support cross-sector coordination and decision-making processes based on a common understanding of risk. This model is currently being piloted in Cambodia, Antigua and Barbuda, Dominica, Kenya and Somalia, and is developed in close collaboration with national stakeholders and other United Nations agencies.

As another example, in partnership with the Internal Displacement Monitoring Centre (IDMC), with funding from the Patrick J McGovern Foundation (PJMF), UNICEF is working to unlock new insights from IDMC's disaster displacement and risk modelling data, to identify hot spots where children are at greatest risk of displacement now and in the future – and to expand CCRI to include a climate displacement dimension.

The CCRI is also being used to underpin advocacy and fundraising efforts. This includes the new '[Today and Tomorrow](#)' initiative, which is a child-focused climate and disaster risk protection initiative for eight cyclone-prone countries. The initiative combines immediate financing for climate resilience and risk prevention programmes for children and young people, with an innovative use of risk transfer finance provided by the insurance market for cyclone disasters in the future.

## Advocacy for and with children and young people at key global climate and DRR events

### COP27 2022 meeting

The UNFCCC COP meetings are important milestones in the implementation of [The Paris Agreement](#) and critical moments for engaging governments, policymakers and key climate stakeholders to ensure that children, their rights and the essential social services upon which they depend are a key focus for action.

At COP27, UNICEF released data and evidence to further the case for action for children and young people, including an updated [Nationally Determined Contributions \(NDC\) analysis](#), the [UNICEF Global Heatwaves analysis](#) and the results of a global climate poll of over 240,000 young people from 29 countries outlining how young people are experiencing and adapting to the impacts of climate change. Young people representing UNICEF and staff also participated in events aimed at (1) securing policy progress to ensure children and young people are protected, prepared and prioritized through and in climate action<sup>70</sup> and (2) positioning UNICEF as a strategic partner for implementation of solutions that improve the resilience of children and young people in key social services.

Overall action on climate change is far short of what is needed. However, there was some progress at the meeting, such as within the Action for Climate Empowerment (ACE) negotiations. This included mandating guidelines and good practices on children's education and empowerment in climate action, with special consideration given to gender equality and inclusion of persons with disabilities. Additionally, the COP27 cover decision featured key language proposed by UNICEF and partners, and formally recognized the role of children as

agents of change for the first time, with language that ‘encourages Parties to include children and young people in their processes for designing and implementing climate policy and action’ and include ‘young representatives’ in their national delegations for future climate negotiations.

## Global Platform for Disaster Risk Reduction 2022 meeting

The 2022 Global Platform for Disaster Risk Reduction (GPDRR) was an opportunity for leaders and experts from around the world to meet and discuss ways to strengthen disaster risk governance and build stronger systems for managing all types of risks, and for stocktaking on meeting the 2030 targets of the [Sendai Framework for DRR](#).

Prior to the event, UNICEF supported the [Major Group for Children and Youth](#) to reach more than 4,000 young people through surveys; virtual forums in Africa, the Americas, Europe and Asia; and an in-person Global Youth Platform for Resilience and Climate Action 2022 preparatory meeting. The events provided input into the Global Children and Youth Statement on Disaster Risk Reduction presented at GP2022.

At GPDRR, UNICEF played a proactive role in supporting young people’s participation and urgently calling for stakeholders to develop and act on child-sensitive policies and programmes. Young people and UNICEF staff presented on climate-centred DRR, child and youth engagement, shock responsive social protection, private sector partnerships, DRR decision-making, anticipatory action, comprehensive school safety, resilience and other DRR efforts. At the event, UNICEF launched the [UNICEF DRR in Action: Every country protected; every child resilient](#) report and shared the new [Capacity for Disaster Reduction Initiative](#) tool it contributed to as partner in the Capacity for Disaster Reduction Initiative (CADRI).

## Advocacy and systems-strengthening for reducing disaster risk and increasing resilience

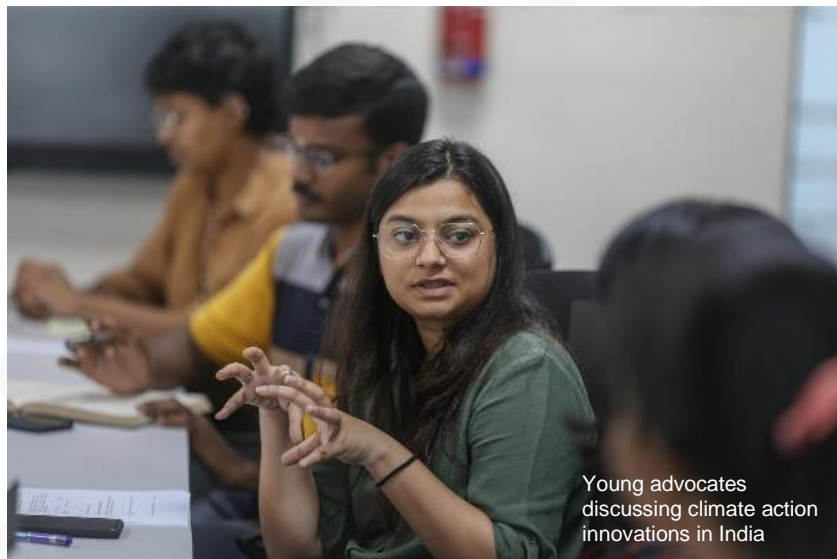
UNICEF participated in a midterm review of the Sendai Framework 2015–2030 on how its actions are advancing global targets. The input highlighted that UNICEF is strengthening system capacity to deliver coordinated, high-quality support to countries on DRR, as highlighted by its work. In 2022, UNICEF country offices provided support to:

