



EAST ASIA & PACIFIC

WATER, SANITATION & HYGIENE ANNUAL RESULTS REPORT 2021

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East Asia and the Pacific
WASH Thematic Report
January – December 2021

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Expression of thanks

UNICEF's work for children is funded entirely through individual donations and the voluntary support of 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 their opportunities to reach their full potential.

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These contributions and support have ensured that vulnerable children and their families in the East Asia and Pacific region have resilient, inclusive and safe water, sanitation and hygiene services. UNICEF will continue to work with governments in various countries in the region and with the sector constituencies, including regional and global water and sanitation entities, to fulfil the human rights to water and sanitation.



CONTENTS

Expression of thanks **iii**

Abbreviations **vii**

Executive summary **viii**

Strategic context **x**

Results achieved in the WASH sector **4**

Introduction.....	5
Drinking water.....	6
Sanitation.....	7
Hygiene.....	10
WASH in institutions.....	12
Climate-resilient WASH.....	15
Enabling environment.....	17
Leveraging WASH investments.....	20
Engaging with the business sector.....	21
Innovations.....	22
Humanitarian response.....	23
Regional support and partnerships.....	25
Challenges and lessons learned.....	28



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Financial analysis **30**

Future workplan **34**

Donor feedback form **39**

Human interest stories **40**

Lao People’s Democratic Republic: Ending open defecation for cleaner and healthier villages.....	41
Cambodia: Better sanitation drives better education.....	43
Indonesia: Handwashing helps schools safely reopen.....	46
Papua New Guinea: “No flies in my vegetable garden anymore!”.....	49
Timor-Leste: Clean water flows to school in rural Timor-Leste for the first time in a decade.....	52
Myanmar: In wake of crisis, UNICEF brings clean water to vulnerable urban families.....	54

Table

Table 1. Selected UNICEF WASH results achieved in East Asia and Pacific region, 2018–2021.....	5
Table 2. UNICEF country office results towards the elimination of open defecation, 2021 results only.....	8
Table 3. Planned EAPRO budget for the WASH sector, 2021 (in US dollars).....	31
Table 4. Total funding received and sources of funding for EAPRO WASH, 2021 (in US dollars).....	31
Table 5. Thematic expenses, by results area in 2021 (in US dollars).....	32
Table 6. Planned budget for EAPRO WASH in 2022 (in US dollars).....	32

Boxes

Box 1. Mobilizing domestic revenue to increase safely managed sanitation in Indonesia.....	9
Box 2. Successfully nudging handwashing in primary schools in the Philippines.....	11
Box 3. Scaling Oky, the girl-friendly period tracker app.....	14
Box 4. Climate-resilient urban sanitation in Indonesia – Hazards, impacts and responses in four cities.....	16
Box 5. Data availability for reporting against Sustainable Development Goal targets 6.1 and 6.2.....	19
Box 6. Water as a catalyst for peace in Myanmar and Papua New Guinea.....	24
Box 7. Selected publications in the East Asia and Pacific region in 2021.....	27

Abbreviations

EAPRO	UNICEF East Asia and the Pacific Regional Office
NGO	non-governmental organization
SDG	Sustainable Development Goal
WASH	water, sanitation and hygiene
WHO	World Health Organization

All \$ references are United States dollars.



Executive summary

This report presents the 2021 results of the water, sanitation and hygiene (WASH) programmes that the United Nations Children's Fund (UNICEF) supports across its East Asia and Pacific region. Because 2021 was the final year of the UNICEF Strategic Plan 2018–2021, the report also summarizes the cumulative WASH results over that period.

The UNICEF East Asia and Pacific region encompasses 28 programme countries served by 14 country offices. In 2021, UNICEF worked with governments and other partners to support WASH services in 18 countries. The region is diverse in many ways, and UNICEF engages in a broad range of activities to respond to country needs that include the building blocks to an enabling environment for effective WASH programming: policy formulation, capacity development, sector financing, institutional strengthening, data collection and monitoring.

Although progress is uneven between and within countries, the East Asia and Pacific region is on track for achieving universal access to basic drinking water and basic sanitation services and ending open defecation by 2030. Some countries still require a twofold to fivefold increase of the efforts of the past decade to achieve universal access to basic WASH services. The Sustainable Development Goal (SDG) 6 target of universal access to safely managed WASH services requires a greater acceleration in all countries. At current trends, the target for safely managed sanitation services will be missed by 460 million people. There is insufficient data to make any estimate of coverage of safely managed drinking water.

According to the World Health Organization (WHO) and UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene latest estimates, 40 million people across the region still practised open defecation as of 2020, and 16 million people relied on surface water as their source of drinking water. Those practising open defecation usually suffer from multiple deprivations, being largely among the most

vulnerable and marginalized; they are typically the poorest households and often ethnic minorities living in remote or hard-to-reach areas. With the SDG ambition of leaving no one behind, these populations require the continued attention of governments and the international community to reduce inequalities in the delivery of the services considered as a human right.

In 2021, UNICEF supported national programmes aimed at eliminating open defecation in Cambodia, Indonesia, the Lao People's Democratic Republic, Myanmar, Papua New Guinea, the Philippines, Timor-Leste and Viet Nam. As a result, 2,304 communities were certified as open defecation-free, with more than 1.4 million people benefiting. UNICEF also supported the achievement of higher service levels of basic and safely managed sanitation through the strengthening of national systems and service delivery.

More than 167,000 people gained access to at least a basic drinking water service due to UNICEF direct support in emergency and non-emergency settings in 2021. In line with UNICEF's commitment to ensure that all WASH services are climate-resilient, many programmes included low-carbon technologies, such as solar pumps, and promoted climate-related adaptations to the services delivered. The community-based water safety planning approach supported throughout the region also included the impact of climate change as one of the risks assessed. Adaptations were made to future-proof drinking water facilities.

To respond to the COVID-19 pandemic, UNICEF worked with governments, academia and the

business sector to promote appropriate hand hygiene behaviour and services. An estimated 1,185,000 people gained access to basic hygiene in 2021 due to UNICEF support. And UNICEF assisted 306 health care facilities to access WASH services through direct support, strengthening infection prevention and control and laying the groundwork for the pandemic recovery.

UNICEF country offices helped provide WASH services in 7,427 schools with direct support, while 7,162 schools gained access through UNICEF's substantive systems strengthening work. UNICEF was instrumental in supporting national guidelines and monitoring protocols to safely reopen schools during the COVID-19 pandemic. The successful three-star approach to WASH in schools, developed in collaboration with GIZ, was applied in Fiji, Federated States of Micronesia, Kiribati, the Lao People's Democratic Republic, the Philippines, Solomon Islands, Timor-Leste and Vanuatu. In some places, the approach was scaled up with government resources.

To support access to menstrual health and hygiene information during the pandemic, new funding was secured to expand the successful Oky period tracker, which is an educational and informative app co-developed with adolescent girls. The focus going forward will be on reaching the greatest number of girls and boys in Indonesia, Papua New Guinea, the Philippines and eventually beyond. The new programme will include a read-out version for girls with low literacy or vision impairment; and work is under way for an opt-in easy-to-read function for girls with an intellectual disability.

UNICEF worked with others to leverage more funding or financing for WASH. UNICEF collaborated with governments and other agencies on WASH proposals to the Green Climate Fund in Timor-Leste and Vanuatu and the United Nations Joint SDG Fund in Cambodia. In Indonesia, UNICEF supported the development and dissemination of guidelines for zakat funds for WASH. In the Philippines, UNICEF is collaborating with the Asian Development Bank to support citywide inclusive sanitation in Baguio City.

UNICEF continued to provide humanitarian WASH responses to populations affected

by floods, cyclones or typhoons in Fiji, the Philippines, Solomon Islands, Timor-Leste, Vanuatu and Viet Nam. In Myanmar, UNICEF provided essential WASH services and supplies to people affected and displaced by conflict. After the military takeover of Myanmar in February, UNICEF moved to alternative implementation modalities, successfully reaching people directly in communities. UNICEF's emergency and humanitarian programming for the region in 2021 reached 480,000 people with basic drinking water supplies and 195,000 with sanitation facilities.

The regional WASH team provided technical assistance and capacity development for UNICEF staff, partner agencies and other sector actors. Regional studies and initiatives included the Hand Hygiene for Asia collaboration, the regional sanitation expo on innovative service provision, the WASH Young Changemaker Programme and a landscape study of the business sector engagement in WASH in Cambodia, Indonesia, Mongolia, the Philippines and Viet Nam. The regional office also took new steps to advance the East Asia and Pacific Women in WASH Initiative by looking inward at the gender balance among its professional staff as well as outward at the potential to increase women's participation in the sector.

The East Asia and the Pacific Regional Office Management Plan for 2022–2025 aims to advance five goals and results areas and to keep the realization of children's rights at the forefront of economic, social, environmental and human developments in the recovery from the impact of the COVID-19 pandemic. Future-proofing the WASH sector necessitates innovative approaches, partnerships, systems and technologies that are prepared for the challenges of tomorrow, including disease outbreaks, migration, urbanization, a changing climate and increasing pressure on natural resources. For the interlinked areas of WASH, climate and the environment, the regional office will support and guide country offices on future-proofing by ensuring: (i) water security; (ii) sustainable, equitable, climate-resilient WASH programming through strong evidence, policy and partnerships, with an emphasis on young people, gender, disability and social inclusion; and (iii) child-sensitive, multisector programmes that address the impact of climate change and environmental degradation.



Strategic context

The East Asia and Pacific region is the largest and most culturally, economically and politically diverse among the regions of the United Nations Children’s Fund (UNICEF) operations and is home to a third of the world’s population, including more than a quarter of its children. The 28 programme countries served by the 14 UNICEF country offices include fast-growing economies and seven least developed countries – three in the Pacific (Kiribati, Solomon Islands and Tuvalu) and four in East Asia (Cambodia, the Lao People’s Democratic Republic, Myanmar and Timor-Leste).

In 2020, an estimated 216 million people in the region lacked access to basic sanitation services, of which 40 million were practicing open defecation, and 137 million people lacked access to basic drinking water services, of which 16 million were dependent on surface water. UNICEF supports water, sanitation and hygiene (WASH) in 18 countries,¹ with the intent of reaching Sustainable Development Goal (SDG) 6, which aims to achieve universal and equitable access to safe water, sanitation and hygiene for all by 2030.

The region has made significant progress towards ensuring universal access to basic WASH services. According to the latest estimates of the World Health Organization (WHO) and UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, the East Asia and Pacific region is on track to meet the 2030 SDG target for universal access to basic drinking water and basic sanitation services. The population practising open defecation within the region had reduced by 106 million since 2010, and the population relying on surface water had decreased by 43 million.

The region is not on track, however, to deliver on the SDG promise of safely managed services for all by 2030. Tremendous inequalities persist, with the gains distributed unevenly between and within countries. At current trends, the SDG target for safely managed sanitation will be missed by 460 million people, or around 21 per cent of the East Asia and Pacific population, in 2030. A doubling of efforts is required to meet the target on time. Only 11 of the 28 countries in the region have nationally representative trend data for safely managed drinking water services, which is insufficient to report on regional access. Faecal contamination of drinking water remains a great concern in the region, but the lack of nationally representative estimates for household drinking water quality prevents clarity

on the severity of the problem. Many countries lack estimates of access to basic hygiene services. To fill these gaps, UNICEF assists governments and national statistics offices to include standard questions and indicators to monitor progress towards the SDG targets 6.1 and 6.2 in their national data collection mechanisms, such as household surveys, national censuses and the Education and Health Monitoring Information Systems.

In 2021, UNICEF WASH support was critical to the success of the COVID-19 response in the region. UNICEF focused on hand hygiene and infection prevention and control, especially in schools and health care facilities, and in building momentum to sustain gains in service during the transition to the recovery phase. In most countries, UNICEF supported social and behavioural change programmes, focusing on the three main messages of washing hands with soap and water, mask wearing and keeping physical distance. In addition, UNICEF worked with the ministries responsible for education and health to integrate WASH and infection prevention and control activities into safe back-to-school campaigns and provided supplies and services.

Various assessments in the past year found that the impact of the COVID-19 pandemic on the provision of WASH services throughout the region was limited. Although some utility companies experienced a slight decrease in revenue collection – likely brought about by a loss of income of the users, the delivery of services was hardly affected. This reflects the commitment of governments and service providers to maintain continuity of services throughout the pandemic. Among the impacts that were detected was a decrease in demand for pit-emptying services in Indonesia. The Asian Development Bank expects that delayed maintenance and reduced revenues may affect small as well as large system operators. Large operators are likely to benefit

¹ Cambodia, China, Democratic People’s Republic of Korea, Fiji, Federated States of Micronesia, Indonesia, Kiribati, the Lao People’s Democratic Republic, Malaysia, Mongolia, Myanmar, Papua New Guinea, the Philippines, Solomon Islands, Thailand, Timor-Leste, Vanuatu and Viet Nam.

from multilateral development banks' COVID-19 bridge funds but the small operators may suffer cash-flow shortages to pay electricity bills to keep pumps operational.

The region is acutely vulnerable to natural disasters, including those related to climate change. These disasters typically impact children most severely. Adolescents in the region have cited climate change among their foremost concerns and are increasingly claiming their right to a more sustainable environment and climate justice. As in previous years, the region suffered in 2021 from climate-related extreme weather events, such as floods, droughts and typhoons. In various countries, UNICEF supported vulnerability mapping exercises, using climate change risk assessment tools to identify priority areas for future-proofing WASH services and water safety planning. In response to the emergencies, UNICEF WASH provided lifesaving supplies and services, such as soap, hygiene and menstrual hygiene materials, and emergency water and sanitation services.

UNICEF's support continued to adapt to the situation in each country. Pandemic-related travel restrictions for UNICEF and its partners, for instance, prevented field work in many places and thus resulted in new programming modalities. Using these new modalities, strong results were achieved in the elimination of open defecation, the provision of basic sanitation and water supply services and expansion of WASH services in schools and health care facilities. This indicates the adaptability and flexibility of new modalities required to continue delivering on children's rights.

Strengthening the enabling environment for the effective delivery of WASH services remained a priority of the UNICEF support to governments, civil society and the business sector. As a result, policies, plans and strategies were changed to better reflect the SDG ambitions of safely managed services. In various countries, the WHO and UNICEF Joint Monitoring Programme worked on the adoption and formulation of standard indicators to monitor access to safely managed drinking water and sanitation services. UNICEF continued its support to the collection of nationally representative data on household drinking water quality in four countries through the Multiple Indicator Cluster Survey.

Conferences and events hosted or co-hosted by UNICEF at the national and international levels were well attended throughout the region, both in person and online. Some countries were more successful than others in taking capacity development sessions for national governments

online due to limited internet access and poor connectivity for government staff.

Certain countries faced specific contextual challenges and disruptions. The Democratic People's Republic of Korea closed its borders since January 2020 not allowing the return of diplomatic staff, United Nations officials, NGOs and halted the import of all humanitarian supplies, including those from the WASH programme. This prompted the UNICEF WASH programme to explore alternative monitoring modalities such as remote monitoring and local procurement options. The military takeover of the democratically elected government in Myanmar early in 2021 required UNICEF to find alternative ways to implement the programme through international non-government and civil society organizations, in order to reach the displaced and underserved population.

