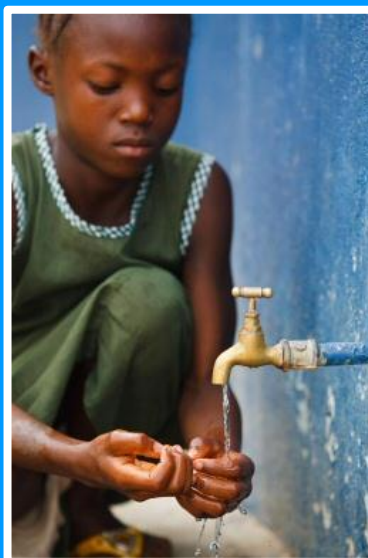


UNICEF

Water, Sanitation and Hygiene Annual Report 2011



UNICEF Water, Sanitation and Hygiene Annual Report 2011

UNICEF WASH Section
Programme Division
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Cover photos: Scenes from the 2011 UNICEF WASH programme (clockwise from top right):

Emergency water supply, Pakistan (UNICEF/ NYHQ2011-1414/Page)

Community planning for sanitation, DR Congo (UNICEF/ DRCA2010-00043/Asselin)

Household water storage, Niger (UNICEF/ NIGB2011-00037/Pirozzi)

Washing hands at school, Sierra Leone (UNICEF/ SRLA2011-0063/Asselin)

New toilet in an open defecation free community, Zambia (UNICEF/ZAMA2011-0096/Nesbitt)

Executive Summary

Sector Developments

The MDG target of halving the proportion of people without sustainable access to improved drinking water has been met, five years in advance of the 2015 deadline. This achievement is a testament to the concerted efforts of the many different stakeholders who helped over 2 billion people gain access to improved drinking water sources since 1990. This is especially good news for children, who are the most affected by poor water supplies.

However, more than 780 million people still have not been reached, the majority of them in poor, isolated and otherwise marginalised communities. Other challenges remain: water quality remains a problem, and many of the improved water sources are too far from people's homes to maximise the health benefits.

The news for sanitation is not as good: the world is still not on track to meet the MDG target. Two and a half billion people still do not have improved toilet facilities and 1.1 billion continue to defecate in the open, creating a serious health threat, especially for children. Coverage inequities are even more pronounced for sanitation than for water supply, with persistent coverage disparities across regions, between countries, and within countries.

But the sanitation news is not all bad. Twenty-one countries, including several of the world's most populous nations, have succeeded in increasing coverage rates by more than 20 per cent since 1990. Open defecation rates are decreasing and there are clear signs that Community Approaches to Total Sanitation (CATS) methodologies are driving the achievement in this trend, notably in sub-Saharan Africa, where coverage rates are low.

The UNICEF WASH Programme

Over the last five years, UNICEF direct support has helped an estimated 100 million people gain access to improved water and 60 million to sanitation. This support has been especially significant in sub-Saharan Africa, where UNICEF service delivery is an important component of overall efforts to improve access. Emergency response accounts for about two-thirds of these water beneficiaries and one-third of sanitation beneficiaries.

Service delivery is only one component of the UNICEF contribution to the WASH sector. Through its large cadre of field-based professional staff, longstanding in-country presence and unique relationships with governments across the world, UNICEF also provides high quality technical assistance to increase the performance of the sector as a whole, as well as increasing the capacity and effectiveness of large-scale national programmes. In 2011 UNICEF supported WASH activities in 110 countries, spending \$372 million: \$154 million for emergency coordination and response and \$218 million on development programmes. The programme is highly decentralised: 94 per cent of staff placements and 98 per cent of expenditure is in countries, at the national and sub-national levels.

UNICEF increasingly gears its evidence-based advocacy, capacity building and service delivery towards addressing inequities, a strategy designed to maximise benefits for children. The report cites a range of examples of this central focus, from the publication of evidence highlighting issues of equity to the re-direction of resources to the most marginalised populations, such as the isolated, fragile, guinea worm-endemic communities in South Sudan.

UNICEF works closely with government, civil society and external support partners on all components of its WASH programme. Priority is given to collaborative frameworks with the potential to maximise

resources and impact, a notable example being the Sanitation and Water for All partnership, which is improving planning and coordination, and raising resources for WASH in the most off-track countries.

The UNICEF WASH programme had a wide range of results in 2011, including the following:

- An estimated 29,000 communities with a total population of 13 million have achieved open defecation free status through direct UNICEF support in 48 programme countries. Broader support to the overall CATS agenda in the areas of advocacy, capacity building and technical assistance is contributing to a very rapid increase in latrine use sub-Saharan Africa and South Asia in particular.
- UNICEF provided more support in more countries to water, sanitation and hygiene in schools than ever before. In 2011 4.5 million children benefited directly from this support, while advances were made in the areas of policy, monitoring and the prioritisation of the issue among decision makers.
- More than a million schools celebrated Global Handwashing Day in 2011. The campaign also reached tens of millions of people with hygiene messages while stimulating increased interest among national decision makers and prompting a shift towards institutionalised promotion programmes.
- UNICEF helped to raise the profile of Household Water Treatment and Safe Storage (HWTS) in 2011 through leadership in global forums and continuing work on improving the sustainability and uptake of household-based water treatment. Through country-level activities, UNICEF direct support helped 6.7 million improve the quality of water in their homes.
- In 2011, 21.9 million people gained access to water supply through direct UNICEF support, 15.1 million through humanitarian interventions and 6.8 million through development programmes. UNICEF also supported efforts to improve the sustainability of water supply systems, and continued to help mitigate arsenic, fluoride and other groundwater contaminants.
- The 41 per cent drop in the global guinea worm case load from 2010 to 2011 was achieved with the support of UNICEF, mainly in the area of water supply.
- UNICEF continued its efforts to raise awareness on the impact of climate change on WASH in programme countries, while helping vulnerable communities increase their adaptive capacity.
- UNICEF worked to improve gender equality in the sector through advocacy and example in 2011, resulting in an increase in representation of women on sectoral management bodies, improved conditions for girls in schools, and other outcomes.
- The JMP used the largest and most robust ever database to update the global water and sanitation coverage picture in 2011, while continuing efforts to improve global sectoral monitoring and preparing for post-2015 targets. At the country level, UNICEF helped build national monitoring systems and supported sustainability and impact-monitoring initiatives.
- UNICEF fulfilled its core commitments for children through direct humanitarian response for WASH in a total of 64 countries, including major efforts in Pakistan and Somalia. UNICEF helped to improve coordination and response effectiveness by leading the WASH cluster globally and in a total of 56 countries in 2011.

In 2012 and beyond, UNICEF will continue to strengthen its overall programme, while focusing on six key challenges: scaling up sanitation, highlighting and addressing inequities, improving the sustainability of water supply systems, strengthening monitoring systems, increasing capacity for emergency coordination and response, and focusing on programming that achieves multi-sectoral outcomes.

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Abbreviations and Acronyms

\$	US\$
AAP	African Adaptation Programme
ADB	Asian Development Bank
AfDB	African Development Bank
AMCOW	African Ministers' Council on Water
CATS	Community Approaches to Total Sanitation
CAWST	Centre for Affordable Water and Sanitation Technology
CCCs	Core Commitments for Children
CEAP	Corporate Emergency Activation Procedure
CEE/CIS	Central and Eastern Europe and the Commonwealth of Independent States
CFS	Child-Friendly School
CHERG	Child Health Epidemiology Reference Group
CLTS	Community Led Total Sanitation
CSO	Country Status Overview
DFID	Department for International Development (UK) (or UKaid)
DGIS	Directorate-General for International Cooperation (Government of the Netherlands)
DHS	Demographic and Health Survey
DRR	Disaster Risk Reduction
EAPR	East Asia and the Pacific Region
EAWAG	Swiss Federal Institute of Aquatic Science and Technology
EC	European Commission
ECHO	European Commission Humanitarian Aid Office
EMIS	Education Management Information Systems
EOR	Emergency Other Resources (sometimes written as ORE)
ESAR	Eastern and Southern Africa Region
EU	European Union
GHD	Global Handwashing Day
GLAAS	UN-Water Global Annual Assessment of Sanitation and Drinking-Water
HWTS	Household Water Treatment and Safe Storage
IASC	Inter-Agency Standing Committee
IDP	Internally Displaced Persons
IRC	International Water and Sanitation Centre
LAC	Latin America and the Caribbean
JMP	Joint Monitoring Programme for Water Supply and Sanitation
LSHTM	London School of Hygiene and Tropical Medicine
MDG	Millennium Development Goal
MENA	Middle East and North Africa
MICS	Multiple Indicator Cluster Survey
MSB	Swedish Civil Contingencies Agency
MTSP	Medium-Term Strategic Plan
NatCom	National Committee
NGO	Non-governmental Organization
ODF	open defecation free

ORR	other resources, regular
PLoS	Public Library of Science
PPP	Public-Private Partnership
PPPHW	Global Public-Private Partnership for Handwashing with Soap
PSI	Population Services International
RR	regular resources
RRT	Rapid Response Team
RWSN	Rural Water Supply Network
SA	South Asia
SACOSAN	South Asian Conference on Sanitation
SANDEC	Department of Water and Sanitation in Developing Countries, in the Swiss Federal Institute of Aquatic Science and Technology (EAWAG)
SDC	Swiss Agency for Development and Cooperation
SIDA	Swedish International Development Agency
SLTS	School Led Total Sanitation
SWA	Sanitation and Water for All
SWAP	Sector-Wide Approaches to Programming
UNDAF	United Nations Development Assistance Framework
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene
WCAR	West and Central Africa Region
WEDC	Water, Engineering and Development Centre
WinS	WASH in Schools
WHO	World Health Organization
WSP	Water and Sanitation Program (World Bank administered)
YCSD	Young Child Survival and Development

1 Sector Analysis

1.1 MDG Water Target Achieved

The world has met the MDG target of halving the proportion of people without sustainable access to improved drinking water supplies, according to analysis based on the 2010 dataset by the WHO/UNICEF Joint Monitoring Programme (JMP).¹ Achieving this target well in advance of 2015 is a testament to the efforts of many different stakeholders, from communities and civil society bodies to national governments and their support partners. This effort was massive: between 1990 and 2010 over

2 billion people gained access to improved water supplies in developing countries around the world, and drinking water coverage increased by 13 percentage points. And because children are disproportionately affected by poor water supplies, this is especially good news.