- 38 countries to develop 86 disaster and climate risk informed development strategies, policies and plans (see examples below).
- 23 countries to strengthen early warning systems, in line with the United Nations Secretary-General’s call to action to ensure every person on the planet is protected by early warning systems within five years.
- 39 countries to update national preparedness frameworks and/or early/anticipatory action.
- 15 countries to develop and implement Recovery and Reconstruction frameworks that incorporate DRR and/or ‘Build Back Better’<sup>71</sup> elements (noting that UNICEF

achieved a 75 per cent increase to incorporate 'Build Back Better' elements into recovery/reconstruction frameworks from 2021 to 2022).

UNICEF plays a leadership role in global DRR collaboration frameworks. It is the lead agency for child and youth-centred DRR overall and in several child-critical sectors (education, nutrition, WASH and child protection) and co-leads or contributes in the social protection and health sectors. In education, UNICEF is the Co-Chair of the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector. UNICEF is also an active member of a thematic group on Health and Psychosocial Support Health and Psychosocial Support within the United Nations Inter-Agency Standing Committee (IASC); and is an active partner in the CADRI partnership covering DRR and climate change adaptation, along with preparedness as the lead agency for UNICEF sectors.

UNICEF works to influence major frameworks and agendas committed by inter-agency platforms – including at the principal level in the Senior Leadership Group on DRR where heads of agencies come together to endorse concrete actions to be delivered by all partners. UNICEF has co-led the delivery of several of the highest-level commitments, including scale up of DRR and climate change adaptation in humanitarian efforts.



Young advocates discussing climate action innovations in India

In many countries, UNICEF is involved in formulation of national policies and legislation related to DRR such as in Algeria and Viet Nam, where a range of long-term UNICEF technical support activities contributed to new child-friendly national laws on disaster management. In other countries, UNICEF supports subnational DRR systems-strengthening processes and a wide range of sector-specific policies, strategies and plans. In 2022, for example:

- In the Eastern Caribbean, UNICEF supported the Caribbean Disaster Emergency Management Agency in drafting shock-responsive social protection policy guidelines for participating Member States, which will be piloted in 2023.
- In India, UNICEF supported national- and state-level disaster management institutions in developing policies, which lead to key policy decisions, DRR road maps and 47 district disaster management plans with child-centred targets in 14 states.
- In Mongolia, UNICEF conducted a child-focused review of 56 existing policies and procedures related to DRR and winter preparedness plans to enhance resilience of children, young people and their families. The review provided policy recommendations

to national and subnational government to make relevant policies, procedures and plans child-focused. UNICEF supported local governments to develop child-centred DRR and winter preparedness plans based on the recommendations.

- In Turkmenistan, the National Child-Centred DRR Strategy was finalized with support from UNICEF and key national partners and submitted to the Cabinet of Ministers for endorsement.

## Innovating for a more liveable planet

In advancing the goals of climate, environment, energy and DRR, it is imperative to innovate. This means to act collectively and faster to design, use and scale truly transformational solutions for every child to thrive. In 2022, UNICEF supported the scale-up of a portfolio of 11 innovative climate solutions in 22 countries reaching over 1.5 million children and young people. Examples include:

- In Africa, in the lead up to COP27, UNICEF and partners promoted videos from young Africans aged 15–35 who participated in the African Climate Mobility Initiative (ACMI) Youth Innovation Challenge to share solutions on how people in Africa can adapt to climate change.
- In Guatemala, a drone system that will provide wireless connectivity is being pioneered for national climate and disaster crisis recovery efforts.
- In Angola, Ethiopia, Kenya, Madagascar and Somalia, the '[More Water More Life](#)' groundwater mapping initiative is using a combination of satellite remote sensing, weighted GIS overlay analysis, hydrogeological mapping and geophysical surveying to monitor groundwater for sustainable use.
- In Madagascar, an [early warning system](#) for drought and groundwater quality monitoring is helping to predict the likelihood of drought. This is done through a combination of piezometer measurements and satellite data, with the analysed data being published on a monthly bulletin for communities and farmers.
- In Malaysia, UNICEF and UNDP are implementing the Youth Environment Living Labs (YELL) with support from the [Green Shark Challenge](#). The challenge was launched in 2021 by UNICEF and UNDP to develop and scale up solutions that respond to global climate challenges. In 2022, YELL made significant progress in engaging young people and youth organizations in climate action, with increasing involvement of the Government of Malaysia, including a financial support commitment for the further scale-up of the programme.
- In North Macedonia, in partnership with UNDP, UNICEF provided funding and technical support to the opening of the first [Bio-Hacking lab](#), which will use advanced bio-hacking techniques to find new ways to tackle solid waste. The lab will pair young innovators with scientists and train schoolchildren with biology, and chemistry experiments.