In October 2021, the UNICEF Executive Board approved the Strategic Plan 2022–2025, under which UNICEF will work with a broad range of stakeholders towards accelerating the achievement of the child-related SDG outcomes. Goal area 4 of the Strategic Plan aims to ensure that **in all contexts, including humanitarian crises and fragile settings, every child, including adolescents, has access to safe and equitable WASH services and supplies and lives in a safe and sustainable climate and environment**. The Strategic Plan encompasses *five 'accelerators'* to work towards these outcomes:

- ✔ **strengthen WASH service delivery and WASH systems;**
- ✔ **invest in safe water for children and communities in water-insecure contexts;**
- ✔ **scale up WASH activities in schools and health facilities;**
- ✔ **increase partnerships with the private sector; and**
- ✔ **expand child-sensitive programming to address climate change and disaster risks.**

For 2022–2025, the UNICEF WASH programme has identified strategic shifts to make WASH systems climate-resilient and address water scarcity; push for addressing the full ambition of the SDGs for safely managed sanitation and hygiene; scaling up WASH in institutions; and linking lifesaving needs with sustainable development solutions using peacebuilding approaches.





Results achieved in the WASH sector

Introduction

Alternative programming modalities developed over the course of 2020 matured during the second year of the COVID-19 pandemic. Work across the enabling environment areas of policy formulation, strategy development and capacity development largely continued online. In-person service delivery and humanitarian

response picked up again, with governments and implementing partners observing appropriate COVID-19 mitigation measures. *Table 1* summarizes selected cumulative WASH results from across the East Asia and Pacific region during the 2018–2021 Strategic Plan period.

Table 1. Selected UNICEF WASH results achieved in East Asia and Pacific region, 2018–2021

UNICEF Strategic Plan 2018–2021 Goal area 4: Every child lives in a safe and clean environment

Outcome statement 4: Sustained use of safe water and sanitation services and adoption of hygiene practices and strengthened systems for a clean and safe environment for all children and women – particularly the most disadvantaged and those affected by humanitarian situations

Selected output indicators	Cumulative results achieved in the East Asia and Pacific region, 2018–2021
Number of additional people with access to safe drinking water services through direct UNICEF support	1,416,982
Number of additional people with access to basic sanitation services through direct UNICEF support	1,710,526
Number of open-defecation-free communities as a result of UNICEF direct support	3,102
Population in open-defecation-free communities as a result of UNICEF direct and indirect support*	5,886,812
Number of schools with separate sanitation facilities for girls and boys delivered through direct UNICEF support	2,589
Number of schools with separate sanitation facilities for girls and boys delivered through substantive UNICEF support to WASH sector systems*	25,902
Number of schools with menstrual hygiene management services through direct UNICEF support	2,799
Number of health centres that have basic WASH facilities through direct UNICEF support	859

Note: *Indirect support and substantive support to WASH sector systems refer to beneficiaries resulting from UNICEF support for strengthening the enabling environment. This might include but is not limited to such inputs as capacity-building, advocacy leading to domestic resource mobilization, human resource support or in-kind support to government systems, technical support to development of standards and improved monitoring.

Drinking water



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During 2021, more than 167,000 people throughout the region gained access to at least a basic drinking water service due to UNICEF direct support in emergency and non-emergency settings. In line with UNICEF's commitment to ensure that all WASH services are climate-resilient, many programmes included low-carbon technologies, such as solar pumps, and promoted climate-related adaptations to the services delivered. Water quality and the sustainable operation of services were often addressed through community-based water safety planning, which both reduces the risk of contamination and increases the sustainable operations of the systems installed. UNICEF also supported the development of drinking water-related plans and strategies, financing analyses, professional management models, improved monitoring and the strengthening of relevant capacities at the national and subnational levels.

In **Cambodia**, UNICEF trained 289 local government officials on water safety planning. The training included use of flood mapping tools, climate risk assessments and climate adaptation. This was followed with a climate risk mapping of community water supplies in five provinces that resulted in the identification of priority areas most at risk. The Ministry of Rural Development

subsequently prioritized these areas for its water safety planning programming.

In the **Lao People's Democratic Republic** and in line with the SDG ambitions on safely managed drinking water services, UNICEF assisted the Government with the provision of climate-resilient household drinking water connections that use elevated storage tanks as an adaptation in flood-prone areas. Although they are more expensive to provide, household connections are positively associated with better health outcomes. Households also value the ease that such connections provide for watering their gardens where they grow vegetables. UNICEF is working with the Government to explore user contributions to the cost of household connections as well as the operation and maintenance.

In **Indonesia**, a task force comprising four ministries and development partners formulated a road map to achieve the SDG 6.1 target for safely managed drinking water services. The road map includes targets, a costed plan and strategies, and it integrates equity, gender equality and disability- and climate-resilient considerations. It also elaborates on the potential for job creation and the contributions that safely managed services can make to the economy. UNICEF successfully advocated the incorporation of previously overlooked non-piped drinking water strategies into the road map. Indonesia conducted a national drinking water quality survey among more than 20,000 households. This completed the information that Indonesia needs to report on access to safely managed drinking water services.

In **Myanmar**, 68 communities comprising 28,600 people were provided with basic drinking water services, including solar-powered systems (in 18 communities). Following the military takeover of the Government on 1 February 2021, these results were delivered by working directly with communities and service providers. All water user committees participated in training on climate-resilient water safety planning and on financial management.

In **Fiji, Kiribati and Vanuatu**, the drinking water safety and security approach is reaching an increasing number of community-managed water supply systems to strengthen quality and resilience to climate conditions. In 2016, with support from UNICEF, the Department of Water

Resources introduced the Vanuatu National Implementation Plan for Safe and Secure Community Drinking Water, which requires rural communities with a community-managed water supply to have a drinking water safety and security plan. The National Implementation Plan provided a technical assistance programme and a capital assistance programme to design new services or improve existing ones. Since 2016, more than 300 communities have developed a drinking water safety and security plan in Vanuatu, and at least 10 organizations have staff that have been trained as facilitators. In 2021, funding was mobilized from the Green Climate Fund for helping an additional 600 communities to develop such a plan, in partnership with the Secretariat of the Pacific Community.

Sanitation

During 2021, UNICEF continued to support efforts towards open-defecation-free communities in eight countries while also helping households move towards higher service levels of basic and safely managed sanitation. Open defecation is still practised by 40 million people in the region who tend to be the poorest and live in rural and often hard-to-reach areas and experience many other deprivations. A continued focus on ending open

defecation in the region is critical to ensure the elimination of inequalities in access to sanitation between rich and the poor households.

Yet, first-time users of toilets and lifelong users of toilets need to be equally supported in their use of safely managed services that safeguard both human health and the environment. The East Asia and the Pacific Regional Office (EAPRO) assisted with learning exchanges and documentation of best practices that led to several publications and events around the region. This included a learning series on safely managed sanitation for UNICEF staff, prepared with the WHO, to share the latest developments in monitoring safely managed on-site sanitation and risk assessment tools for sanitation safety planning. EAPRO is also increasing engagement with the private sector on sanitation.

In 2021, more than 550,000 people gained access to a basic sanitation facility in the region as a result of either UNICEF's direct or indirect support. A total of 2,304 communities reached open-defecation-free status, benefiting slightly more than 1.4 million people. Several countries integrated market-based sanitation with community-led total sanitation, bringing local toilet producers and consumers together to match affordable toilet designs to consumer preferences and household budgets.



Table 2. UNICEF country office results towards the elimination of open defecation, 2021 results only

Country	No. of open-defecation-free communities direct UNICEF support	No. of open-defecation-free communities in-direct UNICEF support	No. of beneficiaries in open-defecation-free communities
Cambodia	-	464	431,480
Indonesia	67	7	44,400
Lao People's Democratic Republic	38	8	46,088
Myanmar	68	-	54,885
Papua New Guinea	608	-	137,340
Philippines	194	585	570,950
Timor-Leste	216	-	41,909
Viet Nam	49	-	81,000
TOTAL	1,240	1,064	1,408,052

After more than 10 years of community-led programming to end open defecation and with the support of UNICEF and others in the sector, the approach now has been fully incorporated into government sanitation programming in **Cambodia, the Philippines and the Lao People's Democratic Republic**. The Lao People's Democratic Republic celebrated its first open-defecation-free province in 2020 and then reached its first open-defecation-free district in the remote and marginalized province of Attapeu in the arid south of the country. Cambodia, too, achieved districtwide open-defecation-free status in one of its marginalized provinces, aided by a subsidy scheme that provided families with an incentive to construct a toilet. The Philippines added 585 open-defecation-free communities under its government-run rural sanitation programme, which received UNICEF assistance over the past decade.

In **Papua New Guinea**, UNICEF continued its strong support to the Government and other partners to eliminate open defecation and promote sustainable sanitation. UNICEF helped with the development of open-defecation-free certification protocols and the establishment of verification teams in targeted districts, along with capacity development. In 2021, most of the

communities triggered in 2020 were declared and certified as open defecation-free, resulting in 604 open-defecation-free communities. In addition, UNICEF facilitated the introduction of new products, such as the LIXIL Sato pan, to increase the supply of affordable options.

In **Cambodia**, market-based sanitation was combined with a targeted subsidy for poor and marginalized households to construct their toilets, making use of the government social protection systems and working in partnership with the NGO iDE. The subsidy accelerated the achievement of open-defecation-free status of many communities and helped to advance equity by targeting the poorest households. A total of 2,266 households applied for and used these subsidies to construct or upgrade their toilet. Importantly, all new toilets constructed were climate-resilient and incorporated adaptive measures against flooding, which was their main climate-related risk.

In **Timor-Leste**, UNICEF worked with the Government on a formative evaluation of its community-led total sanitation programme (2012–2020). The evaluation found that the programme had been effective in bringing about lasting behavioural change around toilet use and

hand hygiene. It also found that hand hygiene was complicated to sustain because of limited water supply in some households. Safe disposal of child faeces and toilet adaptations for people with disabilities were found to need more attention in the future.

In **Indonesia**, UNICEF assisted the Ministry of Health with the development of a road map and costed action plan for the country to achieve open-defecation-free status by 2024. Some 82 members of the Indonesian Alliance of Districts and Cities committed to developing open-defecation-free action plans and strategies, in line with the national goal of eliminating open defecation by 2024. A UNICEF-brokered twinning arrangement between Bekasi City and Sumbawa Barat District successfully fostered joint learning on maintaining open-defecation-free status and addressing safely managed sanitation. A tax and cost-recovery tariff scheme for safely managed sanitation, piloted in Bekasi City, holds great promise for replication in other Indonesian cities. And with the Ministry of Health, UNICEF in Indonesia also piloted a sanitation inspection tool to improve the monitoring of safely managed onsite sanitation services. This effort was part of a global initiative

on monitoring safely managed onsite sanitation services involving the WHO and UNICEF Joint Monitoring Programme, the Bill & Melinda Gates Foundation and many other organizations. It became Indonesia's contribution to the global learning agenda on safely managed sanitation. The Ministry of Health is considering integrating the tool into its national monitoring system to scale up its use nationwide. To help service providers ensure greater sanitation service sustainability and risk mitigation measures during the COVID-19 pandemic, UNICEF with the Government undertook a sanitation service continuity assessment. Building on the findings, technical guidance was developed to ensure the continuity of sanitation services, such as pit emptying, drainage cleaning and waste disposal.

UNICEF supported a bottleneck analysis of **China's** Toilet Revolution that revealed climate-resilient technology gaps in sanitation in the arid and cold areas of the country. This informed the Ministry of Agriculture and Rural Affairs' Five-Year Programme for Improving China's Rural Living Environment 2021–2025. UNICEF collaborated with the Ministry on piloting new climate-resilient technologies in schools and health centres in four counties of Qinghai Province.

Box 1. Mobilizing domestic revenue to increase safely managed sanitation in Indonesia

Indonesia's National Medium-Term Development Plan 2020–2024 sets targets for safely managed sanitation. With the current level of access to safely managed sanitation at 7 per cent in 2019, the Government targeted 15 per cent by 2024 and 53.7 per cent in 2029. Local governments are responsible for ensuring service provision and are expected to fund 25 per cent of the capital investment required.

In 2021, UNICEF carried out a preliminary assessment to assess the potential for municipal governments to provide sustainable financing for safely managed sanitation in urban areas. The assessment started by identifying various funding options from a range of countries and assessing their transferability to Indonesia, based on legal and institutional factors. The options studied were: (i) sanitation taxation associated with a property tax; (ii) sanitation surcharge on water supply tariffs; (iii) sanitation surcharge on tariffs for sanitation services; (iv) contribution fund for house construction; and (v) fee for the registration of septic tank. The collectability of each as well as its applicability were analysed to inform the local government towards selecting the appropriate options. Rather than recommending only one option, the study concluded that multiple ways of mobilizing resources might be suitable, depending on the context.

The assessment recommended initiating policy dialogues on domestic resource mobilization; pilot testing in selected districts and cities to obtain agreement from institutions at the national and subnational levels; and further exploring collaboration between funding for sanitation and other public services in urban areas.

Hygiene



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Across the region, UNICEF supported an estimated 1,185,000 people to gain access to basic hygiene during 2021. The results delivered in hand hygiene reflect its importance of as one of the three main preventive measures for limiting the spread of COVID-19 and other infectious diseases. In 2021, UNICEF continued to build on the global launch of the Hand Hygiene for All initiative with the WHO and other partners – scaling up greater action on hygiene to support the reopening of schools and limiting the spread of disease. The initiative has mobilized a large group of global partners that includes the World Bank, the United Nations High Commissioner for Refugees, the International Labour Organization, the World Economic Forum, the Government of the United Kingdom, WaterAid, the International Federation of Red Cross, civil society groups and others to join forces to accelerate good hand hygiene for all at home, school, health centres, workplaces, transportation hubs and public spaces. In the East Asia and Pacific region, UNICEF engaged many of these same Hand Hygiene for All global partners along with governments, civil society organizations and businesses in support of the vision of hand hygiene for all. This opportunity has contributed to raising the overall profile of WASH and advocating for increased government spending on WASH in many countries.

In **Fiji, Kiribati, Federated States of Micronesia and Solomon Islands**, the UNICEF multicountry office supported national hygiene campaigns in response to the COVID-19 pandemic. In **Vanuatu**, UNICEF engaged with the private sector to commit to the Hand Hygiene for All Initiative. On Global Handwashing Day, 23 parliamentarians, including the prime minister and opposition leaders, came together to demonstrate handwashing in the Parliament while encouraging the population to do the same to curb the spread of the coronavirus. This was done in support of the Department of Water Resources and the Ministry of Health's 2020 national directive requiring all businesses to set up handwashing facilities or handwashing stations due to the pandemic. This includes shops, restaurants, bars and institutions that earn any form of revenue. Schools are required to have handwashing signage at handwashing facilities, which UNICEF has helped to provide. In **Tonga** and with Oxfam and the Tonga National Youth Council, 150 front-line community police officers were trained on hand hygiene promotion.

In **Indonesia**, UNICEF is supporting the Government to develop an intersectoral National Costed Roadmap for Hand Hygiene for All, building on the 2020 National Call to Action for Handwashing with Soap that was signed by 10 ministries. This was the first time that such high-level commitment was demonstrated in Indonesia and with so many ministries working together. The road map takes a broad but in-depth approach and involves 15 ministries, government agencies and task forces and 15 implementing partners. UNICEF also supported a market assessment for hand hygiene to understand the existing value chain, market trends and gaps, the innovation landscape, customer preferences and behaviours. The preliminary findings revealed that the Indonesian market for personal hygiene products was worth \$800 million in 2020 and is likely to expand to \$3 billion by 2025.² UNICEF and the Ministry of Health developed a hygiene behaviour change training guide on handwashing with soap for facilitators, such as health workers.