But, of course, there are still many challenges. More than 780 million people are still without access to improved water supplies, drawing their drinking water from unimproved sources, including surface water and unprotected wells.

These people have not been affected by the drinking water revolution.

Households that are considered ‘covered’ also have challenges. Service levels are defined nationally and may mean that a ‘served’ household is half a kilometre from an improved source that is shared by 250 or even 500 people. Another aspect is the safety of these sources: the JMP uses the proxy indicator of source

Figure 1: Meeting the MDG Water Target

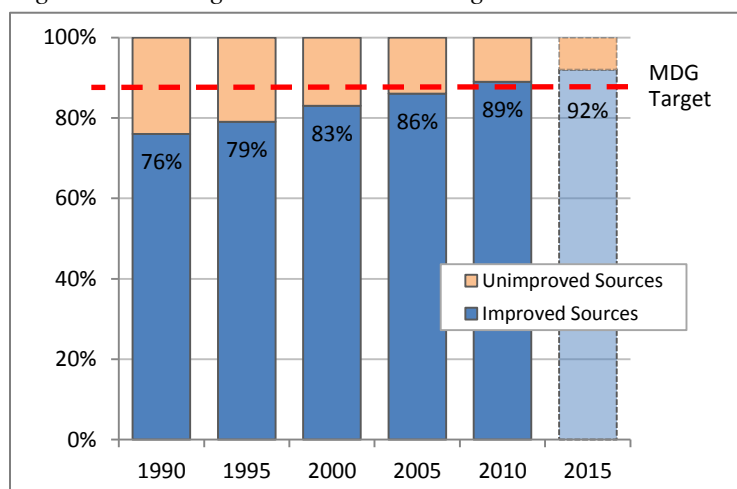
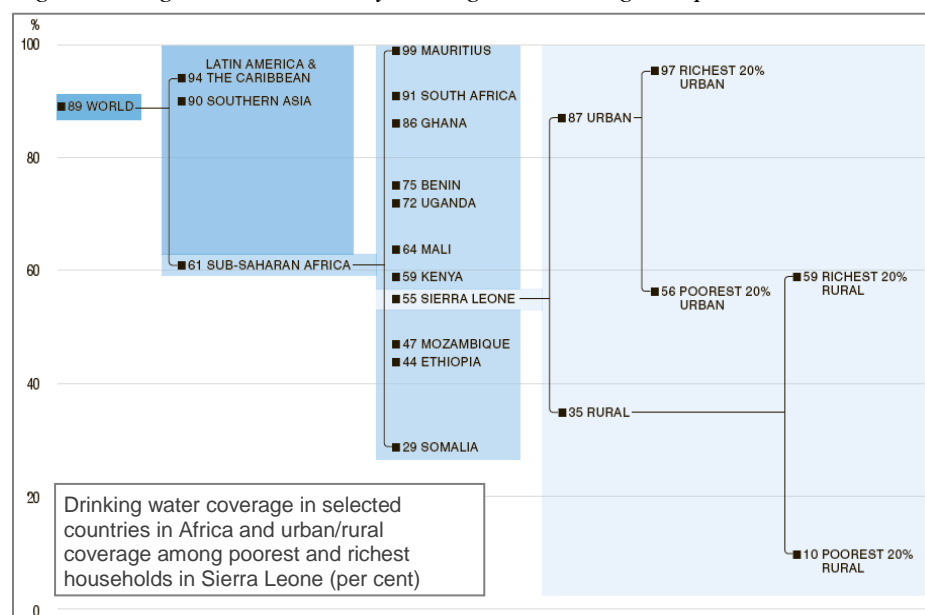


Figure 2: Regional and Country Averages Mask Huge Disparities²



¹ *Progress on Sanitation and Drinking Water: 2012 Update*, WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (which uses the 2010 dataset, the latest available).

² Source: JMP 2012, with data from the JMP 2010 dataset and Sierra Leone DHS, 2008.

type to determine whether or not it is likely to be safe (because directly testing microbial and chemical water quality on a global scale is still prohibitively expensive), but these improved sources can become contaminated through poor maintenance and other factors.

The greatest challenges are in the area of equity. Drinking water coverage is not uniform among regions and countries. Only a minority of countries are on track to meet the MDG water target in sub-Saharan Africa (19 out of 50), while in the rest of the world the vast majority of countries are on track. Within countries disparities are even more pronounced: if you are poor, live in a rural area, belong to a community marginalised due to ethnicity or other reasons, are affected by war or recurring natural disasters, you are much less likely to have access to drinking water than your compatriots (see Sierra Leone example in Figure 2).