## Partnerships for a liveable planet

Effective programming to reduce disaster and climate risk and building resilience for, and with, children cannot be carried out alone. UNICEF works with a very wide range of partners and within partnership frameworks at all programming levels. The following list is a small sample of these:

[ARISE Global Network](#)

[Capacity for Disaster Reduction Initiative \(CADRI\)](#)

[Children in a Changing Climate](#)

[Children's Environmental Rights Initiative \(CERI\)](#)

[Climate & Clean Air Coalition](#)

[Climate Watch](#)

[Connecting Business initiative \(CBI\)](#)

[Data for Children Collaborative](#)

[Fridays For Future](#)

[Global Alliance for DRR and Resilience in the Education Sector \(GADRRRES\)](#)

[Global Water Partnership \(GWP\)](#)

[Health and Energy Platform of Action \(HEPA\)](#)

[Inter-Agency Standing Committee \(IASC\)](#)

[International Renewable Energy Agency \(IRENA\)](#)

[Major Group for Children and Youth \(MGCY\)](#)

[Partnership for Environment and Disaster Risk Reduction \(PEDRR\)](#)

[Protecting Every Child's Potential](#)

[SDG 7 Technical Advisory Group \(SDG 7 TAG\)](#)

[SDG 7 Youth Constituency](#)

[The Nature Conservancy \(TNC\)](#)

[The NDC Partnership](#)

[World Meteorological Organization \(WMO\)](#)

[World Resources Institute \(WRI\)](#)

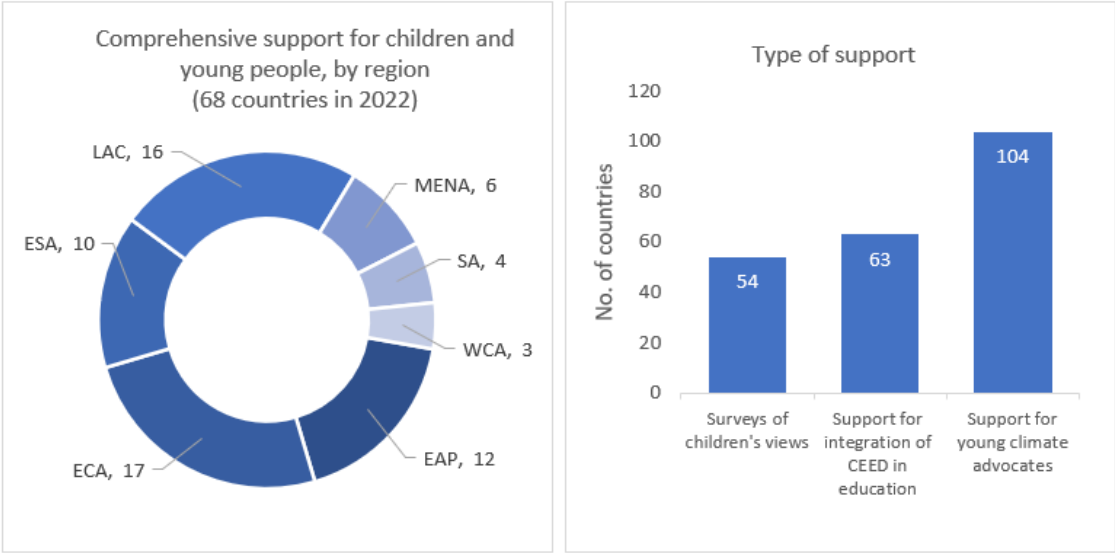
[YOUNGO](#)

# Supporting children and young people to be environmental champions

The engagement of children and young people on climate, environment, sustainable energy and DRR action is one of the most widespread of all UNICEF programmes, reaching 122 countries in 2022. In 68 of those countries, UNICEF provides comprehensive support, covering at least two of the three categories of engagement: polling the opinions of young people, integrating CEED issues or green skills into the education system, or supporting the participation of young climate advocates in policy development processes, advocacy or campaigning (Figure 28).



Figure 28. Number of countries engaging children, adolescents and young people in action and advocacy to address climate change, unsustainable energy use and/or environmental degradation, with UNICEF support (4.3.2)



Source: UNICEF CSIs (2022).

## Including the views of children and young people

Consultation with children and young people on CEED issues is an important part of the overall UNICEF support in this area, an essential step in ensuring that their views are considered in policy engagement and programme design processes. This engagement takes place through a wide range of consultative processes – in a total of 54 countries in 2022. In many countries, surveys were conducted to engage with young people leading up to GP2022, COP27 and other global events, while countries led national surveys on climate and DRR-related issues like energy, air pollution, climate-resilient WASH and school safety and resilience. The [U-Report platform](#) continues to be the most widely used platform for conducting surveys and engaging young people at the national, regional and global levels.

Surveys are key inputs for programme design processes, such as in Armenia where the findings from a 2022 [survey](#) of children and adolescents are being used to inform climate change education in schools and the 2022 [Afghanistan: Rising to the Challenge](#) report, which built on the 2020 regional [Rising to the Challenge](#) study in South Asia.