In **Mongolia**, UNICEF and the Government worked to integrate hand hygiene into activities in the National Public Health Centres Action Plan. UNICEF, along with the United States

² See Euromonitor and Marketline survey data, 2021 and Intellect Analysis.

Agency for International Development and the Ministry of Education and Science, distributed hand sanitizer and hand hygiene kits to 145,000 students in some 700 schools and kindergartens in eight provinces. UNICEF piloted a mobile application to collect real-time information on how communities access information about COVID-19 prevention measures. It also assessed current knowledge about COVID-19 prevention and found that more than 90 per cent of urban respondents indicated handwashing with soap, use of hand sanitizer and wearing a mask as the most important prevention measures. UNICEF Mongolia considers the deployment of this mobile app a useful method to inform the development of future communication materials and to assess how information is accessed.

In **Myanmar**, UNICEF and the BBC Media Action conducted a short pilot communication project through Facebook targeting urban families. They produced evidence-based media content that worked to inform and engage audiences while promoting disease-prevention and handwashing. The campaign launched at the height of the third wave of COVID-19 in the country, when appetite for public health information was particularly high: It achieved 2.9 million views, 58,000 interactions and 8,400 shares. The campaign demonstrated that Facebook can be an effective platform for sharing timely information on handwashing, testing content and reaching people directly.

In **Papua New Guinea**, UNICEF engaged with Post PNG (the postal service) to deliver

handwashing kits to 200 schools and 36 health care facilities in remote areas as part of its corporate social responsibility programme. Post PNG also took out a full-page appeal in national newspapers, calling for readers to join in synchronized handwashing sessions during Global Handwashing Day.

In the **Philippines**, UNICEF, in close coordination with the Department of Health, supported a rapid assessment for hand hygiene behaviours, the development of a social and behaviour change strategy and the pre-testing of communication materials. This work led to a *WASH O'Clock* campaign that was launched in October 2021. It uses communication materials to remind the public to wash their hands. The Department of Health invested \$180,000 in the campaign. The launch activity reached 1.7 million listeners and more than 800,000 viewers. The campaign includes the placement of handwashing facilities and nudges in public places, such as markets, transport hubs, government offices, malls, restaurants and churches in selected cities and municipalities. The campaign aims to mobilize businesses, local government units and community-based organizations. For example, Manila Water Foundation Inc., a corporate foundation of large water concessionaires, is supporting community activations and private sector engagement in the National Capital Region, while a Provincial Health Office in Biliran is helping the campaign with a grant from the Department of Health. Strong monitoring will assess the effectiveness of campaign interventions.

Box 2. Successfully nudging handwashing in primary schools in the Philippines

UNICEF WASH in the Philippines collaborated with colleagues of the research group IDinsight to conduct randomized control trials on nudging handwashing among primary school students. The study examined the impact of nudges that target the knowledge-behaviour gap for hand hygiene. Of 132 schools, half received nudges, including contextual cues (painted footpaths from toilet to handwashing station) and visible reminders (posters and stickers). The study found a 17 per cent increase in handwashing with soap and water among students when compared with the control group and a 36 per cent increase in the availability of soap at handwashing stations. The analysis suggests the programme had simultaneously nudged students to wash their hands with soap in schools that already had soap and nudged teachers to provide soap where it was not already available. These findings demonstrate that behavioural nudges costing less than \$70 per school led to significant increases in handwashing with soap among students four months after the intervention. The results of the study were published in the *American Journal of Tropical Medicine and Hygiene*.

Source: Huang, Haijing Crystal, et al., *Nudging Handwashing Among Primary School Students in the Philippines: Evidence from a cluster randomized trial*, *American Journal of Tropical Medicine and Hygiene*, vol. 105, no. 6, 2021.

WASH in institutions



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The ambitions of universal access to WASH services includes schools and health care facilities. But the pandemic has underlined the importance of hand hygiene facilities in other public places, such as workplaces, government buildings, markets, transportation centres and places where children and their families spend time. In 2021, UNICEF country offices in the East Asia and Pacific region helped provide WASH services in 7,427 schools and 306 health care facilities through direct support, as part of the safe reopening of schools and infection prevention and control in schools and health care facilities and to lay the groundwork for pandemic recovery.

UNICEF has been instrumental in supporting national guidelines and monitoring protocols to safely reopen schools during the pandemic. The eighth International WASH in Schools Learning Exchange, promoted by EAPRO, the UNICEF Regional Office for South Asia, GIZ and WaterAid, was conducted over three days online. It brought together more than 300 delegates from governments and civil society from across the Asia and Pacific region to discuss ongoing efforts to support school reopening as well as other important topics, like climate resilience and menstrual health.

The special focus on the needs of girls and women – whether as students, teachers, patients seeking health care or health care workers – has resulted in great attention on menstrual health and hygiene as well as other aspects of gender inclusion. Partnerships with organizations of people with disabilities have also resulted in specific adaptations to services so that they are more inclusive.

Following the United Nations Secretary-General's Call to Action for Improved WASH in Health Care Facilities in 2018, UNICEF continued to help provide WASH services in health care facilities and to strengthen infection prevention and control through guidelines, capacity development and supplies.

Most of the schools reached in 2021 were in the **Philippines**, where the Department of Education has integrated the three-star approach under its national school health programme. The three-star approach is gradually being introduced nationwide, province by province, and aided by the national WASH in schools learning exchanges and other capacity-development activities. UNICEF still supports these efforts but the majority of the funding is provided by the Department. In 2021, the Department of Education added a specific budget line for WASH in schools, with a budget of 358 million pesos (approximately \$7 million) of earmarked funds in the National Expenditure Plan.

In **Indonesia**, together with the Public–Private Partnership on Handwashing with Soap, UNICEF supported the safe reopening of 15,000 schools with COVID-19 Safe School Kits, reaching more than a million children. And 1,620 sanitarians, teachers and government staff were trained on hygiene behavioural change interventions in communities, schools and health care facilities. UNICEF worked with the Ministry of Education, Culture, Research and Technology on the introduction of the global WASH in schools indicators to monitor the situation in the more than 300,000 schools in Indonesia. Using a sample-based approach, this information will be applied for planning and resource allocation. Together with the Ministry of Health and the NGO SNV, UNICEF conducted a costing analysis and investment needs assessment for WASH in primary health care centres. The costed road map for WASH in health care facilities informs the planning process of subnational governments throughout Indonesia. The UNICEF-supported

work in the country over the past years on standards and indicators for WASH in schools and their inclusion in the Education Monitoring Information System has resulted in the first national estimates made by the WHO and UNICEF Joint Monitoring Programme for SDG reporting. Indonesia is one of 10 countries in the region with data for all three WASH services in schools.

In the **Lao People's Democratic Republic**, in collaboration with GIZ, the Government has successfully scaled up the three-star approach to WASH in schools to cover 15 of the 18 provinces. With UNICEF support, the three-star online monitoring tool was expanded to include three more provinces, bringing the total to six provinces. With funding from the Global Partnership for Education, UNICEF is providing water supplies, hand hygiene facilities and hygiene behavioural change education to 250 schools.

In **Mongolia**, UNICEF supported the development of climate-resilient WASH in school facilities, which combine indoor school toilets with public indoor toilet and bathing facilities for the surrounding communities. This approach successfully led to an increased budget allocation by the Ministry of Education and Science for the construction or rehabilitation of indoor facilities nationwide. The year-round water supply to these facilities has greatly improved the hygiene situation in the schools and in the communities.

Throughout the Pacific island countries, UNICEF supported the construction of WASH facilities in 139 schools: 42 in **Vanuatu**, 38 in **Solomon Islands**, 31 in **Fiji**, 22 in **Kiribati** and 6 in **Palau**. In 2021, the Multi-Country Formative Evaluation of the Pacific WASH in Schools three-star approach was completed, covering more than 600 schools in **Fiji, Kiribati, Federated States of Micronesia, Solomon Islands** and **Vanuatu**. The main findings included strong government buy-in through policies and support and marked improvements in hygiene behaviour of students in the model three-star schools. The programmes were found to be less effective on the embedding of WASH in schools in local or national budgets to secure the financial support to sustain the services or cover their operation and maintenance costs. The evaluation recommended a better articulated theory of change for the introduction of the three-star approach, aimed at scaling up and sustaining gains made, increasing the climate resilience of facilities and increasing the focus on inclusion, particularly for children with disabilities.

New funding allowed UNICEF to engage governments on WASH in a health care facility programme in **Fiji, Kiribati, Federated States of Micronesia, Samoa, Solomon Islands** and **Vanuatu**. The programme started with various data collection initiatives to address the data gap on health care facilities throughout the region. Also, 46 participants from the Pacific completed the eight-module online WASH in health care facilities academic training course organized by Emory University (in the United States).

In **Papua New Guinea**, UNICEF supported the construction of WASH facilities in 116 schools. In 2021, the Government endorsed the Student Hygiene Club guidelines. Student hygiene clubs are now operational in 244 schools. The clubs focus on behavioural change communication and address among other things menstrual health and hygiene and the better use and maintenance of sanitation facilities. More than 115,000 school children participated in the celebrations of the different WASH awareness campaigns and days, including Menstrual Hygiene Day, Global Handwashing Day and World Toilet Day. UNICEF supported the construction of WASH services and conducted training activities in 29 health care facilities serving a combined population of more than 300,000.

In **Timor-Leste**, UNICEF supported WASH services in 91 schools, benefiting nearly 13,500 children. With \$1,000 of seed funding per school from the Global Program for Education, the programme engaged communities to explore what roles they, parents, school leaders and students could take up to ensure the proper operation and maintenance of the school WASH facilities and how inclusive facility designs could cater for students with disabilities and for girls to manage their menstruation with privacy and dignity. UNICEF also supported the Ministry of Health with the roll-out of national standards for WASH in health care facilities.

In **Myanmar**, UNICEF supported construction of WASH facilities in 2,774 schools and 35 rural health care facilities. A comprehensive WASH in schools behavioural change package for school children was developed for use by partners, including WASH and Education Emergency Cluster partners. The package includes a module for home-based learning programmes.

In **Viet Nam**, UNICEF helped upgrade WASH facilities in 105 schools and health centres with disability-inclusive designs and benefiting more than 73,000 people.

Box 3. Scaling Oky, the girl-friendly period tracker app

Oky is the first-of-its-kind open-source mobile phone period tracker and menstruation education application co-created with and for girls through the UNICEF East Asia and Pacific Regional Office as a collaboration between gender and WASH specialists. Oky illustrates innovative tech design that tackles the taboo, stigma, misconceptions or harmful practices and lack of quality information related to menstruation and sexual and reproductive health for girls. Oky was built together with girls to accommodate their digital realities (connectivity, devices, literacy, gatekeepers) and followed extensive human-centred design processes, whereby girls in Indonesia and Mongolia reflected on the barriers to menstruation information and brainstormed on how to break the silence and myths surrounding periods, sexuality education and reproductive health. Although there are more than 200 commercial period tracker apps available in the global market, they target adult women rather than girls and typically focus on conception. These commercial period tracker apps are often not educational, can be gender-stereotyping, overpromise on predictions and often charge fees. They are not open source and are rarely adapted to local languages or contexts. There are concerns that data entered in commercial apps may be compromised or used by third parties. And foremost, they are rarely tailored to girls' specific needs and experiences. Hence, the need for the Oky tracker.

Oky was successfully launched in 2020 on International Menstrual Health and Hygiene Day (May 28), in the pilot markets of Indonesia and Mongolia and using TV shows and digital media due to COVID-19. The Oky app helps girls to learn about puberty, menstruation and sexual and reproductive health in ways they want, on the digital devices available to them. It empowers girls to manage their periods with confidence and normalcy. More than 55,000 users, the vast majority of them girls, downloaded the app within the first couple of months of the launch. During the COVID-19 pandemic, UNICEF and partners have also leveraged the Oky app to integrate COVID-19 information into the content in girl-friendly language. The Indonesian version, for example, includes localized content on COVID-19 prevention and myth-busting, which has now also been integrated into the global version of the app and will be used in other country versions.

In 2021 and with investment from the Australian Department of Foreign Affairs and Trade, UNICEF started taking Oky to scale in Indonesia, Papua New Guinea and the Philippines to bring its benefits to the greatest number of girls and boys. To do this, country offices sought new partners to localize Oky in Papua New Guinea and the Philippines, and new formats to make the app most appropriate. In the Philippines, Oky will build on the ongoing **#MeronAko Campaign** materials, reach and partnerships supported by UNICEF and the Department of Education. In Papua New Guinea, where the gender digital divide is stark, girls and young women face large barriers to mobile phone ownership and usage, UNICEF is seeking ways to deploy Oky as a simplified digital product that is relevant for the context and that will meet the needs and digital realities of girls. This includes interactive voice response product that runs on basic phones with the Oky content repurposed as audio, as a simple chatbot or as a **KaiOS app** that can run on low-cost 'smart feature' phones.

Disability inclusion is another new priority to be reflected in Oky. Oky is for all girls, and the Android and iOS app already include a read-out function for girls with low literacy or vision impairment. With partner organizations specializing in inclusivity, UNICEF is planning Oky adaptations and additional Oky products to cater to girls with physical and/or intellectual disability (with an opt-in 'easy read' function for girls with intellectual disability).

Climate-resilient WASH



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The East Asia and Pacific region is prone to extreme weather events, which are becoming more frequent and intense as a result of climate change. Rising sea levels pose a huge threat to many of the low-lying islands and coastal delta areas. Most countries experience periodic floods, and typhoons and cyclones regularly batter the Pacific Islands and the Philippines, among many countries. In 2020, UNICEF committed to ensure that all WASH support is climate-resilient, using three benchmarks: (i) climate-resilient wash services; (ii) climate-resilient communities; and (iii) use of renewable energy. As a baseline for this process, EAPRO completed a climate-resilient country profile assessment in 2019 using the GWP-UNICEF Strategic Framework for Climate-Resilient WASH. EAPRO developed the four-star approach to climate-resilient WASH to assist countries in making progress through four incremental steps of work: (i) sustained WASH services; (ii) assessed climate impact and emissions reduction for the services; (iii) community-wide climate-resilient approach that includes community protocols and a strategy of validation; and (iv) national-level climate-resilient services.

To support all countries in the region, EAPRO is leading the development of a **climate-smart technologies** catalogue with the Asian Institute of Technology to assist practitioners to

identify appropriate options. The catalogue will include comprehensive technical specifications with associated greenhouse gas emission data and energy efficiency in both online and offline versions.

In **Cambodia** and as part of a climate risk assessment, UNICEF supported flood risk mapping using GIS software and historical flood data to identify at-risk areas and communes. Through the United Nations Coordination Team, UNICEF provided inputs to discussions with the Mekong River Commission on linking water resources management and meteorological information to improve climate risk assessments. To reduce dependency on drinking water sources that are vulnerable to contamination by flooding, UNICEF helped establish five reusable water bottle-filling stations and the extension of three piped systems in flood-prone communes, benefiting more 14,000 people.

In **Fiji, Kiribati and Vanuatu**, UNICEF continued to scale up the well-established drinking water safety and security planning approach. This facilitates communities to carry out a risk assessment and prioritize among options for protecting their water sources against the effects of extreme weather events, such as flooding and strong winds. In Vanuatu, the drinking water safety and security planning approach is being further scaled up with the Department of

Water Resources, the Secretariat for the Pacific Community and funds from the Green Climate Fund to an additional 600 communities, targeting the most vulnerable.

In **Indonesia**, UNICEF partnered with the Institute for Sustainable Futures at the University of Technology Sydney and the Universitas Indonesia to study the impact of climate change on sanitation services in urban areas and the development of a climate-resilience framework and related guidelines (see Box 4).