1.2 Sanitation is Off-track

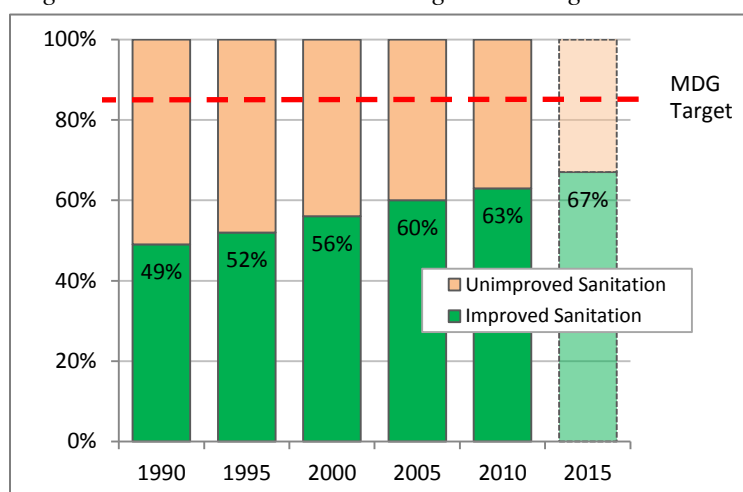
Progress is Slow

The sanitation MDG target is far from being achieved, with 2.5 billion people still without access. Only 63 per cent of the global population now have access to improved sanitation facilities, and projections indicate that this figure will only rise to 67 per cent by 2015, well below the 75 per cent target. This is not to say that progress has not been made: coverage has increased by 14 percentage points since 1990 and 1.8 billion people have gained access. But because the coverage levels started out so low in many countries and population growth is high, the progress has not been nearly enough.

Especially worrying are the high levels of open defecation, which is still practiced by over a billion people, 15 per cent of the global population. Open defecation is most common in South Asia and sub-Saharan African countries, but it is also a problem in other regions, including East Asia and the Americas. In 19 countries more people practice open defecation than all other forms of excreta disposal combined.

Coverage inequities are even more pronounced for sanitation than for water supply. Globally, urban residents are two-and-a-half times more likely to have access to sanitation than urban residents. In countries in sub-Saharan Africa people in the richest fifth of the population are almost five times more likely to have access to improved sanitation than the poorest fifth, while in South Asia they are more than ten times more likely.³ There are also significant disparities across regions (coverage is far lower in sub-Saharan Africa and South Asia than in other regions) and between countries within regions (Bolivia and Cambodia, for example, have far lower sanitation coverage rates than their neighbours).

Figure 3: The MDG Sanitation Target Challenge



³ Figures are from supplemental studies involving 35 sub-Saharan countries and 3 South Asian countries. See the 2012 JMP report for details.

Signs of Improvement

The news for sanitation is not all bad. Twenty-one countries have succeeded in increasing coverage rates by more than 20 per cent since 1990, including several large-population countries like Egypt, Pakistan and Viet Nam. In China alone 593 million people have gained access to sanitation and coverage has increased by 40 percent.

Open defecation rates are decreasing. There are indications that Community Approaches to Total Sanitation (CATS)⁴ methodologies are driving the acceleration in this trend, notably in parts of sub-Saharan Africa where preliminary data shows near-exponential increases in the number of people living in open defecation free (ODF) communities (see Section 3.2). This is especially encouraging because sub-Saharan Africa has lower sanitation coverage rates than any other region.

These gains are recent so they are not yet reflected in JMP figures, but it is likely that this progress will be presented during the next update, in two years' time.

⁴ Community Approaches to Total Sanitation (CATS) is an umbrella term encompassing a variety of community- and demand-led approaches, including Community Led Total Sanitation (CLTS), Total Sanitation, School Led Total Sanitation (SLTS) and related approaches.

2 UNICEF WASH Programme Overview

2.1 Addressing Inequities in WASH

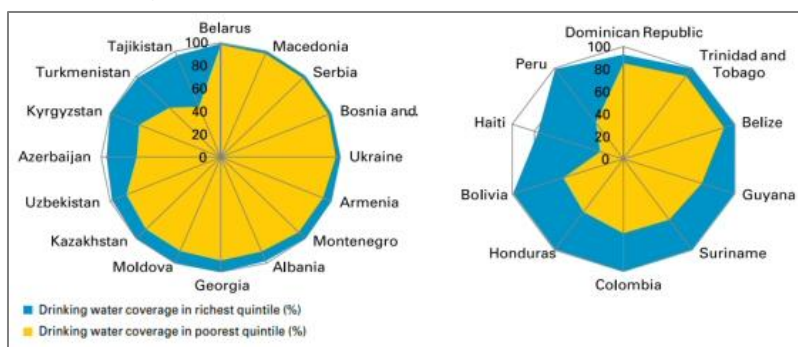
UNICEF continues to focus its programmes on understanding and addressing inequities so that all children, particularly those who suffer the worst deprivations, realise their full potential for survival, growth and development. For WASH, this has meant sharpening its focus on equity issues at all programme levels, from refining the overall strategic direction to making small but important adjustments to how work is carried out in the field.