A consultation theme in 2022 was singling out and amplifying the voices of girls and young women. In the lead up to COP27 UNICEF sponsored a [U-report survey](#) of over 17,000 adolescent girls from 29 programme countries, focusing in particular on the impacts of climate (80 per cent of respondents had already experienced a climate-related emergency and 32 per cent food shortages due to climate change). In a more comprehensive survey conducted in partnership with the World Association of Girl Guides and Girl Scouts, over 33,000 girls and young women in 90 countries were consulted through U-report and in-person interviews. The resulting report, [Bring in the Girls!](#), presents survey results and emphasizes the need for greater involvement of girls in climate processes.

## A focus on awareness-raising and advocacy

Young people are passionate about climate change, the environment, sustainable energy and reducing disaster risk in their communities. They are already highly effective advocates for action both within their communities and social media groups, and through engagement processes with decision makers, with room for greater opportunities to advance their rights. A key component of UNICEF programming is providing the support and tools to advance their actions, such as through its Voices of Youth platform with [tools](#) for climate activists, [air pollution facts](#) and more.

In programme countries, UNICEF's support is wide-ranging. In many countries, UNICEF develops and disseminates educational material for children and young people ranging from comic books to chatbots. UNICEF also supports processes for the engagement of young people with decision makers including child parliaments and consultation forums, supports climate-, energy- and DRR-focused youth groups and trains young activists. In Mongolia, for example, UNICEF supported the Teen Parliament 2022 session on affordable and clean energy; in the Plurinational State of Bolivia UNICEF strengthened the capacities of 34 national and subnational adolescent climate change organizations; and in the Republic of Moldova the United Nations Youth Advisory Panel was consulted on development of the CLAC.

In Ecuador, UNICEF facilitated consultation of young people through U-Report and chat boxes in advance of both the COP27 and Stockholm+50 meetings; supported engagement of young people in the NDC formulation process and other national processes; and encouraged wider and more inclusive participation of youth through the [Climate Action for Youth](#) booklet published in both Spanish and Kichwa in 2022.



UNICEF and its partners also provide extensive support for young advocates in regional and global processes. This includes the development and dissemination of information resources and educational material for children themselves, and for the people and organizations who support them. Examples in 2022 include a [guide](#) for young people on sustainable energy in English and Spanish and the [Green Words](#) booklet on ideas for climate action with a focus on children living with disability, along with an updated [guide](#) for supporting children at COP meetings. Regional UNICEF publications include a [toolkit](#) for young climate activists in the Middle East and North Africa and a [guide](#) for supporting young activists in Latin America and the Caribbean.

Ahead of GP2022 and COP27, UNICEF worked to build the capacity of children and young people to be effective climate advocates and, at the meeting, helped to ensure they were present, visible and heard. For example, support at COP27 included:

- Advocating with government partners that led to inclusion of 82 young people in national delegations.
- Working with the UNFCCC Youth Constituency (YOUNGO) in the training and support of more than 200 youth delegates.
- Co-producing a guidance package with Save the Children and other partners: [A COP Fit For Children: How to support children's participation.](#)
- Running training on climate policy, media and communications and youth and migration and displacement to build the capacity of youth delegates attending COP27.
- Running events under the *Conference of Youth* (COY17) programme, including a workshop on youth engagement in the NDCs, panel discussion on intergenerational

- climate action, a youth-led discussion on youth climate advocacy and capacity-building, and a ‘youth for climate caravan’ initiative.
- Offering direct support for the participation of 37 children and youth to attend COP27, and support for 154 young people at the meeting, including the facilitation of their engagement in negotiations and events with decision makers.
- Supporting, as an institutional partner, the first-ever [Children and Youth Pavilion](#) alongside influential youth networks such as YOUNGO, the SDG 7 Youth Constituency and the United Nations Secretary-General’s Youth Advisory Group.
- Developing content for young people to use in media interviews (such as the heatwaves study, the results of the global U-Report poll with 200,000 responses) and the provision of platforms to speak to the press.

## Promoting and supporting green skills and volunteerism

Responding and adapting to climate change will require a radical transformation towards a green economy. Paramount to the success of this transition is the development of green skills for children and young people, which encompass a range of hard and soft skills – including science, engineering, advocacy, disaster risk management and general education and awareness about climate change and the environment. UNICEF country offices are supporting young people to acquire green skills as well as have greater opportunities and capacities to engage on the climate crisis in meaningful ways so they can actively and independently participate and lead. For example, in 2022:

- In Bangladesh, the GenU ImaGen Ventures<sup>72</sup> Youth Challenge on Climate Change encouraged youth in six divisions to participate in designing local solutions to climate change issues at divisional bootcamps. A total of 340 youth participated, with 20 of the most innovative solutions receiving support from seed funds and dedicated mentorship.
- In Bosnia and Herzegovina, UNICEF engaged young people in development of their digital, entrepreneurial and green skills through the IT Girls and UPSHIFT<sup>73</sup> programmes, which reached 522 adolescents.
- In Burundi, the ‘Green Girls’ initiative equipped vulnerable girls and those affected by climate change living at sites for internally displaced persons and host communities with empowerment activities. Through production of green charcoal from organic sources, participants were equipped with knowledge on household waste and business skills so they could contribute to the mitigation of climate change risks within their community.
- In Viet Nam, 200 students worked to raise awareness on environmental issues, promote green skills and environmental protection and shared student-led, girl-led initiatives in climate action at a festival organized by the Ministry of Education and Training and supported by UNICEF.