In the **Lao People's Democratic Republic**, the Government shifted policy to integrate climate resilience into household drinking water supply programming. The policy now focuses on providing access to more resilient piped drinking water house connection services that reduce the reliance on local groundwater sources, which are at risk of contamination from recurring floods.

In **Mongolia**, UNICEF assisted the Government with the implementation of a community-based climate-resilient WASH programme on the protection of sanitation facilities in health care centres, schools and kindergartens from extreme winter conditions. UNICEF also helped provide climate-resilient WASH facilities in peri-urban and rural areas, ranging from automated smart water kiosks to public shower houses (with water- and energy-efficient technology) to small-scale wastewater treatment systems.

In **Viet Nam**, UNICEF organized a virtual workshop on climate-resilient WASH technologies, bringing together more than 100 participants from the Government and 40 provinces to share insights on strengthening climate resilience in WASH.

Box 4. Climate-resilient urban sanitation in Indonesia – Hazards, impacts and responses in four cities

Climatic trends in Indonesia over the past 30 years demonstrate an increase in surface temperatures, rainfall, more intense wet and dry seasons and an increased frequency of extreme events. Climate models indicate these hazards will increase in frequency and intensity. And 40 million people living in low-lying coastal areas of Indonesia are also at risk from sea-level rise. Population growth and urbanization will increase this risk, with the country's urban poor being most vulnerable.

To understand how sanitation systems may respond to more frequent or severe future hazards, UNICEF supported a study by the Universitas Indonesia and the Institute for Sustainable Futures at the University of Technology Sydney to assess the impacts and response of communities and systems to past and current climate hazards. It was one of the first multi-city in-field studies of climate impacts on sanitation services that consider the social and institutional impacts and actions for a community as well as local and national governments. The study report presents the findings of data collected in 2020 and 2021 from predominately low-income households, service providers and local governments in four locations with diverse climate conditions: Makassar City, Lombok Timur Regency, Palu City and Bekasi City.

The hazards assessed in these cities included sea-level rise, flooding, drought or water shortage and strong winds. Sanitation systems included communal scale and onsite sanitation – none of the cities had centralized sewerage. Evidence of climate hazards limiting access to safe sanitation was found in all four cities and across the entire sanitation service chain. The report explains how people revert to open defecation, suffer from distress in meeting defecation needs and are faced with overflowing toilets and onsite systems, restricted emptying services and damaged treatment plants. Close interaction of sanitation with the wider water cycle means that precious water resources may be increasingly contaminated. The findings aim to inform local and national governments of climate impacts on sanitation and provide the basis to increase awareness and motivate actions to improve climate-resilient sanitation. The practical recommendations stretch across four dimensions: (i) institutions, governance and services; (ii) financing; (iii) user and societal engagement; and (iv) infrastructure.

Enabling environment



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For UNICEF, strengthening the enabling environment for WASH refers to critical work on policy and strategy development, partnerships, coordination, advocacy, capacity development, exploring alternative funding and financing modalities and strengthening monitoring and accountability. UNICEF throughout the East Asia and Pacific region engaged in activities across all these areas in 2021, at the national and subnational levels. Previous sections highlighted some examples, and the following covers additional examples of UNICEF's efforts in strengthening the enabling environment for accelerating progress towards the water and sanitation goals under SDG targets 6.1 and 6.2.

Cambodia does not yet have national SDG estimates for the population with access to safely managed sanitation services. UNICEF worked with the Government on strengthening the national WASH SDG monitoring and reporting system in order to collect the information to report against the SDG indicators.

In **Indonesia**, UNICEF raised the profile of sanitation within the Government's development

agenda through several high-level events and interventions, including engagement on the 2022 Sanitation and Water for All Sector Minister's Meeting preparations, which will be hosted by the Government of Indonesia and co-convened by UNICEF. Following the high-level launch of the SDG 6 plan, multiple stakeholders engaged in the preparation of a costed road map for realizing the targets for safely managed sanitation and drinking water services.

Because of the COVID-19 pandemic, the **Lao People's Democratic Republic** is facing increased poverty and tighter fiscal space, which impacts on its social spending. The Government has embraced cost-effective and transformative approaches for WASH, such as community-led total sanitation, water safety planning, handwashing with soap and water and cost-recovery. They are reflected in the Ninth National Socio-Economic Development Plan.

Just prior to the military takeover in **Myanmar**, the final draft of the National Rural Sanitation and Hygiene Policy and associated Costed Implementation Plan that UNICEF supported was sent for approval and endorsement by the Government. Since the military takeover of the government, it has explored collaboration with civil society and international NGO partners who are still operational. Using the mWater monitoring platform, UNICEF continues to monitor programme implementation.

In the **Pacific**, UNICEF invested significantly in filling data gaps for SDG WASH reporting. In **Fiji**, UNICEF supported the development of the Water and Sewerage Act, a national water point survey and, through the Multiple Indicator Cluster Survey, the collection of drinking water-quality data to feed directly into national SDG monitoring. In the **Federated States of Micronesia** (through the College of Micronesia) and in **Fiji, Solomon Islands** and **Vanuatu**, UNICEF supported surveys on WASH in schools and WASH in health care facilities to strengthen evidence-based decision-making. The WASH in schools survey included modules on menstrual health and hygiene. In **Kiribati**, UNICEF supported assessments of health care centre and school WASH infrastructure, groundwater and water quality on North Tarawa Island. Throughout the Pacific and in partnership with Akvo Foundation, UNICEF continues to increase the capacity for using mobile data collection and reporting.



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In **Papua New Guinea**, UNICEF continued strong support to strengthen government and other sector partner systems. This included the roll-out of the National WASH Policy and a WASH bottleneck analysis conducted in Goroka District, which enabled the development of a district capacity-development plan. The WASH management information system (which uses mWater) was fully operationalized to strengthen evidence-based planning and monitoring, and its coverage expanded to more than 1,745 communities, 825 schools and 162 health care centres covering 14 districts across nine provinces. The National WASH Advocacy and Communication Strategy was endorsed and launched in all 89 districts, significantly contributing towards raising the profile of WASH in the country. The National Department of Health adopted the national community-led total sanitation manual, which UNICEF had helped develop.

In the **Philippines**, a WASH bottleneck analysis tool refresher training at the national level and in a subnational workshop in Mindanao resulted in a plan for strengthening the subnational systems to deliver WASH services.

In **Timor-Leste** and following major institutional reforms, UNICEF reformulated its partnership with the Ministry of Public Works, the National Water and Sanitation Authority and Bee Timor-Leste – the government entity charged with the establishment, operation and maintenance of public WASH services. This greatly increased sector coordination, improved SDG monitoring and led to the integration of climate resilience in national WASH programming.

In **Viet Nam**, UNICEF supported the Ministry of Agriculture and Rural Development on the formulation of a new National Strategy on Rural Water Supply and Sanitation, 2021–2030, with a Vision to 2045, in collaboration with the NGO East Meets West. UNICEF's assistance ensured that the strategy addressed climate resilience, prioritized marginalized (ethnic minority) groups and included sanitation and hygiene. The strategy was approved by the Parliament in November.

Box 5. Data availability for reporting against Sustainable Development Goal targets 6.1 and 6.2

Many countries in the East Asia and Pacific region lack data to report on progress towards SDG targets 6.1 and 6.2, according to the WHO and UNICEF Joint Monitoring Programme, which maintains nationally representative estimates of access to WASH services at the household level, in schools and health facilities. As shown in the table, more than half of the countries in the region lack national estimates for safely managed drinking water or sanitation services. Data on WASH in schools are available for half of the countries in the region. Data on access to WASH services in health care facilities are least available. With a mandate from the United Nations General Assembly to report against progress towards these targets, UNICEF works with national statistics offices and ministries of education and health to fill these data gaps.

Data availability, by country in the East Asia and Pacific region for SDG targets 6.1 and 6.2



	WASH SERVICES IN HOUSEHOLDS (2020)					WASH SERVICES IN SCHOOLS (2019)			WASH SERVICES IN HEALTH CARE FACILITIES (2019)		
	Water		Sanitation		Hygiene	Water	Sanitation	Hygiene	Water	Sanitation	Hygiene
	Basic	Safely managed	Basic	Safely managed	Basic	Basic	Basic	Basic	Basic	Basic	
Cambodia	●	●	●	●	●	●	●	●	●	●	●
China	●	●	●	●	●	●	●	●	●	●	●
Cook Islands	●	●	●	●	●	●	●	●	●	●	●
Democratic People's Republic of Korea	●	●	●	●	●	●	●	●	●	●	●
Fiji	●	●	●	●	●	●	●	●	●	●	●
Indonesia	●	●	●	●	●	●	●	●	●	●	●
Kiribati	●	●	●	●	●	●	●	●	●	●	●
Lao People's Democratic Republic	●	●	●	●	●	●	●	●	●	●	●
Marshall Islands	●	●	●	●	●	●	●	●	●	●	●
Federated States of Micronesia	●	●	●	●	●	●	●	●	●	●	●
Mongolia	●	●	●	●	●	●	●	●	●	●	●
Myanmar	●	●	●	●	●	●	●	●	●	●	●
Nauru	●	●	●	●	●	●	●	●	●	●	●
Niue	●	●	●	●	●	●	●	●	●	●	●
Palau	●	●	●	●	●	●	●	●	●	●	●
Papua New Guinea	●	●	●	●	●	●	●	●	●	●	●
Philippines	●	●	●	●	●	●	●	●	●	●	●
Samoa	●	●	●	●	●	●	●	●	●	●	●
Solomon Islands	●	●	●	●	●	●	●	●	●	●	●
Thailand	●	●	●	●	●	●	●	●	●	●	●
Timor-Leste	●	●	●	●	●	●	●	●	●	●	●
Tokelau	●	●	●	●	●	●	●	●	●	●	●
Tonga	●	●	●	●	●	●	●	●	●	●	●
Tuvalu	●	●	●	●	●	●	●	●	●	●	●
Vanuatu	●	●	●	●	●	●	●	●	●	●	●
Viet Nam	●	●	●	●	●	●	●	●	●	●	●
East Asia and Pacific regional estimate availability	●	●	●	●	●	●	●	●	●	●	●

Leveraging WASH investments



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UNICEF's role throughout East Asia and the Pacific in leveraging domestic and international resources for WASH is gaining in importance as governments continue to increase their capacity to provide these services. UNICEF is well-placed to assist governments in attracting more financing for children, including financing for WASH. Various new international funding mechanisms associated with climate or the COVID-19 pandemic include provisions for governments to fund WASH interventions. UNICEF throughout the region increasingly works with governments on determining investment opportunities and on grant applications that tap into these new funding mechanisms.

In **Cambodia**, UNICEF worked with the Ministry of Industry, Science, Technology and Innovation in 2021 on expanding the application of the Guiding Principles for Pro-Poor Water Connection Subsidies. This allowed the Ministry to leverage a \$2 million loan from the World Bank to accelerate the connection of poor households to a piped drinking water supply system. UNICEF is also collaborating with the United Nations Development Programme (UNDP) to advance the design of a proposed innovative Climate Adaptation and Mitigation (CLEAN) financing

mechanism from the United Nations Joint SDG Fund. The aim of the CLEAN mechanism is to leverage funding from other investors and domestic financing from commercial banks for improved WASH and solid waste management services for more than 100,000 people in five provinces. The programme will involve local authorities and private sector service providers and to achieve increased efficiencies for public infrastructure investments financed through sovereign lending to Cambodia by the Asian Development Bank.

In **Vanuatu**, UNICEF helped the Department of Water Resources and Secretariat of the Pacific Community obtain Green Climate funding of \$14.7 million for a four-year period. The project aims to achieve a paradigm shift towards climate-resilient water security for rural areas by enhancing community-based planning and adaptation for climate-resilient water management, developing climate-resilient rural water infrastructure and creating an enabling environment at the provincial and national levels to better address the climate risks associated with water security.

In **China**, UNICEF established a South–South cooperation partnership with the Ministry of Agriculture and Rural Affairs' Academy for Agricultural Planning and Engineering. It leveraged \$900,000 from the Asian Development Bank and the Poverty Alleviation and Regional Cooperation Fund to support WASH in Central Asian countries through a WASH knowledge hub. The hub promotes rights-based, gender-responsive and climate-resilient WASH norms and practices through technical government partners engaged in South–South Cooperation on WASH. Partners that signed up to support the hub include the IRC Global Hub, the Stockholm Water Institute, the Bill & Melinda Gates Foundation innovation team and the World Bank Water Team.

In **Indonesia** and to mobilize alternative funding sources to serve poor households, UNICEF together with the National Development Planning Agency (BAPPENAS) and the National Zakat Board (BAZNAS) launched technical guidelines for allocating zakat funding for WASH. The launch brought together more than 200 participants representing BAZNAS, the Indonesian Ulema Council, universities, Islamic microfinancing institutions, the private sector

and local government in 76 districts and cities for learning sessions on financial instruments and models in support of WASH. These options range from Islamic microfinancing for sanitation to allocating corporate social responsibility funds to community water supplies.

An integrated cross-sector approach to contain the spread of COVID-19 in the **Pacific** mobilized an additional \$9 million to improve WASH in health care facilities. This resulted in new WASH in health care facilities programming in **Fiji, Kiribati, Federated States of Micronesia, Samoa, Solomon Islands** and **Vanuatu**.

In the **Philippines**, UNICEF and the Asian Development Bank exchanged letters to collaborate on an urban sanitation programme in Baguio City. Together with the Asian Development Bank and the Government, UNICEF will provide technical assistance on the introduction of the citywide inclusive sanitation principles and on social and behaviour change.

In **Timor-Leste**, UNICEF assisted the National Designated Authority with the submission of a Readiness Proposal to the Green Climate Fund. UNICEF also collaborated with UNDP on making a joint submission to the Green Shark Challenge, proposing an innovative school model with climate-resilient WASH services.

Engaging with the business sector

A growing civil society and strong business sector in the East Asia and Pacific region means an increasing opportunity for UNICEF to leverage support for its mission and mandate, including addressing WASH service gaps. To achieve SDG 6, UNICEF is looking to strengthen its engagement with the business sector to provide WASH services for all, but particularly for marginalized and unserved urban and rural communities. UNICEF's Regional WASH Evaluation recommended the development of a partnership strategy with the business sector, with engagement modalities and wide dissemination. In 2021, EAPRO carried out a landscape study of business engagement in the region, with a focus on Cambodia, Indonesia, Mongolia, the Philippines and Viet Nam. The study looked at the current and potential role of businesses, multistakeholder partnerships, business aggregators and other actors in providing WASH services, as an employer,

as a creator of impact on communities with WASH implications, as a source of technology, innovation and financing or as a voice and influence to advocate for children's rights to water and sanitation.

Engaging businesses in hand hygiene to respond to and recover from the pandemic was a priority across the region in 2021. EAPRO worked with partners on a virtual Mobilizing the Business Sector for Hand Hygiene for All event in March 2021 that brought together more than 200 people from the business community and public sector to share experiences and foster dialogue. Covering countries from Afghanistan to Vanuatu, the Asia-Pacific conference was co-hosted by Plan International, the World Business Council for Sustainable Development, the International Federation of Red Cross and Red Crescent Societies, WaterAid, the Freshwater Action Network South Asia and the UNICEF Regional Office for South Asia. At the end of the event, dozens of businesses and individuals committed to hand hygiene and supporting the most vulnerable communities, including children and their families, with the means to protect their health and environment. Some businesses committed to review their health and safety protocols or to ensure that all workers



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have access to handwashing services. Other businesses committed to form new partnerships so that hygiene supplies and services can reach everyone.