Globally, this means that UNICEF programmes focus on strategies and programme components explicitly designed to reduce disparities. In sanitation this means an emphasis on total sanitation approaches that, by definition, prevent the exclusion of any segment of the population. In water it means focusing on low-cost approaches that enable everybody to gain access and on initiatives to improve the sustainability of systems. For WASH in Schools it means directing resources towards the most marginalised schools and ensuring that the needs of all school children are met, including boys, girls and the physically challenged.

This strategic refinement is guided by a set of tools and guidance material UNICEF has produced for country offices. It includes a core set of guidance material (including a webinar) on programming for equity in WASH, a position paper on the UNICEF role in water, a field note on programming in fragile states and a discussion note on WASH programming in poor urban communities (see Section 2.4 for publication listings). UNICEF is also conducting a comprehensive ‘equity stock take’ of its emergency WASH programme to identify gaps and identify course corrections to ensure UNICEF contributions to humanitarian programmes reach the most disadvantaged and marginalised. Related to these efforts, UNICEF is developing a Marginal Budgeting for Bottlenecks (MBB) tool for tracking key constraints in the WASH sector (see Section 7), and is working within UNICEF’s new organization-wide Monitoring Results for Equity System (MoRES), which is helping to anticipate future problems, identify them as they emerge, and address them as quickly as possible.

In 2011, UNICEF re-doubled efforts to document inequities in the sector as a whole, using the information to advocate for more equitable resource allocation globally and at country level. The JMP is a key instrument for this agenda: in 2011 the JMP published a global thematic report on equity and drinking water⁵ and a regional snapshot on sanitation inequities in South Asia (produced for the fourth South Asia Conference on Sanitation, SACOSAN-4). Steps were taken to ensure that monitoring data captures equity issues, including JMP efforts to better disaggregate between poor and richer urban populations and UNICEF efforts to chart progress on reducing disparities through its equity tracker reporting system for country offices.

Figure 4: Regional Coverage Disparities (extract from JMP Equity and Drinking Water Publication)



⁵ *Drinking Water: Equity, safety and sustainability*, JMP, 2011.

UNICEF advocacy around equity takes many forms, including support to policy reform (e.g., the inclusion of CATS approaches within national sanitation programmes), advocacy for new financial resources and work with government partners on the development of new standards (e.g., WASH in Schools standards).

2.2 Sanitation and Water for All

The Sanitation and Water for All (SWA) partnership continued to grow and bring greater political attention to the underlying obstacles to achieving universal access to sustainable water and sanitation. The Partnership and its key activity, the biennial High Level Meeting, have influenced improved sector financing, resource targeting, planning and monitoring, coordination, and mutual accountability of stakeholders.

One year after the 2010 High Level Meeting, countries reported a number of achievements:

- nine developing countries met the increased budget allocation commitments made at the 2010 High Level SWA meeting;
- seven donors reached or exceeded their funding targets;
- monitoring systems were enhanced for improved decision making in seven developing countries
- there was new reporting on funding flows by eight donors;
- nine countries improved coordination and accountability systems, and six donors further aligned planning and resource allocation with national planning processes.

Two countries have now developed comprehensive SWA Compacts: Ghana in 2010, and Liberia in 2011. These Compacts set targets, commit funding and outline actions to be taken at the ministerial level for accelerating coverage and achieving specific commitments made at the High Level Meeting. The Compacts are in the public sphere, increasing transparency and accountability of both government and support partners. This has already had an impact in Ghana, where stakeholders from the media and civil society increasingly structure their observations – and criticisms – of sector activities within the framework of the Compact. The experience gained in Ghana was also an important input in the development of the Liberia Compact, demonstrating the potential of south-south exchange within the SWA framework. Further, Sierra Leone is now interested in developing a Compact as well and is learning from Ghana and Liberia.

The SWA partnership itself has grown in a number of ways. As of the end of 2011 it had 79 partners, including 35 developing countries and 7 donor agencies. In addition, the well-known statesman and development advocate John Agyekum Kufuor (past President of Ghana, and past Chairperson of the African Union) became the SWA Chair, raising the profile of SWA – and of WASH generally. As it prepares for the second biennial High Level Meeting (in 2012), SWA is poised to make a major difference in the sector.