UNICEF has also been supporting an upsurge in young volunteers mobilizing on sustainability and climate, in a wide range of areas including tree planting, air pollution, recycling and water conservation. Examples include:



- In Brazil, UNICEF is building a network of 160,000 volunteers with a focus on the Amazon and semi-arid regions. The volunteers plant trees, collect trash, clean beaches, recycle plastic and produce street art with pro-environment messaging.
- In India, UNICEF mobilized 1.1 million volunteers around water scarcity in the water-stressed states of Maharashtra and Karnataka. Volunteers supported harvesting rainwater initiatives, built community soak pits and led campaigns that encouraged reduced water consumption at home. The goal is to conserve more than 1 billion litres of water through the ongoing actions.
- In Jordan, about 1,000 volunteers mobilized through the UNICEF-supported Nahno volunteerism platform<sup>74</sup> on a range of environmental interventions including tree planting, recycling, and city cleaning drives across the country. In 2022, the volunteers planted 7,537 trees and collected 10,248 kilograms of solid waste.
- In Mongolia, volunteers are equipped with devices to monitor air quality that they deploy inside their communities. On days of high air toxicity, the volunteers alert people to the hazard and provide them with information on how to protect themselves. UNICEF Mongolia has leveraged this volunteer activation to complement their behind-the-scenes advocacy efforts with the government to adopt more robust policies to address air pollution and build resilience.

## Internal sustainability

In the area of internal sustainability, UNICEF has built a business model that enables it to be a more effective, efficient, impactful and an ethical leader within the multilateral system. In 2022, UNICEF developed an action plan to increase cost savings, simplify operations, reduce carbon emissions and improve the inclusiveness of its office premises. This includes actions in the area of operations, in strengthening environmental and social safeguards, and supply chains.

## Operations

Fifty-three per cent of UNICEF offices are now situated within United Nations Common Premises, exceeding the United Nations target of 50 per cent, and significantly increasing the efficiency and sustainability of operations. UNICEF has identified an additional 14 high-cost office locations as candidates for moving to common premises under the plan for 2023.

Globally, UNICEF continues to be on track to achieve the United Nations target of a reduction of carbon emissions by 45 per cent in 2030. In 2022, the total volume of emissions decreased by 17 per cent (11,834 t CO<sub>2</sub>) compared with 2019 emissions, but increased by 36 per cent (15,828 t CO<sub>2</sub>) compared with 2021 due to the increase in air travel. This increase was due in part to more comprehensive reporting (an increase in the number of offices reporting) but also to an increase in air travel as COVID-19 travel restrictions were lifted. Thus air travel contributed to 38 per cent of UNICEF total emissions, masking significant energy savings made in other areas in 2022, including reduced consumption of vehicle fuel and generator use (down to 21 per cent and 12 per cent, respectively, of total emissions). UNICEF continues to prioritize the goal of

climate neutrality (measure, reduce, and offset carbon emissions) through data reporting, performance evaluation, project implementation and sustainability behaviour awareness activities, and by offsetting unavoidable emissions when necessary.

In 2022, UNICEF completed a green construction programme in Mozambique and Ghana that included 20 Energy Efficiency projects, 10 Solar PV projects and 2 Green Building Certifications. Ongoing projects in Afghanistan, and Nigeria (the Kano office), will result in a projected reduction of the GHG emissions by 1,100 tons CO<sub>2</sub> upon completion.

## Environmental and social safeguards

Environmental and social safeguards (ESS) is the term used for policies and measures designed to ensure that development projects promote social well-being and protect the environment while avoiding or minimizing adverse impacts. Over the course of 2022, an additional six UNICEF country programmes reported that they were implementing an ESS system, bringing the total to 21 countries.

As a reflection of the importance of ESS to UNICEF's programming and operations, UNICEF allocated core funding to fill two dedicated posts on this important topic, with the first ESS engaged by late 2022 and the second commencing in April 2023. These resources were allocated to ensure that UNICEF's ESS system is finalized by late 2023 and that support is provided to UNICEF programme and operations teams to understand how ESS applies to their work, and the potential of it. With these dedicated resources and senior management support, it is anticipated that UNICEF's global ESS system will be completed by late 2023 and is scheduled to be implemented by mid-2024.

## Supply chains

In 2022, UNICEF's Supply Division carried out a number of initiatives to improve sustainability, including developing a new solar procurement strategy in alignment with UNDP solar strategies and expanding work to optimize cold chain equipment, including through the use of Solar Direct Drive systems. Supply Division also accelerated efforts to reduce plastic waste for long-lasting insecticidal nets (LLINs) by actively managing packing requirements.