In a follow-up to the conference, EAPRO launched the *Hand Hygiene for All: Resource guide for business* on Global Handwashing Day 2021. The guide helps businesses learn and take action to improve water, sanitation and especially hand hygiene. The scope of the guide includes workplaces, business operations and supply chains and surrounding communities. The guide includes multiple references for where businesses can find more information and resources to support business actions. A summary version is also available to give a short overview of resources and actions for businesses.

In **China**, Chinese companies participated in the regional virtual conference Mobilizing the Business Sector for Hand Hygiene for All that EAPRO organized in March 2021. Four large companies made public pledges to help increase access to WASH and promote hand hygiene among their workforce. The State Grid Corporation in Qinghai Province allocated corporate social responsibility funds for rural sanitation programmes. Following a regional sanitation expo organized by EAPRO in June 2021, three innovative companies were selected by Aape to further demonstrate and scale their innovations: an indoor water-saving toilet, an in-situ high-efficient composting toilet and a bio-toilet.

In **Indonesia**, a Public–Private Partnership on Handwashing with Soap was developed in 2020 with UNICEF support, bringing together 17 members, including the Government, companies, development partners and civil society organizations. In 2021, UNICEF worked with members of the public–private partnership to collect in-kind donations for the creation of COVID-19 Safe School Kits, which were distributed to 15,000 schools and reached more than a million children. Building on global resources and activities under the WASH4Work partnership, which aims to expand access to services in workplaces, UNICEF collaborated with the Indonesian Ministry of Manpower and various business associations on a landscaping analysis of WASH conditions in workplaces and surrounding communities. Issues like WASH climate resilience and menstrual health and hygiene in the workplace are now also under discussion with these collaborators.

Innovations



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The regional WASH Young Changemakers programme, which EAPRO manages, brought in a new cohort of innovators in 2021. The programme uses young people's talent to develop WASH innovations. The 2021 innovators responded to the theme of 'Future-proof WASH', with solutions that target such challenges as climate change, water and resource scarcity, public health emergencies, urbanization and migration. Five finalists were accepted into the programme from more than 80 applications.

Although many studies have shown that the WASH workforce overwhelmingly comprises men, all five of the WASH Young Changemaker finalists in 2021 were women. A women's cohort presented an opportunity to tackle the gendered challenges faced by women innovators, such as stereotypes, discrimination and limited networks. Through the programme, UNICEF amplified the voices of women in the WASH sector, celebrated women leaders, created more women-friendly professional networks and focused on online spaces where women can feel safe and respected. The five finalists were coached and presented their pitches virtually to more than 50 participants from different entities and organizations in the public and private sectors.

They received mentoring and other assistance to further develop their innovations. New engagements with UNDP, Indorama ventures, Thammasat University in Thailand and others were achieved through the 2021 programme.

Following the success of the regional programme, UNICEF China initiated a Young Changemakers event engaging adolescents in WASH-related innovations as well as primary school-aged children in a water-related art competition. Guidance to localize the programme to the country level has been prepared, and UNICEF country offices in Indonesia, Myanmar and Indonesia are planning similar initiatives for 2022.

Humanitarian response



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In all countries, UNICEF helped governments with activities aimed at limiting the spread of COVID-19. The WASH support included social and behavioural change focused on hand hygiene and the provision of essential supplies to schools, health facilities and COVID-19 testing and quarantine and treatment centres. In many countries, UNICEF worked with the education ministry on guidelines and, in some cases, essential WASH services to facilitate the safe reopening of schools. To support learning and exchange, EAPRO reviewed lessons learned from the pandemic response in China, Mongolia, Myanmar, the Pacific, the Philippines, Timor-Leste and Viet Nam.

UNICEF continued to respond to rapid onset emergencies and humanitarian crises with WASH support in countries affected either by civil strife or climate-related extreme weather events. During 2021 and throughout the region under UNICEF's emergency and humanitarian programming, 480,000 people were reached with basic drinking water supplies and 195,000 with sanitation facilities.

EAPRO continued to co-chair the Regional WASH Humanitarian Coordination Platform with the International Federation of Red Cross. A new learning and collaboration agenda for this platform will focus on priority topics, such as the triple nexus (humanitarian–development–peace), greening the response, protection and social inclusion and other areas in need of collective strengthening. UNICEF also initiated new work to use WASH as a catalyst for peace in conflict-affected communities in Myanmar and Papua New Guinea, with specific attention to the role of young people as agents of change.

By far, the largest emergency response of the year was in **Myanmar**, where 237,500 conflict-affected people were provided with drinking water supplies and 37,500 people received sanitation facilities. The humanitarian support focused on Rakhine, Kachin and Northern Shan states, as per the Humanitarian Response Plan, but expanded to Chin, Saging and Kayin states following the military takeover of the government on 1 February 2022, which resulted in displacement of people in areas not previously affected.

In **Thailand**, UNICEF expanded collaborations to meet the humanitarian WASH needs of people fleeing violence along the border with Myanmar. UNICEF provided training to partners in the Thailand WASH Sector Working Group on protection in WASH, gender-based violence risk mitigation, prevention of sexual exploitation and assault as well as WASH standards – strengthening the quality of response activities across the sector.

In **Fiji**, which was affected by tropical cyclones Yasa and Ana in December 2020 and January 2021, respectively, UNICEF responded to the extensive flooding that resulted, providing more than 11,000 people with emergency WASH supplies, including hygiene kits, portable latrines, water purification and disinfection materials. In Fiji and other Pacific countries, UNICEF continued its supporting role to the WASH emergency clusters, focusing on response, recovery, preparedness and climate-resilience activities.

In **Solomon Islands**, UNICEF supported the roll-out of the Safe Schools training programme in 432 schools in high-risk COVID-19 and other emergency zones. The training covered response, preparedness and climate resilience. In **Vanuatu**, UNICEF provided WASH disaster risk management training in four provinces for more than 80 participants from government and partners on standard operating procedures and coordination during an emergency WASH response. UNICEF helped facilitate a donation of 250 period-proof pants from the AWWA Company in New Zealand to the Government of Vanuatu to help address the menstrual hygiene management needs of women and girls in future emergencies. The Red Cross agreed to trial the use of the period-proof pants with 50 women

and girls to collect feedback. Period-proof pants are an innovative solution to address menstrual hygiene needs in emergencies and will be prepositioned for future emergencies.

After the heavy rains in March and April that resulted in flash flooding and landslides in 13 municipalities in **Timor-Leste**, including the capital Dili and its surrounding low-lying areas, which were worst hit, UNICEF contributed to a joint United Nations post-disaster needs assessment and the restoration of WASH facilities for more than 5,000 families.

In **Viet Nam**, which saw serious flooding at the beginning of 2021 that affected more than a million people, UNICEF collaborated with the Government to assist more than

Box 6. Water as a catalyst for peace in Myanmar and Papua New Guinea

Increasingly, global security analyses cite water as a strategic resource that, when not managed properly, can be a source of conflict and, in extreme cases, even threaten national and regional security. While water and WASH can be a source of conflict, they also can be positive drivers of social cohesion and contribute to peacebuilding. A 2013 study by Strategic Foresight Group found that countries that are actively engaged in water cooperation did not engage in conflict. As change agents, youth can be pivotal in the process of strengthening vertical and horizontal social cohesion and, hence, including them in such initiatives is critical.

In Myanmar and the Philippines, UNICEF is exploring WASH as an entry point for peacebuilding and conflict-sensitivity. In both places, UNICEF worked with partners in 2021 on water management and WASH conflict analysis. The collaboration will continue in 2022 on the design and implementation of water management and WASH interventions that are conflict-sensitive and help build social cohesion while engaging young people as agents of change for peacebuilding.

In Myanmar, UNICEF worked with its NGO partner ADRA and a consultant to carry out conflict analysis in Kayin State, which has been affected by civil war since 1949, with the ethnic armed organization known as Karen National Union fighting for an independent state. The conflict analysis was conducted using participatory action research with 24 young women and men and found conflicts between domestic and agricultural water users, with conflicts escalating in the dry season and exacerbated by poor water system design and maintenance. It also found gender disparities, with women bearing greater responsibility for water-related tasks but with less authority. The study showed that young people were willing to establish a water management committee to oversee the operation and maintenance of the water supply system and to set up a revolving fund for the sustainability of the system, while women and other influential leaders could reduce tension and promote social cohesion.

In Papua New Guinea, the conflict analysis was carried out in Goroka District and found that conflict between communities owning water sources and communities dependent on those sources were exacerbated by pollution and water scarcity. Based on that analysis, UNICEF and partners will develop an intervention to help reduce conflict with landowners and water users as well as water source pollution. It will train young people on peacebuilding and lead community consultations on WASH. The intervention is expected to facilitate the creation of a youth network for peer education on integrated water management and risk prevention.

177,000 households and hard-to-reach schools and health centres with hygiene supplies, water tanks and ceramic filters to restore access to safe drinking water supplies.

Regional support and partnerships



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EAPRO supported country offices to review progress, strengthen existing programming and move in new directions, in collaboration with governments and other sector partners, such as civil society organizations and business. Trainings and events in 2021 reached more than 1,500 WASH professionals from more than 30 countries and varied in scope and subject: climate-resilient WASH, WASH in schools, safely managed sanitation, hand hygiene, menstrual health and hygiene, disability inclusion and ways to increase collaboration with other sectors, such as nutrition, health and education. EAPRO supported documentation, learning and knowledge-sharing across the region, resulting in four regional publications, 18 country-specific publications, nine videos and 12 newsletters (see box 7).

EAPRO organized a virtual **Regional Sanitation Expo** in June 2021, in collaboration with the Asian Institute of Technology, the Siam Cement Group and the Thai Chamber of Commerce, aimed at sharing innovative sanitation solutions and lessons from rapid progress in Thailand and other countries. The event brought together 200

sanitation practitioners from 80 organizations in 29 countries, representing business, government, NGOs and academia. They discussed opportunities to develop innovative solutions for the poorest communities by working together. The expo highlighted the momentum and potential for further business engagement to achieve safely managed sanitation for all, particularly for the most vulnerable and lowest-resource communities.

The thought leadership programme of EAPRO supported a **landscape study of the business sector engagement in WASH** in Cambodia, Indonesia, Mongolia, the Philippines and Viet Nam. The study assessed and categorized the business sector contribution to WASH in East Asian and Pacific countries using the programming approaches from UNICEF's Strategy for WASH (2016–2030). It also assessed the business sector potential for engagement in WASH in these countries. The study will result in the preparation of 'playbook' for the business sector to engage with UNICEF WASH and guidance for UNICEF country programmes to engage with the business sector.

To advance an intersectoral approach to **menstrual health and hygiene**, UNICEF EAPRO and WaterAid organized a learning series around Menstrual Hygiene Day. The three topics: (i) leaving no one behind, including a focus on girls and women with disabilities, sexual and gender minorities and emergency-affected persons; (ii) digital knowledge and skills, which were particularly relevant during the pandemic; and (iii) accelerating action and investment, which included hearing from youth innovators on the barriers to expanding their businesses. The learning series was attended by more than 250 participants from more than 20 countries. Recommendations included continuing to build the evidence base for menstrual health and hygiene; increasing investment by exploring blended finance; ensuring inclusive solutions; and supporting women-led enterprises.

UNICEF, GIZ and WaterAid hosted the **Eighth East Asia Pacific and South Asia International Learning Exchange on WASH in Schools** in November 2021 to discuss progress on reopening schools. The event brought together around 350 country delegates and more than 200 registered observers from government and support agencies in 23 countries. The discussions centred on WASH contributing to safe school reopening and opportunities to use the recovery from the pandemic to accelerate access to climate-resilient and inclusive WASH

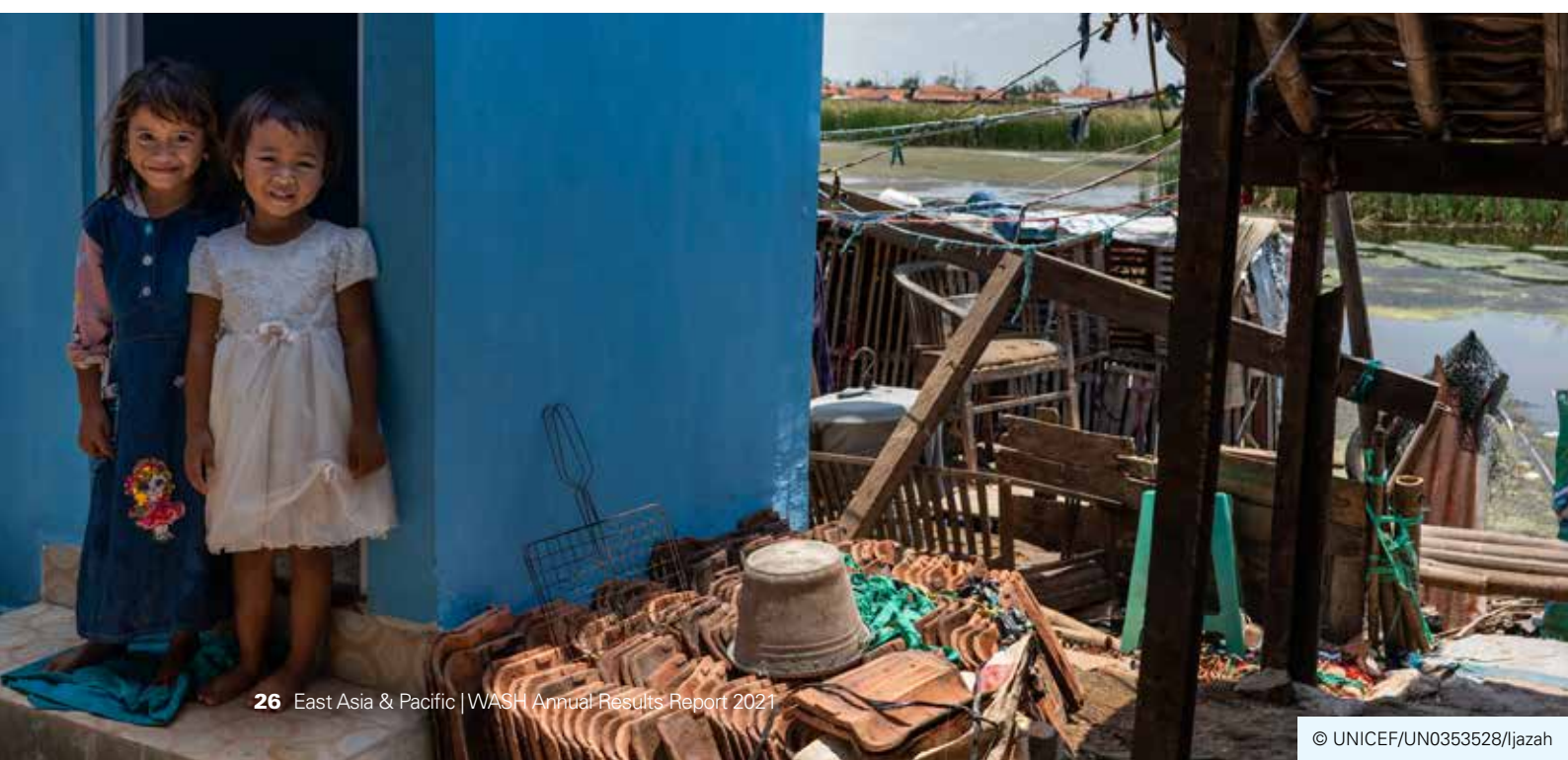
in schools. The state of WASH in schools and the impact of the pandemic was also analysed, while 17 country update videos prepared by governments provided an overview of the status and progress in the region. Technical sessions focused on WASH in schools and safe school reopening; monitoring and data management; and WASH in schools+ (menstrual health and hygiene and climate-resilient WASH). The third day involved country consultations, with delegations exchanging with each other on their action plans.