2.3 WASH Programme Scope and Structure

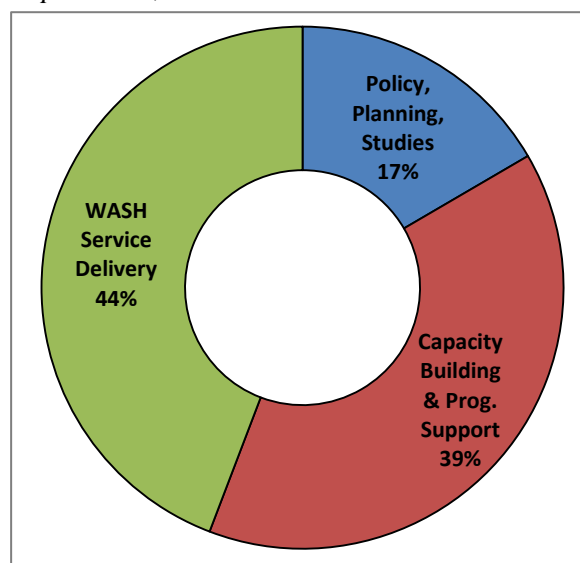
UNICEF was engaged in WASH programming in 110 countries in 2011, the most ever. The scope of engagement in individual countries ranged from large, comprehensive packages of support for national WASH programmes to limited activities in specific areas such as hygiene promotion in schools, or humanitarian response.

Total UNICEF expenditure on WASH in 2011 was \$372 million: \$154m for emergency response and coordination and \$218 million for regular programming. This is 5 per cent lower than total 2010 expenditure. The drop is entirely due to reduced emergency funding from donor partners. The development portion of the WASH programme actually increased in the same period, by 4 per cent.

Over 80 per cent of expenditure was in the regions with the greatest WASH challenges and where most of the world's disadvantaged children live: sub-Saharan Africa and South Asia (see Section 8 for more details on expenditure).

At the end of 2011, UNICEF employed 534 full-time WASH professional staff, the most ever, and more by far than any other sector support agency. The vast majority of these professionals – 94 per cent – are stationed in countries, at the national or sub-national level (the balance are in regional offices and headquarters).

Figure 5: WASH Programme Balance by Expenditure, 2011⁶



UNICEF expends 44 per cent of its WASH funds on service delivery, mostly in poor and otherwise marginalised communities. About 60 per cent of this is through emergency response programmes. As shown in Figure 5, the balance of overall expenditure is on policy, planning and studies (17%) and capacity building and programme support (39%).

2.4 Programme Highlights

Key Results

UNICEF direct support helped nearly 22 million people gain access to improved drinking water supplies and 14 million to basic sanitation facilities in 2011. Over the last five years, **100 million people gained access to water and 60 million to sanitation through UNICEF direct support**. While service delivery is just one component of the overall WASH programme, it is a significant contributor to increases in water and sanitation coverage levels, especially in sub-Saharan Africa.

UNICEF helped to raise knowledge levels on **inequities in WASH** in 2011, and took significant steps towards addressing inequities through advocacy, through joint efforts with partners (including the **Sanitation and Water for All** initiative), and by making adjustments and building capacity within its own programme of support. UNICEF also worked to **strengthen the role of women** in sectoral processes through advocacy and example (see Sections 2.1, 2.2 and 6).

A strong focus on **supporting communities to eliminate the practice of open defecation** through CATS programmes over the last three years is yielding results, most notably in sub-Saharan Africa where evidence is pointing towards exponential increases in latrine use (Section 3.2).

⁶ These figures include both emergency and development activities, but not the WASH in Schools activities (which are classified differently).

UNICEF provided more support in more countries to **water, sanitation and hygiene in schools** than ever before. In 2011 4.5 million children benefited directly from this support, while advances were made in the areas of policy, monitoring and the prioritisation of the issue among decision makers (Section 3.4).

The **Global Handwashing Day** campaign is truly becoming more than just a day, stimulating an increase in interest among national decision makers on handwashing with soap, and prompting a shift towards institutionalised promotion programmes. In 2011, over a million schools formally participated in GHD events, the most ever (Section 3.2).

In 2011, UNICEF continued to support efforts to improve the **sustainability of water supply systems**, and help mitigate the impact of arsenic, fluoride and other groundwater contaminants (Section 3.3).

UNICEF helped to raise the profile of **Household Water Treatment and Safe Storage (HWTS)** in 2011 through leadership in global forums and continuing work on improving the sustainability and uptake of household-based water treatment. Through country-level activities, UNICEF direct support helped 6.7 million improve the quality of water in their homes, and many more through emergency interventions (Section 3.3).

UNICEF support to the **guinea worm eradication** initiative – mainly in the area of water supply – contributed to the 41 per cent drop in the global case load from 2010 to 2011 (Section 3.3).

UNICEF continued its efforts to raise awareness on the **impact of climate change on WASH** in programme countries, while helping vulnerable communities increase their adaptive capacity (Section 5).

WHO and UNICEF used data from over 1,400 surveys, censuses and reports to update the JMP global coverage picture, while continuing efforts to improve global **sectoral monitoring** and prepare for post-2015 targets. At the country level, UNICEF helped build national monitoring systems and supported sustainability and impact monitoring initiatives (Section 7).

UNICEF fulfilled its core commitments for children through direct **humanitarian response for WASH** in Pakistan, Somalia, Libya, the Philippines and 60 other countries in 2011. UNICEF helped to improve coordination and response effectiveness by leading the WASH cluster globally and in a total of 56 countries in 2011 (Section 4).