Supply Division supported countries in strengthening end-to-end supply chains through systemic and focused interventions that build resilience and efficiencies. This included support for strengthening government-operated supply chains, including the UNICEF Supply Chain Maturity Model.<sup>75</sup> In 2022, UNICEF supported 27 governments in developing or updating national supply chain strategies to address barriers to health, nutrition and WASH commodities. In Madagascar, for example, UNICEF launched the One United Nations for Health Supply Chains Initiative, bringing United Nations agencies, key donors and implementing partners together to develop a road map for a shared understanding and common vision of the country's supply chain priorities.

# Financial report

This section of the report provides a summary of UNICEF expenditures on Goal Area 4 programming in 2022. The Financial annex (*pending*) provides additional details on these and other expenditure patterns. This summary includes information on expenditures only – information on the contributions received by funding partners in 2022 are included in the Financial annex.

## WASH expenditures

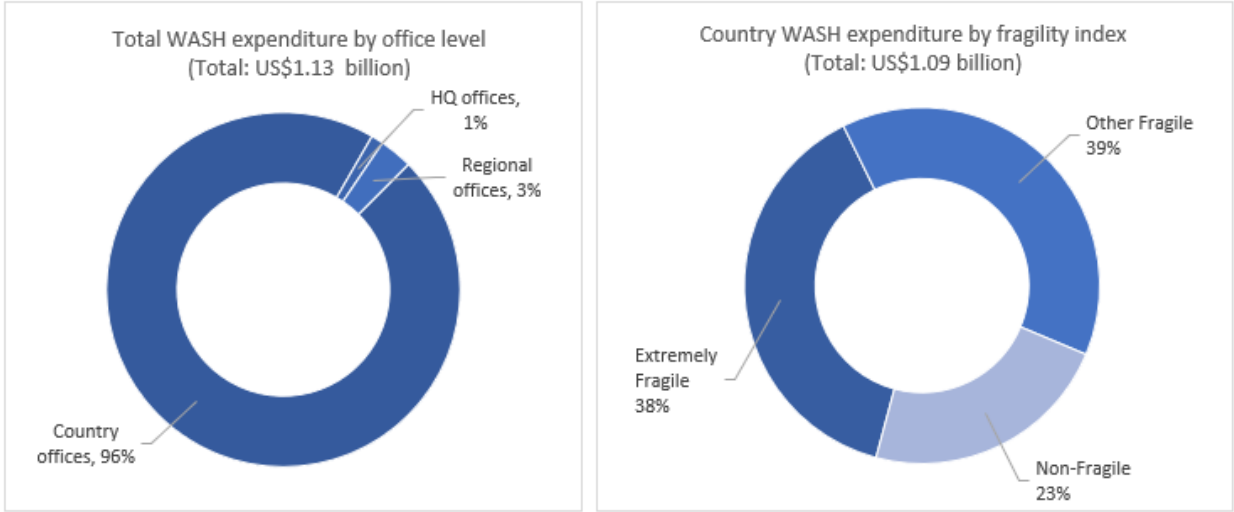
### Expenditure patterns in 2022

Total expenditure on WASH programmes was US\$1.13 billion in 2022. This includes all WASH-related expenditure in the calendar year in a total of 109 countries, at the regional level and in headquarters.

UNICEF WASH expenditure is highly focused on programme countries. In 2022, 96 per cent of expenditure was at the national or sub-national levels, and 4 per cent at regional or headquarters office levels (Figure 29). Although relatively small – 1% of all expenditure – expenditure at headquarters level is critical for the effectiveness of the overall WASH programme, and is currently difficult to fully cover.

UNICEF expenditure is also focused on countries with the greatest needs: in 2022, 77 per cent of country-level expenditure was in fragile or extremely fragile countries.

Figure 29. UNICEF WASH expenditure by office level and fragility index, 2022



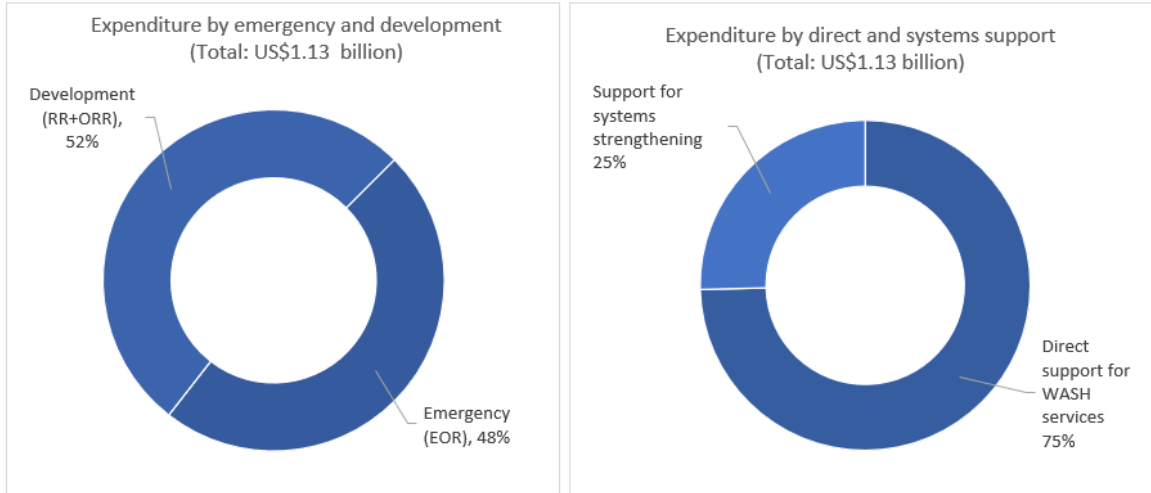
WASH programmes and expenditures cover all UNICEF programme regions. In 2022 the largest proportion of expenditures (31%) was in the Middle East and North Africa region, primarily due to the ongoing large-scale humanitarian response programmes in the region. The two Sub-Saharan Africa regions accounted for 37 per cent of expenditure and South Asia for 16 per cent (see the Financial Annex for details of expenditure at the regional and country levels).