UNICEF collaborated with the Singapore Water Academy on two **joint training programmes** that capacitated more than 60 government officials from around the world, under the UNICEF–Singapore Cooperation Programme. The first course focused on leaving no one behind in WASH, including how to strengthen the enabling environment and improve the climate resilience of the sector. In 2021, the learning agenda was expanded to include a new course on integrated water resources management and climate resilience.

UNICEF deepened regional collaboration and partnerships with many organizations in 2021. In addition to the agencies already cited, UNICEF also engaged with the Asian Development Bank, the Asian Infrastructure Investment Bank and the World Bank at the regional level on topics ranging from the COVID-19 response to safely managed sanitation, as well as how UNICEF's technical capacity and position in the region could be leveraged in support of bank-financed investments. UNICEF also continued collaboration with the Association of Southeast Asian Nations

Secretariat and with one of its Health Clusters to initiate a policy review towards eventual support to a possible WASH declaration.

UNICEF developed an action plan for the **East Asia and Pacific Women in WASH Initiative**. This initiative looks inward at the gender balance within UNICEF's own professional staff as well as outward at UNICEF's potential to increase women's participation in the sector. Despite efforts to improve the gender balance of the UNICEF professional WASH cadre, a significant gender gap remains. This workforce gap is compounded by a leadership gap, with women (particularly those from lower-middle-income countries) even less likely to be in managerial or senior professional roles. UNICEF's Women in WASH Initiative is global, and in East Asia and Pacific, the new action plan was informed by a survey of all women colleagues. It includes such actions as mentoring, career counselling, peer networking, support for women's learning and training and support to women's supervisors. To advance gender parity in the sector outside of UNICEF, country offices in Papua New Guinea and Timor-Leste are carrying out studies on women's workforce participation in WASH and developing action plans with partners, such as women in engineering networks and other United Nations agencies. In Viet Nam, UNICEF is working on increasing opportunities for the advancement and career development of female employees in the Centre for Rural Water Supply and Sanitation at the provincial and national levels through a female leadership programme and other networking and mentorship programmes.



Box 7. Selected publications in the East Asia and Pacific region in 2021

UNICEF country and regional offices contributed to many studies, evaluations, field notes and other learning resources throughout 2021. The following gives a glimpse of the knowledge products.

Regional resources

- *Joint Monitoring Programme Snapshot of Household Drinking Water, Sanitation and Hygiene in East Asia and Pacific, 2000–2020*
- *Joint Monitoring Programme Snapshot of Household Drinking Water, Sanitation and Hygiene in Pacific Region and Pacific Islands, 2000–2020*
- *Hand Hygiene for All: Resource Guide for Business*

Field notes and technical papers

- *Real-time Monitoring of Handwashing Facilities in Myanmar* (UNICEF COVID-19 WASH response)
- *Manufacturing and Distributing Ceramic Filters for Use in Emergencies: An example from Viet Nam* (field note)
- *Building Professionalism in Disaster Management: Standardizing and certifying disaster management expertise in ASEAN* (field note)
- *WASH in Schools Programme: Better data is helping build a stronger success in Indonesia* (field note)
- *WASH in Schools Programme in the Philippines: Better alignment of policy and management changed the WASH in schools landscape* (field note)
- *Transformative Progress on Water, Sanitation and Hygiene in Schools Programme in Indonesia* (field note)
- *Building Capacity for Quality WASH in Schools Construction in Vanuatu* (field note)
- *Innovative Use of Social Media Taking WASH in Schools to Scale in Vanuatu* (field note)
- *Understanding Open Defecation Practices in Rural Aceh, Indonesia* (technical paper)
- *Mobilizing Domestic Revenue to Increase Safely Managed Sanitation in Indonesia* (technical paper)

Reports and papers

- *Market Assessment for Safely Managed Sanitation in Indonesia*
- *Country-Led Formative Evaluation of Community-led Total Sanitation in Timor-Leste (2012–2020)*
- *Formative Evaluation of UNICEF Three-Star Approach for WASH in Schools in the Pacific*
- *Sustaining Sanitation Services in the Time of COVID-19*
- *Behaviour Change Interventions for Strengthening Handwashing with Soap in Indonesia*
- *Making Water, Sanitation and Hygiene a Core Business Priority, Indonesia*
- *Data for Decision-Making During the COVID-19 Pandemic in Indonesia*
- *Climate-Resilient Urban Sanitation in Indonesia: Hazards, impacts and responses in four cities*
- *Nudging Handwashing Among Primary School Students in the Philippines: Evidence from a cluster randomized trial*
- *Self-Supplied Drinking Water in Low- and Middle-Income Countries in the Asia-Pacific*

Challenges and lessons learned



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The COVID-19 pandemic continued in 2021, with each successive new variant driving even larger numbers of infections in most countries in the region. Many countries faced community transmission for the first time in 2021, resulting in movement restrictions and school closings. This required continued flexibility, as teams throughout the region had to change their traditional way of supporting governments and working with partners by moving most communication online. Movement of UNICEF, government and other partner staff and supplies remained limited in some areas, but new operational modalities continued. Governments have largely managed to resume their role in regulating and facilitating the delivery of WASH services. The many online mobile-based monitoring and reporting tools gained significant importance, and many programmes across the region expanded the use of such tools.

Putting the last first: Addressing the WASH needs of poor and marginalized populations

As the number of people without basic services declines throughout the region, attention in many

countries has shifted to addressing the needs of the growing middle class. However, millions of people across East Asia and the Pacific still practise open defecation or use surface water for drinking – unacceptable deprivations. Those at risk of being left behind the overall progress in many countries tend to be ethnic minorities, persons living in hard-to-reach areas or otherwise marginalized and vulnerable households.

As governments look to recovery from the pandemic, UNICEF will continue to advocate on behalf of those at risk of being left behind. As the duty bearer for the human rights to water and sanitation, governments remain responsible to ensure access to at least basic WASH services to all, even when that requires considerable investment of public funds without full cost recovery through user tariffs.

Accelerating to deliver safely managed sanitation for all

The WHO and UNICEF Joint Monitoring Programme predicts that, at current trends, the East Asia and Pacific region will miss the SDG target of safely managed sanitation for all by 2030, by 460 million people. A doubling of the rate of effort is required to meet the target. In a region largely comprising middle-income countries with a robust private sector, there is ample opportunity for governments to accelerate progress. UNICEF supports national and local governments to create the enabling environment of policies, regulations and decentralized decision-making mechanisms in which local sanitation businesses can thrive, and this will remain an important part of the future workplan.

Persistent water quality challenges limiting the achievement of safely managed drinking water services

Only 11 of the 28 countries in the region can produce nationally representative estimates for the proportion of the population with access to a safely managed drinking water service. Such service must be accessible on premises, available at all times and free from contamination. A straight average across nine countries found that only 56 per cent of the household drinking water sources were considered to provide 'safe' drinking water – water without faecal contamination.³ This is

³ The straight average was not population weighted. The standard used for low risk was less than 1 *E. coli* cfu/100ml.

a major barrier in achieving safely managed services. To address it, UNICEF country offices will continue to promote and support the successful water safety planning approach to managing drinking water systems and support the collection of nationally representative data on water quality to advocate for increased investments in water safety.

Continued momentum for scaling up hand hygiene

The pandemic drew renewed attention to the importance of hygiene, especially hand hygiene and other preventive measures, such as mask wearing and social distancing. This stretched across the settings of schools, health care facilities, other public places and businesses. The take-up of the Hand Hygiene for All global initiative throughout the region and the good response to the United Nations Secretary-General's Call to Action on WASH in Health Care Facilities were positive developments, accelerated by the pandemic.

Pandemic and school closures affecting WASH in schools and menstrual health and hygiene

Building on the success of the WASH in schools programming around the region, almost all UNICEF country offices are supporting menstrual health and hygiene. Mainstreaming menstrual health and hygiene programmes in national curricula lifts the shroud of secrecy and

shame that surrounded menstruation for so long and timely informs girls about menarche and menstrual health and hygiene. Studies found that this raised girls' confidence and self-esteem. However, with widespread school closures continuing in 2021, such opportunities for in-person learning and support were limited. This showed the value of digital tools for self-guided learning, such as the Oky Period Tracker app. The expansion of Oky during the pandemic in Indonesia, Mongolia, the Philippines and Papua New Guinea aims to reach hundreds of thousands of girls through their mobile phones.

Short-term humanitarian funding in protracted crisis

The protracted crisis in Myanmar more than ever needs predictable funding to continue to support WASH service delivery to vulnerable populations through channels other than the de facto authorities. At the end of 2021, more than 320,000 people had been newly displaced within the country in 10 states and regions with critical humanitarian needs. Short-term emergency funding – while critical to meet acute needs – puts undue spending pressure on programmes and does not provide sufficient time for programmes that link humanitarian needs to sustainable development. Humanitarian funding is most valuable when it is multiyear and flexible, allowing for a sustainable response that creates resilience to future crises and shocks.



Financial analysis



This financial report focuses only on regional office expenditures. In 2021, EAPRO WASH planned a total of \$1,300,000, of which \$1,290,372 was spent for regional activities and technical support to countries.

Table 3. Planned EAPRO budget for the WASH sector, 2021 (in US dollars)

Outputs	Funding types	Budget planned 2021
OUTPUT 5.7: UNICEF EAPRO has strengthened capacity to design and implement gender-responsive, equity-focused WASH programmes that deliver results for the most disadvantaged children at scale.	Regular resources	0
	Other resources	300,000
OUTPUT 6.7: EAPRO has strengthened evidence, partnerships and resource-mobilization capacity to improve WASH outcomes.	Regular resources	0
	Other resources	1,000,000
Total		1,300,000

Note: ¹ RR: Regular resources; ORR: Other resources – regular (add ORE: Other resources – emergency, if applicable). ² Planned budget for ORR (and ORE, if applicable) does not include estimated recovery cost (only programmable amounts).

Table 4. Total funding received and sources of funding for EAPRO WASH, 2021 (in US dollars)

Grant	Allocated (2021)	Expenditure	Available amount
Regular resources*	\$229,430	\$229,430	\$0
SC170534 (UK Foreign, Commonwealth and Development Office, Accelerating Sanitation and Water for All II)	\$344,387	\$113,999	\$230,388
SC189906 (WASH Thematic Funding) <i>SC1899060006 (Japan Committee for UNICEF)</i> <i>SC1899060060 (Swedish Committee for UNICEF)</i> <i>SC1899060114 (Australian Committee for UNICEF)</i>	\$713,267	\$598,184	\$115,083
SC180673 (Australian Department of Foreign Affairs, Strengthening WASH Monitoring Capacity in East Asia and Pacific)	\$393,477	\$265,620	\$127,857
SM200202 (UK Foreign, Commonwealth and Development Office, Hygiene Behaviour Change Coalition)	\$50,000	\$50,000	\$0
SC200655 (Hand Hygiene for All Global and Regional Coordination, UNICEF USA)	\$33,140	\$33,140	\$0
Total	\$1,763,701	\$1,290,372	\$473,328

Note: * Regular resources received in 2021 included allocations from thought leadership funds for EAPRO as well as 7 per cent set aside funding under Water Security for All.

Table 5. Thematic expenses, by results area in 2021 (in US dollars)

Thematic expenses by results areas	Expense
Results area: Water	45,522
SC189906 2018–2021 WASH Thematic Pool	45,522
Results area: Sanitation	510,809
SC189906 2018–2021 WASH Thematic Pool	510,809
Results areas: Adolescent engagement and gender equality	41,853
SC189906 2018–2021 WASH Thematic Pool	41,853
Grand total	\$598,184

Table 6. Planned budget for EAPRO WASH in 2022 (in US dollars)

Outputs	Funding types	Budget planned 2022
Output 4.1 (WASH–Programme excellence): UNICEF East Asia and Pacific country offices have strengthened capacity to increase safe and sustainable access to and utilization of WASH services that deliver results for the most disadvantaged boys and girls in development and humanitarian situations.	Regular resources	0
	Other resources	610,000
Output 4.2 (WASH–Public goods): East Asia and Pacific region benefits from better-quality evidence, partnerships to advocate for and leverage resources and engagement from the public and private sectors to sustain and strengthen inclusive and equitable WASH outcomes for children.	Regular resources	100,000
	Other resources	930,000
Total		1,640,000





Future workplan

WASH in the EAPRO Management Plan 2022–2025

UNICEF's Strategic Plan 2022–2025 reflects the unreserved commitment to promote the rights of all children, everywhere, as stated in the Convention on the Rights of the Child. The Strategic Plan will guide synchronized action towards an inclusive recovery from the impacts of COVID-19, acceleration towards the achievement of the SDGs and the attainment of a society in which every child is included, without discrimination, and has agency, opportunity and their rights fulfilled.

UNICEF's ambition on WASH for 2022–2025 is reflected in the UNICEF Strategic Plan goal area 4: Every child, including adolescents, has access to safe and equitable water, sanitation and hygiene services and supplies and lives in a safe and sustainable climate and environment.

The EAPRO Management Plan for 2022–2025 aims to advance the five Strategic Plan goals and results areas across the region and to keep the realization of children's rights at the forefront of economic, social, environmental and human development in the recovery from the impacts of the COVID-19 pandemic. For WASH, the EAPRO Management Plan acknowledges that business as usual is no longer an option if the transformative progress needed to meet SDG 6 is to be achieved. Future-proofing the sector necessitates innovative approaches, partnerships, systems and technologies that will meet the challenges of tomorrow, including disease outbreaks, migration, urbanization, a changing climate and increasing pressure on natural resources. Reducing rather than exacerbating inequalities will require governments and service providers to respond with solutions that are practical, cost-effective and scalable – and contribute to job creation and economic growth.

For the interlinked areas of WASH, climate and environment, EAPRO will provide support and guidance to country offices to advance WASH future-proofing by ensuring: (i) water security is addressed in the region; (ii) sustainable, equitable, climate-resilient WASH programming

is supported through stronger evidence, policy and partnerships with an emphasis on young people, gender, disability and social inclusion; and (iii) child-sensitive, multi-sector programmes are implemented to address the impact of climate change and environmental degradation on children.

Climate-resilient WASH

Ensuring that all WASH support provided by UNICEF is aimed at advancing climate resilience is central to the entire agenda for 2022–2025. EAPRO will continue to support this shift by supporting risk assessments and options identification and implementation at the national level, together with support to strengthen monitoring of climate-resilient results. To benefit all regional partners, EAPRO is developing a catalogue of climate-smart WASH technologies (with the Asian Institute of Technology), developing training materials and resources to implement the Four-Star Approach to Climate Resilient WASH and develop a strong climate rationale for WASH in all countries. EAPRO will also seek to expand learning with many organizations around the region. For example, webinars jointly planned with the Institute for Sustainable Futures at the University of Technology Sydney on climate-resilient sanitation will share lessons from Indonesia, Timor-Leste and other countries with a wider audience. There is great opportunity for expanded exchange with Australian-based organizations on climate-resilient WASH in the lead up to the Water and WASH Futures Symposium in 2022 and a conference in 2023, both of which will focus on WASH and climate. To better articulate the current status of climate-resilient WASH infrastructure, UNICEF is working with the WHO and UNICEF Joint Monitoring Programme on the formulation of indicators and monitoring mechanisms to articulate and measure the level or extent of climate resilience of WASH services. Several studies are planned throughout the region to help shape these indicators.