Building the Evidence Base in WASH

All major UNICEF WASH country programmes sponsor WASH-related surveys, studies, evaluations and pilots. Results from these exercises are important inputs for advocacy and programme design, and they help to build the national evidence base for WASH. A sample of these UNICEF-supported efforts in 2011 includes:

- an assessment of UNICEF WASH programming support over the last decade in Bolivia;
- a water quality risk assessment survey in Burkina Faso;
- a rigorous mid-term impact assessment of the “One Million Initiative” in Mozambique;
- a comprehensive WASH sector assessment in Nepal;
- research on sanitation markets in India;
- a CATS evaluation in Zambia;
- a benchmarking study on self-supply in Ethiopia;
- a study on user preferences and willingness to pay for household water treatment products in Tanzania;
- a national survey on WASH in schools in Mali.

The results of these efforts are often applicable beyond their countries of origin and UNICEF works to disseminate them globally in a variety of ways, including through the WASH Field Notes series (e.g. a field note on improving drilling cost effectiveness based on work in Mozambique and Zambia was published in 2011).

UNICEF also works regionally to develop and produce materials that advance the WASH knowledge base. One example is the evaluation of the West and Central Africa CATS programme, which was finalised in 2011 and published as a technical note.⁷ The evaluation confirmed the significant potential of the approach, while highlighting the need to strengthen sanitation market chains to assure sustainability. Another example is the use of the JMP and other datasets to analyse regional trends and sector characteristics, and the publication of results in JMP ‘snapshots’ and other publications.

At the global level UNICEF continues to be involved in a number of joint initiatives with partners. In 2011, much of this effort revolved around the issue of equity in WASH, including the JMP assessment of drinking water supply equity, the equity stocktaking exercise for UNICEF humanitarian response programming and a new WASH in Schools equity mapping study. Work also continues on CATS evaluations (UNICEF will carry out a comprehensive multi-country study in 2012), on studies related to the sustainability of Household Water Treatment and Safe Storage (HWTS), and other global initiatives with partners.

Selected UNICEF WASH Global-level Publications, 2011

- | | |
|---|--|
| <ul style="list-style-type: none"> • Drinking water: Equity, safety and sustainability. JMP thematic report (published with WHO) • JMP 2011 Snapshots: Inequities in South Asia; Drinking Water and Sanitation in Arab States; Sanitation and Open Defecation in Africa (published with WHO) • Improving Cost Effectiveness of Drilling Programmes in Mozambique and Zambia. UNICEF WASH Field Note • Sustainable Supply Chains for Rural Water Services: Linking local procurement of handpumps and spare parts supply (published with RWSN) | <ul style="list-style-type: none"> • UNICEF’s Role in Water: Towards 2015 and Beyond. UNICEF WASH Position Paper Series • Assessing the Implementation of Selected Household Water Treatment and Safe Storage Methods in Emergency Settings, 2011 (published with LSHTM) • West and Central Africa Evaluation of Community-led Total Sanitation, UNICEF WASH Technical Brief • WASH in Schools Monitoring Package • Water, Sanitation and Hygiene for Schoolchildren in Emergencies: A guidebook for teachers |
|---|--|

⁷ *West and Central Africa Evaluation of Community-led Total Sanitation*, UNICEF, July 2011.

Capacity Building

Building capacity of government and non-government stakeholders is a core component of the UNICEF WASH programme, accounting for more than a third of all expenditure in 2011. Capacity building takes many forms, ranging from core support to government sectoral training programmes and institutions, to the day-to-day engagement of UNICEF staff with counterparts at national and sub-national levels. It includes the development of sector-specific training manuals and guidelines (including over a dozen CATS manuals in the last two years), as well as the introduction of WASH-related modules into the national training curricula of teachers and health practitioners. And all capacity building efforts draw on attempts to build the WASH evidence described above.

UNICEF also stepped up its internal capacity building programme in 2011 with the launch of a formal staff training curriculum. The curriculum consists of three inter-related streams: core modules encompassing the principle concepts of WASH programming, advanced and specialist modules for in-depth coverage of particular areas and a set of guest webinars on new or innovative WASH practice from partner organisations.

Most of the modules are delivered as webinars, giving maximum access to staff in all regions. (There were 40 webinars in 2011, including the core training modules and other offerings.) The WASH in Emergencies module is a face-to-face training course that is being delivered in different regions (230 staff have been trained to date, see Section 4.2) and the Sector Landscape module is a self-directed training tool on CD-ROM. In most cases, partners are invited to join in the training programmes. WASH staff also participate in UNICEF-wide training opportunities, such as a 2011 learning programme on social norms run by the University of Pennsylvania, and emergency simulation training programmes at the United Nations Logistics Base for peacekeeping in Brindisi, Italy.

The WASH in Schools e-Certificate programme offered by webinar in partnership with the Emory University Center for Global Safe Water continued in 2011. Rolled out in 2010, the inaugural course was completed by 42 participants, mainly from Africa and Latin America. The second course, this time geared towards Asia, awarded certificates to 50 graduates. Some 70 professionals are enrolled in the current session, which runs from December 2011 to April 2012. UNICEF is adapting the materials as a continuing education course for national WASH professionals in programme countries.