As in previous years, UNICEF expenditure on emergency WASH programming accounted for about half of all WASH expenditure (48% in 2022, compared to an average of 51% over the previous Strategic Plan 4-year period). The largest responses by expenditure on humanitarian responses in 2022 were, in order, in Afghanistan, Yemen, Lebanon, Ukraine and Ethiopia.

Starting with the Strategic Plan 2022-2025, UNICEF has categorized its programming into direct support for WASH services (Result Area 1) and support to partners for WASH systems strengthening (Result Area 2). In 2022, a quarter of total expenditure was on Result Area 1 (Figure 30). This is not unexpected because service delivery, especially in the area of water supply, is inherently more costly than support for systems strengthening and, thus, expenditure levels are not a direct reflection of the level of effort on this area. It is also the case that some service delivery programming contributes to systems strengthening, such as the piloting of innovative approaches in the field and efforts to ensure emergency responses also strengthen WASH sectors in programme countries (see discussion elsewhere in the report on the humanitarian-development-peace nexus).

UNICEF aims to transition more programming and expenditure towards systems strengthening activities, but funding from donor partners is, at this stage, still focused more on service delivery. The contribution of thematic funding for systems strengthening work is of critical importance, including in 2022 from the governments of Germany, the Netherlands, the United Kingdom and Sweden (see the Financial annex for details on thematic funding).

Figure 30. UNICEF WASH expenditure by emergency vs. development programming and direct vs. systems strengthening programming, 2022

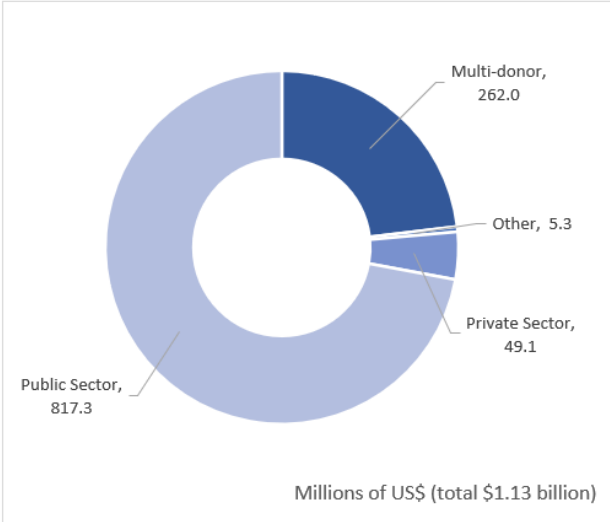


Note: RR = regular resource, ORR = other resources, regular, ORE = other resources, emergency

# Funding sources for UNICEF expenditures on WASH programmes

The most important sources of funding for UNICEF WASH programming are public sector sources from donor countries, principally bilateral agencies, accounting for 72 per cent of all UNICEF WASH expenditure in 2022 (Figure 31). The other categories of funding are multi-donor funds, including thematic funds for WASH programming and for humanitarian response, and private sector funds that include donations through UNICEF national committees and UNICEF offices. The largest of these, for 2022 expenditures, were from the United States, Japan, China, the United Kingdom and Switzerland. UNICEF also received generous donations from companies including LIXIL, Unilever and a range of other companies in programme countries.

FIGURE 31. Donor funding for UNICEF WASH, by category, by 2022 expenditures



The largest public sector donor country contributions for 2022 WASH expenditure were the governments of the United States of America, Germany and the European Commission (Table 9). The largest public donor for emergency programming was the government of the United States and the largest donor for development (non-emergency) programming was the government of Germany.



TABLE 9. Top ten public sector donors for UNICEF WASH programmes, by 2022 programme expenditure, millions of US\$

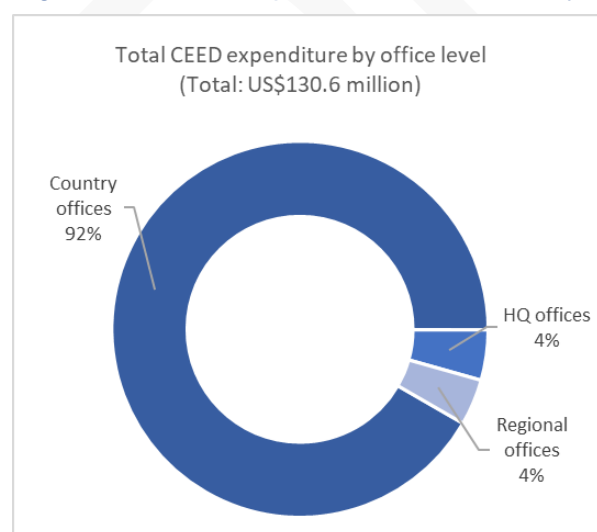
Public funding source	Emergency Resources (ORE)	Regular Resources (ORR)	Grand Total
United States	179.9	9.9	189.8
Germany	19.3	132.3	151.6
European Commission	29.9	48.8	78.7
United Kingdom	45.5	27.5	73.0
Japan	39.9	2.1	42.0
Netherlands	0.0	23.5	23.5
Sweden	12.5	8.4	20.9
Republic of South Korea	1.9	10.5	12.4
Canada	9.2	2.2	11.4
Norway	3.5	1.8	5.3