Raising the profile of WASH with national and sub-national governments

The EAPRO WASH team will collaborate with a diverse range of regional partners to align strategies and efforts to address WASH issues of regional concern. Together with the country offices and regional partners, EAPRO will explore, document and disseminate new and innovative approaches and successful experiences for read across to other country offices, partners and governments. The upcoming Sanitation and Water for All partnership's Sector Ministers Meeting in May 2022 in Jakarta, hosted by the Government of Indonesia and co-convened by UNICEF, is an excellent opportunity to share some of these experiences and raise the importance of WASH in national development agendas across the region.

In addition to advocating with governments to continue to address the WASH needs of the poor and marginalized households without access to basic WASH services, EAPRO plans to deepen partnerships with organizations of people with disabilities for WASH in 2022 and provide UNICEF country offices with guidance for engaging with sexual and gender minority groups on WASH-related topics.

Expanding partnerships

The future-proofing agenda requires intersector collaboration with United Nations sister agencies, particularly on climate and linking WASH to integrated water resources management in arid areas where water tables are lowering or coastal areas where salt intrusion due to overextraction of aquifers threatens water supplies further land inwards. Similarly, to reach safe sanitation for all will require continued partnership with UN-Habitat and the Asian Development Bank, such as the recent collaboration between UNICEF and the Asian Development Bank in the Philippines on a Baguio City citywide inclusive sanitation project.

More broadly, EAPRO will seek to broker new partnerships with multilateral development banks on the different ways in which UNICEF country offices can contribute to the identification, formulation and implementation of Asian Development Bank- and possibly other

multilateral development bank-funded WASH loans and grants in the region. Following the completion of the landscape study on business engagement in five countries, EAPRO will seek new engagements with multistakeholder partnerships, business aggregators and businesses of different sizes across the region.

Safely managed sanitation and the circular sanitation economy

Achieving safe sanitation is not only a vision for fulfilling the human right to it but also for reducing emissions, greening cities and towns and creating dignified jobs and small businesses. UNICEF will continue to support further market assessments that assess the supply, demand and business environment, with EAPRO support planned for Cambodia, the Pacific Islands, Timor-Leste and Viet Nam in 2022. EAPRO will also assist country offices in incentivizing innovation, supporting better technical and financial performance of businesses for toilet construction and pit-emptying services and facilitating transport, treatment, disposal and re-use of human waste.

The safe reuse of treated wastewater or faecal by-products – termed the 'circular sanitation economy' – holds huge promise to create more and better sanitation jobs, support resource recovery and lower greenhouse gas emissions in the urbanizing parts of the region. The technologies to safely collect, transport, treat and re-use human waste have largely been developed but are not applied at scale. EAPRO plans a learning event on the circular sanitation economy and on nature-based solutions for safe reuse of faecal by-products and treated wastewater. It will also explore opportunities to form new partnerships in this area, with universities such as the Asian Institute of Technology, multilateral development banks such as the Asian Development Bank, NGOs such as Borda and multistakeholder partnerships such as the Toilet Board Coalition. Exploring the entry points with governments and local markets for scaling up the circular sanitation economy will be an important element for UNICEF's assistance on WASH in the East Asia and Pacific region in the years to come.

WASH in institutions

EAPRO will work with partners across the region to ensure that WASH in schools and health care facilities are climate-resilient and socially inclusive. This will mean applying climate risk assessments and selecting resilient and low greenhouse gas service options for these institutions critical to children.

After supporting WASH in schools programming in the region for well over a decade, countries have increasingly included budget lines for WASH in their education budgets. In some countries – notably Indonesia and the Philippines – UNICEF’s support to the local and national governments is achieving results at a large scale. In all countries, UNICEF will continue to work with ministries responsible for education on increasing the effectiveness of WASH in schools programming while exploring how to best involve civil society and the local private sector to support the provision, operation and maintenance of WASH facilities in schools. The innovative work of UNICEF with the Global Partnership for Education in Timor-Leste, where schools receive \$1,000 of seed funding towards WASH in schools improvement and where civil society organizations and parents provide additional support in cash and kind, holds great promise. The annual International Learning Exchange on WASH in Schools for East Asia and the Pacific and South Asia is an opportunity to share these good practices and lessons between governments and incorporate them into national action plans.

In partnership with the WHO, UNICEF country offices will continue to advocate for at least basic WASH services in health care facilities as a critical component of pandemic recovery and health system preparedness. EAPRO will continue to support country offices on implementing the Eight Practical Steps to Achieve Universal Access to Quality Care, developed in 2019 by WHO and UNICEF to respond to the Secretary-General’s Call to Action on WASH in Health Care Facilities. In partnership with UNESCO and WHO, UNICEF will also continue its support for the inclusion of WASH modules in Education and Health Monitoring Information System, to assess the current WASH situation in schools and health care facilities and to monitor trends.

Menstrual health and hygiene

A major barrier to improving menstrual health and hygiene for girls and women is the lack of funding and financing dedicated to related outcomes. This could be due to the multisector nature of menstrual health and hygiene support as well as to the lack of specificity among development actors in the types of funding or financing required for different aspects of menstrual health and hygiene. Globally, menstrual health and hygiene remains relatively undervalued and untapped by investors and donors, given its potential for achieving both social and financial returns. In 2022, EAPRO will collaborate with others to design financial vehicles to provide appropriate capital to a variety of organizations operating in the menstrual health and hygiene market, with a focus on (i) supporting small and medium-sized enterprises at the local, national and regional levels to increase market access and distribution of menstrual health and hygiene products and services and (ii) incentivizing innovation among large players in the menstrual health and hygiene space, including multinational enterprises, to expand the reach and impact of products and services in the region.

UNICEF, WaterAid and the Burnet Institute will collaborate to document progress towards supporting menstrual health and hygiene across the region. Through these efforts, UNICEF will aim to strengthen commitment and action for menstrual health and hygiene across the region and beyond. The review efforts will provide a framework for countries to share lessons learned and to set priorities for future action and monitoring.

Youth innovation

The initiatives and the energy that the WASH Young Changemakers bring to their work are examples of how good ideas can be brought to life with perseverance, energy and a little support from UNICEF. Building on the successful WASH Young Changemaker programmes at the regional level in 2020 and 2021, EAPRO will support country offices to initiate similar programmes at the national level in 2022. This will offer opportunities to bring in new national partners – organizations specialized in innovation

and entrepreneurship, business sector actors, youth movements and universities – and work together to create opportunities for young people. Country teams may explore how the WASH Young Changemaker programme can be linked to the idea of the circular sanitation economy, which is an issue that lends itself to many local initiatives that contribute to climate change mitigation.

Knowledge exchange, capacity development

The online learning exchanges co-organized with the UNICEF Regional Office for South Asia will also continue in 2022. They have been successful in attracting government participants, UNICEF staff and partners and were highly appreciated for updating participants on the latest developments in WASH. The Singapore–UNICEF Joint Training Programmes for government officials will continue in 2022. EAPRO will assist country offices in selecting participants for the different academic online short courses that have proven instrumental in establishing

critical capacity at the national level to take new WASH initiatives forward. EAPRO will continue to support the UNICEF country offices in the formulation of studies and the documentation of their experiences for sharing with other UNICEF offices in the region and beyond. Together, these are the pillars under the knowledge management strategy aimed at UNICEF WASH staff staying abreast of the latest developments and experiences on all things WASH.

EAPRO will further support multiple regional reviews and WASH thought leadership pieces that are of benefit to its country office programmes and that are tailored to the specific situations and needs in the region, with an eye to the future. Such studies include a thought piece on the fourth industrial revolution and its meaning and impact on WASH; an inventory of the potential for applying the principles of the circular sanitation economy in the region; and a piece on frontier technologies in the WASH sector in the region.

Donor

feedback form

We welcome feedback on this report from our valued partners across the region.

To provide feedback, please use the [online feedback form](#).





Human interest stories

Lao People's Democratic Republic:

Ending open defecation for cleaner and healthier villages

UNICEF, with funding from MMG through UNICEF Australia, is supporting a community-led approach to eliminate open defecation in Vilabouly District of Savannakhet Province

Written by Siliphot Sihaphom, 29 January 2021

<https://www.unicef.org/laos/stories/ending-open-defecation-cleaner-and-healthier-villages>

Nola Naduangchanh, 41, is a resident of Nam Khip village in Vilabouly District of Savannakhet Province, where she lives with her husband and three teenage daughters. Sitting atop a sunny and breezy hill, the village is home for 100 households. Walking through the village, it is now common to see an outhouse located within the vicinity of almost every home in the village. However, such a sight would have been quite rare in the village years ago.

“Many years ago, most families in our village did not have toilets in their homes, and a common practice among us was to rely on either the bushes or neighbours who owned a toilet, which I remember distinctly there being only around four families back then,” says Naduangchanh. “As for my own family, we were all forced out of necessity to dig and use a pit latrine, including my three young daughters.”

The practice of open defecation in Nam Khip left the surrounding environment of the village dirty and with an unpleasant smell. A lot of the people who practised open defecation before were also primarily children.

Open defecation is a major health problem for many communities where access to toilet facilities is unavailable. The practice can put communities at greater risk of diseases, such as waterborne diseases like diarrhoea.

There has been gradual improvement to the situation at Naduangchanh's village, and virtually every family in Nam Khip now has access to and is using a toilet. This change is the result of many different factors, including efforts by the Government and development partners. Over the past years, the situation has further improved due to the implementation of a water, sanitation and hygiene (WASH) in community programme supported by UNICEF in Vilabouly District.

The intervention, which is supported by funding from MMG through UNICEF Australia, was

introduced in Vilabouly District in 2018. It aims to completely eliminate the practice of open defecation in the district through the introduction of the community-led total sanitation approach.

“Seeing the impact made by open defecation on the environment of my own village and the harms that it poses to the villagers, especially to the young children, I decided to have a toilet built in my home around two years ago,” says Naduangchanh. “I am so happy now that we have a toilet at home. The village overall just looks much cleaner and healthier compared to before.”



Deputy village chief Naduangchanh shows the new water towers constructed by UNICEF

©UNICEF Lao PDR/2020/SSihaphom

The community-led total sanitation approach recognizes that simply providing toilets to communities does not guarantee its use and thus, focuses instead on mobilising communities to create open-defecation-free villages by changing behaviours and triggering demand for toilets instead of simply providing hardware.

Based on the community-led total sanitation approach, UNICEF's intervention focuses on providing cascade training on how to trigger demand for collective behavioural change around the practice of open defecation. The process begins at the district level, where district authorities receive training on community-led total sanitation and how to trigger demand for change by disseminating messages on sanitation and the health consequences of open defecation. Afterwards, district-level trainers provide training to village authorities on how to further trigger the community's desire to create behavioural change and a collective drive towards the creation of open-defecation-free villages. These trainings are targeted 14 villages in Vilabouly District, including Nam Khip. Naduangchanh was among the people who were trained.

Coincidentally, Naduang hanh was elected the deputy village chief in June 2020. Now she has the authority to continue the sanitation drive in her village so no child will ever have to face the same plight as her children experienced.

She is working hard to ensure that the people of her village do not revert back to practising open defecation again. Utilizing the techniques and knowledge that she has gained from the training, the newly elected deputy village chief and a team from the village committee visit individual households in Nam Khip quarterly. They spread awareness on the health consequences of open defecation, the importance of handwashing, toilet use and generally maintaining a clean and hygienic environment to safeguard the community against the spread of diseases. In addition to these house visits, she also uses village loudspeakers to raise awareness on sanitation.

"At first, many villagers were not accustomed to using toilets and did not see the importance of using toilets and the health consequences of open defecation. However, the attitude of the villagers toward the use of toilets has changed for the better since we began working to actively raise awareness about the harms of open defecation and the importance of good hygiene and sanitation to health," says Naduangchanh.



An outhouse toilet in every home has now become a common sight in Nam Khip village. "Now that every household in Nam Khip village is using a toilet our village is open defecation free. I feel extremely proud of the great collective effort among the villagers of Nam Khip to tackle the issue of open defecation," says Naduangchanh.

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Cambodia:

Better sanitation drives better education

How a school's sanitation situation was transformed by the staff and the local community working together

Written by Jaime Gill, 2 March 2021

<https://www.unicef.org/cambodia/stories/better-sanitation-drives-better-education-cambodia>



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"A few years ago, the sanitation situation here was horrible," says Norng Sothavy, director at Ang Roka Primary School, gesturing towards a brownish, weed-covered pond at the heart of her school's grounds in rural Takeo Province. "If the children wanted water for washing their hands, they had to get it from that pond, which was very unreliable. The water wasn't clean, and in the dry season the water would disappear. The children had to leave the school to get water. Even worse, there were only four old toilets, not nearly enough for the hundreds of children here."

"It really was bad," confirms Hoern Sing Huoy, 11, a Student Council member "Everything was so old. If you wanted to use the toilets, you didn't

ever feel like there was any privacy. There weren't any locks on the doors, and there were holes in the walls. So, most kids used to go to the toilet out in the school fields."

The situation may sound inconvenient and unpleasant, but Phong Vanny, village assistant in Knach Khang Tbaung village and leader of the School Support Committee, explains that it was far worse than that. "Safety used to be my biggest worry," she says, "Seeing the children washing their hands in muddy water was the most obvious risk. But it was also dangerous when they went to get water from outside the school because they were crossing roads, and traffic accidents do happen here."

Norng says that it was never a case of expecting a handout. "It was always clear that we had to make the changes happen... it wasn't just going to be done for us. The Department of Education officers helped us write a proposal. An important step was to set up a WASH Committee with teachers and community leaders who would help us to raise some of the funds in the local community and make sure it was a priority."

Fortunately, the school and the local community saw the problems clearly and united to find a solution. They contacted the local District of Education officer, who suggested they would be prime candidates for a UNICEF supported programme to improve water, sanitation and hygiene (WASH) in disadvantaged schools.

Khoem Sothy, a wiry 36-year-old with a thoughtful demeanour, is a teacher at the school and a father of one of the pupils, so he was quick to sign up as one of the first members of the WASH Committee. "I knew how much the children hated the old toilets, and I knew that some kids, especially girls, would sometimes not come to school because of them. So, I really believed in WASH, the whole Committee did. We helped with the fundraising and now we run activities to keep improving sanitation in the school."



Hoeurn Sing Hoy of the Student Council demonstrates handwashing in the school's new facilities
© UNICEF Cambodia/2021/Jaime Gill

As a result of the school's successful proposal, a new integrated WASH system was built, made possible by generous funding from PRIMARK. The first priority was building a toilet block, with three toilets and facilities for children with disabilities and the safe disposal of sanitary materials, both of which are rare in Cambodian schools. This was followed by the installation of an electric pump to bring up clean water from an underground well and a water filtration system for drinking water. At the same time, the old toilets were also refurbished and modernized with the funds mobilized by the school from the local community.

"The school is our top priority as a community. This is where our children get educated and build their futures," Phong says, proudly showing the still gleamingly clean toilet block. "This really matters to us. We want our children to be safe at school and to be able to have dignity when they use the toilet, especially the girls."

The new system proved its worth when the school was preparing to reopen after COVID-19 forced school closures for much of 2020. The teachers and community members all agree that they would have struggled to put in place proper safety procedures for the students if they had still been using the old, inadequate WASH system. "We were so lucky to have all the new facilities in place," Norng says, "They have helped us to teach the kids about good handwashing, and I know that the children then go back to their homes and teach their families too."