Notes: Does not include private funding sources, multi-donor fund pools, UNICEF regular resources or United Nations funding sources. In some cases (e.g. United States, Germany and United Kingdom) the country total includes funds from multiple government agencies.

## CEED expenditures

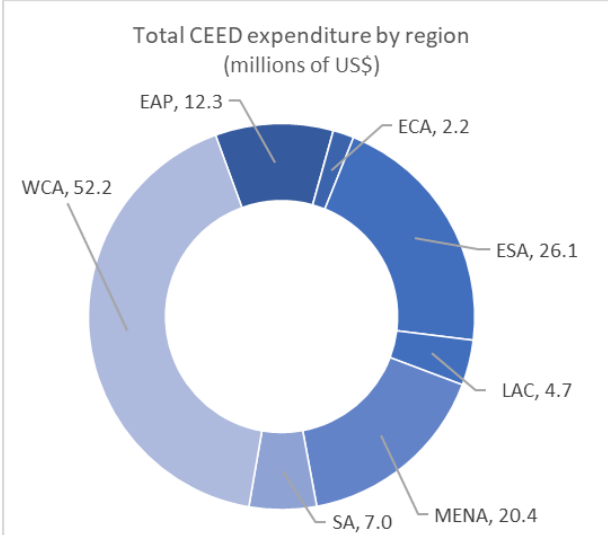
In 2022 UNICEF expenditures on CEED programming totalled US\$130.6 million. As is the case for WASH, most expenditure is at the country level, with just 4 per cent of expenditure used for headquarters and 4 per cent for regional offices (Figure 32).

Figure 32. CEED expenditure at the country, regional and country programme levels, 2022



CEED expenditures are across all UNICEF regions. The most expenditure in 2022 was for programming in the West and Central African region, accounting for 42 per cent of the total, followed by the Eastern and Southern Africa region and the Middle East and North Africa region (Figure 33). A total of 83 countries registered expenditure on CEED programming in 2022.

Figure 33. CEED expenditure by region, 2022



The largest source of funding for CEED programming in 2022 was UNICEF General Resources, which accounted for 25 per cent of all expenditures (US\$32.6 million). Other sources of funding included transfers from the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) and other United Nations agencies, multiple United Nations agency funds, and thematic funds. The top public sector donor for CEED were the governments of the United States and the United Kingdom, and the European Commission (Table 10).

TABLE 10: Top ten public sector donors for UNICEF CEED programmes, by 2022 programme expenditure, millions of US\$

Public funding source	Emergency Resources (ORE)	Regular Resources (ORR)	Grand Total
United States	12.63	0.31	12.95
United Kingdom	7.89	0.39	8.28
European Commission	5.51	1.62	7.13
Germany	5.31	1.32	6.63
Japan	2.62	1.06	3.68
Sweden	2.39	0.55	2.94
Switzerland	0.09	1.19	1.28
Denmark	0.95	0.01	0.96
Norway	0.61	0.31	0.92
Republic of South Korea	0.01	0.80	0.81

Notes: Does not include private funding sources, multi-donor fund pools, UNICEF regular resources or United Nations funding sources. In some cases (e.g. United States) the country total includes funds from multiple government agencies.

# Abbreviations and acronyms

AfDB	African Development Bank
AMCOW	African Ministers' Council on Water
ASWA	Accelerating Sanitation, Hygiene and Water for All
CCRI	Children's Climate Risk Index
CEED	climate, environment, energy and DRR
CLAC	Climate Landscape Analysis for Children
CWIS	Citywide Inclusive Sanitation
COP27	27th United Nations Climate Change Conference of the Parties
COVID-19	coronavirus disease 2019
CSI	Core Standard Indicator
DRR	disaster risk reduction
GCF	Green Climate Fund
GWC	Global WASH Cluster
IPC	infection prevention and control
IPCC	Intergovernmental Panel on Climate Change
IRC	International Water and Sanitation Centre
JMP	WHO–UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
MHH	menstrual health and hygiene
MICS	Multiple Indicator Cluster Surveys
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NGO	non-governmental organization
ODF	open defecation free
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal
SIWI	Stockholm International Water Institute

SMQ	strategic monitoring question
SWA	Sanitation and Water for All
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
WASH	water, sanitation and hygiene
WASH BAT	WASH Bottleneck Analysis Tool
WASH FIT	Water and Sanitation for Health-care Facility Improvement Tool
WHO	World Health Organization

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