The impact of the new sanitation systems appears to have been swift, with the school's records indicating that absenteeism has dropped since the new WASH system was built, particularly among the teenage girls who were most affected by the previous poor set-up. In fact, the school's excellent facilities have become so well known that more than 30 children have transferred to the school to access them, which has in turn generated healthy competition among the different local school WASH Committees.



Boy at Ang Roka Primary School washes his hands in the new facilities supported by UNICEF

©UNICEF Cambodia/2021/Jaime Gill

"We do compete with the other schools in the area, each school wants to be the best," says Khoem. It's the kind of rivalry that ultimately benefits students by creating more hygienic and happy environments for their learning."

Indonesia:

Handwashing helps schools safely reopen

UNICEF and the Government of Indonesia are installing handwashing facilities and promoting hand hygiene in schools during the COVID-19 pandemic

Written by Adinda Silitonga, 13 April 2021

<https://www.unicef.org/indonesia/stories/handwashing-helps-schools-safely-reopen-across-indonesia>



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Handwashing with soap is one of the most effective ways to protect against COVID-19 infection. Yet, not everyone knows how to do it properly. In March 2020, most schools in Indonesia closed their doors to control the spread of the coronavirus. As they prepare to fully reopen during the pandemic, hand hygiene is more critical than ever to keep students and teachers safe when they return to the classroom.

In East Lombok, the local government has received support from UNICEF to install several handwashing facilities in schools, including the State Elementary School 4 Rarang in Terara District.

Sopi, a public health sanitarian at the Rarang community health centre, visited the school to educate teachers on proper handwashing and remind students to wash their hands. "I am very proud to do



Ramzul, an official with the East Lombok Health Office, gives a presentation to teachers on how to disinfect classrooms and prepare hand sanitizer and disinfectant solution
© East Lombok Health Office/2021

this work because it is important for the future generations of our country," she says.

Ramzul, an official at the East Lombok Health Office, also took part in the activity. In addition, handwashing, his team also trained the teachers on how to disinfect classrooms and prepare hand sanitizer and disinfectant solution. "I hope that the teachers, principals and everyone else at the school will follow the health protocols when they are in the classroom and at home," says Ramzul.

While schools in East Lombok are preparing to reopen after more than a year of remote learning, some schools in Aceh Province on the other side of the country have already resumed classroom-based learning. Many Islamic boarding schools in the province never closed and continued face-to-face learning throughout the pandemic.

However, many have limited means to implement the COVID-19 health protocols required by the Government. As of December 2019, only one in ten schools in Aceh had access to proper water, sanitation and hygiene facilities. In response, the local government, supported by UNICEF and Yayasan Aceh Hijau, intervened in a number of Islamic boarding schools in Banda Aceh, South Aceh and Pidie Districts.

One of these schools is Pesantren Al-Aziziyah in Banda Aceh, which has more than 400 students living and studying on campus. Previously, the school did not have the water, sanitation and hygiene facilities to meet the needs of all students.

“We are very happy with the support from UNICEF and Aceh Hijau, which has helped us to provide handwashing facilities during the pandemic,” says Tgk. Bulqaini, Head of Pesantren Al-Aziziyah. “We hope that in the future we can continue to work together to advance the school.”

With the new handwashing facilities, students and teachers at Al-Aziziyah now feel that they have the means to fight COVID-19. «There are many students here, and we must wash our hands all the time to prevent the spread of coronavirus,” says Awaluddin, 16.

While progress has been made since the beginning of the pandemic to make universal access to hand hygiene available to everyone, there is still much that needs to be done. However, across Indonesia individuals and organizations are working at the forefront to ensure that children can continue learning in a safe and healthy environment.

UNICEF is grateful to key partners, including the Government of the United Kingdom, for its support to keep the most vulnerable children healthy and protected during the COVID-19 pandemic.



A student washes her hands at a newly installed handwashing facility at her elementary school in Aceh Province
© UNICEF/2021/Ihsane

Papua New Guinea:

“No flies in my vegetable garden anymore!”

| *A Papua New Guinea community's journey to overcome open defecation*

Written by Fredrick Musoke, 24 September 2021

<https://www.unicef.org/png/stories/no-flies-my-vegetable-garden-anymore>



© UNICEF/UN0525862

There is a change in Airin Pami, a village of 78 households located in Western Highlands Province. “Only a few months back, lots of flies used to be all over my vegetables, and the smell of human and pig faeces filled the air. I sometimes wanted to run away for a while,” says 68-year-old Nankul Enos, leaning on her spade as she works in her garden. “Not anymore! Nowadays there are hardly any flies around, and the uncomfortable smell has gone,” she adds with a smile.

Jacob Ninit, 44, a subsistence farmer who lives near to Enos, agrees. Like nearly every home in Pami and much of the rural Highlands region, he grows coffee, sweet potatoes, cassava and fruits in addition to raising a pig or two. His household consumes some of the food and sells the surplus in the nearby Mt. Hagen town, some of which ends up as far away as the big cities of Lae and Port Moresby.

“When we first started to work in Pami, nearly half of the households practised open defecation while the other half had degraded latrine facilities, which mainly consisted of open pits in the ground,” says Aruai Kiske, 68, a retired civil servant. Kiske is also a community-led total sanitation motivator with CARE International Papua New Guinea, UNICEF’s implementing partner for the Klinpela Kommuniti Projek. He is one of more than 500 motivators trained by UNICEF to mobilize communities to improve their sanitation, including elimination of open defecation.

Klinpela Kommuniti is a pilot water, sanitation and hygiene project co-funded by the European Union to improve access to WASH facilities in schools and health centres in four Papua New Guinea districts: Hagen Central in Western Highlands, Goroka in Eastern Highlands, Nawaeb



A woman washing her hands beside her new toilet in Pami village, Hagen Central District
© UNICEF/UN0525861

in Morobe and Central Bougainville in the Autonomous Region of Bougainville. The project is also empowering 800 pilot communities to eliminate open defecation by building toilets for their homes and consistently using them. UNICEF is working with partners to support government efforts and replicate best practices in other areas of Papua New Guinea. Open defecation leads to faecal contamination of communities' water sources and food produced by households, such as vegetables and fruits, some of which are eaten raw.

"Poor sanitation, especially through faecal matter, is a leading cause of waterborne diseases like diarrhoea, a major killer for children young than 5 years," says Nirakar Joshi, UNICEF's Chief of WASH. He explains that poor sanitation is a major contributor to stunting that affects the growth and development of children.

According to the Papua New Guinea National Nutritional Policy 2016–2026, nearly four in ten children in the country suffer from stunting, which contributes to about 20 per cent of deaths in children younger than 5 years. Stunting also leads to long-term cognitive defects, poor performance in school or fewer years of completed schooling and lower adult economic productivity.

UNICEF has been working with the Government and through European Union support provided in the last three years to help empower communities to improve their sanitation situation in a sustainable way by building safe toilets for their households. According to the World Health Organization and UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 76 per cent of people in Papua New Guinea either practise open defecation or use unimproved sanitation.

"Elimination of open defecation is a government priority in Papua New Guinea, where many people still do not have access to improved sanitation including basic safe toilets," stresses Leo Noki, Chief Executive Officer of Mt. Hagen City Authority.

Pami village, however, is one community that is no longer included among those still faced with the challenges of open defecation. It was recently certified by the Mt. Hagen City Authority as an open-defecation-free community.



Aruai Kispe, 67, an active community motivator in Pami village, Hagen Central District, shows the pit where non-biodegradable household garbage is disposed of as part of community-led total sanitation efforts supported by the UNICEF and European Union water, sanitation and hygiene project

© UNICEF/UN0525860

As is the case with other Klinpela Kommuniti Projek villages, Pami's journey to a defecation-free status involved three critical steps. First was the initial community entry or visit by a Klinpela Kommuniti Projek promoter along with a community-led total sanitation community motivator and mobilizer to identify community leaders and other influencers. This was necessary to get buy-in to the idea that there was an open-defecation challenge that the community and that households needed to collectively address.

This was followed by a community-wide meeting in the village square, also called community 'triggering', to raise awareness on the dangers of open defecation. Here, the community is guided collectively to come up with practical solutions that can lead every household to constructing its own toilet along with a handwashing station using locally available materials.

Finally, considerable follow-up by both the community motivator and health promoter ensures that every household completes its toilet and handwashing station. The emphasis after this step is on promoting behaviour change practices to consistently use and regularly clean the toilets.

UNICEF and partners are implementing the open-defecation free effort in the context of the Government's Healthy Islands Concept, which emphasizes holistic community and household

improvement in health behaviours. This also includes teaching communities' healthy habits like regular and correct hand-washing steps with soap, keeping a home clean and hygienic as well as beautifying the home environment by planting flowers.

Klinpela Kommuniti Projek communities are also learning about conserving water at home and recycling it for such uses as cleaning toilets. According to Kumar Vishnupad Manu, General Manager, Feedback Foundation from India, UNICEF's technical partner on community-led total sanitation, the average household of five to six people need at least 10 litres of water a day for handwashing after using the toilet and to keep the toilet clean. This can be a challenge, especially in the dry season, because most communities collect water from creeks and wells that are often a distance from their homes.

Communities and households are also motivated to address open defecation from household animals. This is done through the construction of animal shelters and safe disposal of animal faeces to support open-defecation free efforts.

Communities also learn the importance of separating degradable and non-degradable garbage and how to effectively dispose the latter. Household garbage, such as cans and plastics, are disposed of in a pit while biodegradable waste is used as fertilizer for the garden.



A villager in Pami village in Hagen Central District shows off a pig pen he built to stop his pigs from defecating around his home
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Timor-Leste:

Clean water flows to school in rural Timor-Leste for the first time in a decade

An innovative funding scheme by the Ministry of Education Youth and Sports, supported by UNICEF and the Global Partnership for Education, is helping bring water to rural schools in Timor-Leste and helping keep students safe from COVID-19

Written by UNICEF Timor-Leste, 2 September 2021

<https://www.unicef.org/timorleste/stories/clean-water-flows-school-rural-timor-leste-first-time-ten-years>



© UNICEF Timor-Leste/2021/Fluis

Eskola Basic Filial Zona Golgota-Baucau school has 211 students – 99 girls and 112 boys. It sits on a plateau, offering stunning views of the beaches and crystal-clear waters of the ocean in Baucau Municipality, east of the capital Dili. For nearly a decade since it opened, the school had difficulties accessing water.

Students and teachers had to use the lunch break to walk to a communal water pipeline a kilometre away and then carry heavy buckets of water along the rocky paths back to the school. The water was used for handwashing, cleaning of the school and even to stop the dust from blowing around during the dry season.

“It is a tough choice, as staff, children and I used almost the entire break to fetch water instead of giving children time to play. But there was no choice because water was critical to help with handwashing, sanitation and cleanliness and keep children safe from disease,” says Ana Floriana dos Santos Marques, the Principal of EBF Zona Golgota school.

A small grant scheme called Fundu Ki’ik, launched in March 2021 by the Ministry of Education, Youth and Sports, with funding from the Global Partnership for Education and support from UNICEF, is helping at least 240 schools in the 12 municipalities and special Region of Oecussi enclave improve access to clean water

and help them protect children against COVID-19 and other diseases like diarrhoea.

“The lack of clean water results in children falling ill and missing out on studies, and has a big impact on girls’ education when they skip classes owing to the lack of adequate facilities for menstrual hygiene management.” says H.E. Dr António Guterres, Vice Minister of Education Youth and Sport. “This scheme will help make schools safer and provide the facilities needed in schools, and enable children to continue learning during the pandemic.”

Under the scheme, selected schools are provided a maximum of \$1,000 each to help them improve access to water, sanitation and hygiene facilities and promote a safe and secure environment for learning, including preventing the spread of COVID-19 and other diseases. To date, 74 schools have benefited from the scheme in all municipalities.

“For the first time in a decade, our school has running water and students can now have more time to play, instead of having to go and fetch water for their basic needs,” adds dos Santos Marques. “Teachers also have more time to prepare lessons and support students.”

Initially, people thought that it would require highly sophisticated equipment and support from engineers to install the plumbing works. However, a team effort by parents, school staff and community members helped ensure that the school now has clean running water. They purchased plumbing materials, dug a channel to divert water, installed and connected the pipeline to the main water source, the water tank and handwashing and other facilities.

“The spirit of volunteerism, participation and collaboration among parents has helped make the school safer and make our community stronger,” says Francisco da Costa, one of the community members.

“I am extremely happy we have water and, more importantly, can use the break to play, catch up with friends, and not have to worry about having to get water for use in the school,” says Ines Ximenes, 12.

“Thanks to the Global Partnership for Education and UNICEF initiative, we can now be happy that schools such as these that did not have direct access to water can now be safer learning environments for children,” says Apolinário Serpa Rosa, Director General for Basic Education, Pre-school and Recurrent Education.



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Myanmar:

In wake of crisis, UNICEF brings clean water to vulnerable urban families

Written by Saw Wai Moe and Ruth Ayisi, 3 November 2021

<https://www.unicef.org/myanmar/stories/wake-crisis-unicef-brings-clean-water-vulnerable-urban-families>



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When Swe Mar, 39, her husband and four children left their home in Ayeyarwady Region to seek a better life in Yangon, Myanmar's largest city, they struggled to make ends meet. Unable to find work, her husband returned home to search for a job.

But Swe Mar remained in Yangon, in Hlaing Thar Yar Township, where she works hard to make a living. Living in a tiny house that was once a construction site kitchen, Swe Mar and her family have no toilet of their own and have

to share with Swe Mar's parents, who live in a neighbouring house.

Swe Mar sells sweets and on a busy day can earn up to 6,000 Myanmar kyat, or about \$3. This, combined with the income of her eldest son, Chit Naing, 16, who works on a nearby construction site, is barely enough to cover basic living costs for the family, which includes three younger children: Kaung Sett, 12, Zwe Htet, 6, and 18-month-old Kyal Sin.

During the recent military takeover of the government, one of Swe Mar's main worries was obtaining safe water for her family. Until recently, her only option was to buy water from vendors selling water from large containers, pushed through the neighbourhood on trolleys. Swe Mar had to provide her own containers and was never sure whether the water was really clean or safe to drink. "Sometimes, I filtered the water before using it," she says. The water, which Swe Mar used for cooking and drinking, cost her approximately 4,000 kyat a month, a significant expenditure for her family.

Bringing clean water to doorsteps

The challenges faced by Swe Mar and her family are common to most residents of the poorest areas of Yangon. In these districts, approximately 16.3 per cent of households have insufficient water to drink, cook and wash with and for latrine use. This creates a serious risk of waterborne diseases like cholera and typhoid.

As part of UNICEF's response to the ongoing crisis in Myanmar, UNICEF and partners have been distributing safe bottled water to vulnerable families in Hlaing Thar Yar and other areas, prioritizing families with young children, pregnant women and breastfeeding mothers.

Clean water makes a clear difference

While water distributions have faced challenges, including COVID-19 restrictions and security risks, the impact of these efforts have been widely felt and appreciated.

Some 50,000 people like Swe Mar have benefited so far from the UNICEF-supported efforts.

UNICEF plans to work with its partners to expand coverage of water distribution to reach more communities experiencing water shortages while also working to rehabilitate water systems, install water treatment and supply systems and continue to promote awareness around the importance of proper hygiene.



Safe drinking water bottles being distributed to Swe Mar's family. "I receive two 20-litre water bottles every two days, direct to my doorstep. I don't need to use a water filter or provide my own containers. We can drink directly from the water bottle," Swe Mar says. "I use this water for drinking only as I collect rainwater for cooking. I now have extra money."

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