UNICEF WASH Staff Training Curriculum Core Modules

- WASH in Emergencies
- Community Approaches to Total Sanitation
- WASH in Schools
- More than Soap and Water: Taking Hand-washing with Soap to Scale
- Sustainability of Rural Water Services
- Going to Scale with Household Water Treatment and Safe Storage
- Environment, Climate Change and WASH
- Sector Monitoring and the Joint Monitoring Programme
- Understanding the Global WASH Sector Landscape

2.5 Beneficiaries

Over the last five years, UNICEF direct support has provided about 100 million people with improved water supplies and helped 60 million people gain access to basic sanitation facilities. This includes almost 22 million water beneficiaries and 14 million sanitation beneficiaries in 2011.

Table 1: Water and Sanitation Beneficiaries from UNICEF Direct Support, 2007-2011

Total Beneficiaries,⁸ millions of people		2007	2008	2009	2010	2011	Totals (5 years)
Water	Emergency	9.7	15.9	11.9	12.5	15.1	65.2
	Development	5.6	8.1	8.3	6.5	6.8	35.2
	Total	15.3	24.0	20.2	19.0	21.9	100.4
Sanitation	Emergency	2.7	4.6	5.5	4.2	4.0	20.9
	Development	4.4	8.4	8.4	7.8	9.9	38.9
	Total	7.0	13.0	13.8	12.0	14.0	59.8

Over the last five years, about two-thirds of water beneficiaries are from emergency programmes. For sanitation the ratio is reversed – two-thirds are from development programmes. The number of people benefiting from emergency interventions varies from year to year of course, depending on requirements and the contributions of WASH cluster partners and other responders.

The number of water beneficiaries from development programmes is increasing but only modestly, because the remaining unserved populations are increasingly difficult to reach and because more developing countries are taking full control of their water supply programmes. For sanitation there is an accelerating upward trend in development programme beneficiaries, due to the rapid expansion in CATS initiatives, notably in sub-Saharan Africa (see Section 3.2).

Beneficiaries are difficult to define, and UNICEF makes a number of assumptions in compiling these figures. For example, indirect beneficiaries of UNICEF upstream support for building enabling environments are not included, but people gaining access to sanitation through self-built toilets as a result of UNICEF direct support to CATS initiatives are included (in fact, most the sanitation beneficiaries from UNICEF support are now through CATS programming). See the box for more assumptions and notes.

Beneficiary Assumptions and Notes

- Service standards (e.g., the number of people per water point) vary from country to country.
- The majority of beneficiaries result from the joint efforts of UNICEF and its partners, and the scope of UNICEF's contribution to these efforts varies from country to country and from project to project.
- School water points often serve the host community as well as the school.
- No distinction is made between newly constructed water supply facilities and rehabilitated facilities where people regain access to water.
- The figures include some, but not all, emergency water and sanitation systems and services. Some emergency interventions are temporary, some result in permanent systems.

Other beneficiaries of UNICEF WASH programming in 2011 include:

- 4.5 million children reached through WASH in Schools programmes;

⁸ Figures are from UNICEF Country Offices with substantial WASH programmes. Total global beneficiary figures are higher. Note that an alternative methodology was used to calculate beneficiaries in 2010 that likely resulted in lower than actual figures for development beneficiaries (and required some estimates). Most sanitation development beneficiaries in 2011 (and to a lesser extent in 2008-2010) are from CATS programming.

- 39 million people reached directly with interventions to promote hand-washing with soap through promotional activities in communities and schools;
- 184 million people contacted through hygiene promotion mass media programmes and campaigns;
- 6.7 million people reached through Household Water Treatment and Safe Storage (HWTS) programmes, 6.2 million with chlorine-based products and 500,000 with filters and other methods such as solar disinfection (SODIS).

In addition, in 2011, WASH facilities were constructed in 9,876 schools and 1,340 health posts.

3 Progress in 2011

3.1 Building Enabling Environments

UNICEF advocacy and support contributed to new national sectoral policies, strategies and planning instruments in a number of countries in 2011. Prominent examples include Nepal's first-ever National Hygiene and Sanitation Master Plan and the Lao PDR National Strategy for Rural Water Supply, Sanitation and Hygiene, both which were developed with technical and financial support from UNICEF.

UNICEF advocacy is also leading to more programme countries incorporating CATS into existing national policy, notably in West and Central Africa (e.g., Chad, Central African Republic, Mauritania) and in Eastern Africa (Kenya and South Sudan).

Three countries set national targets for the elimination of open defecation: Kenya by 2013, Malawi by 2015 and Madagascar by 2018. In all cases UNICEF has committed to help achieve these ambitious targets, including through support to third-party verification and certification systems.

Afghanistan, Ghana and Tanzania issued new policies that highlight the importance of promoting handwashing with soap. In Mali, UNICEF sponsored a process to harmonize all existing hygiene education tools in the country, including promotional material, promotion protocols, technical standards for handwashing facilities, and monitoring and evaluation tools.

Comprehensive UNICEF support, including studies, piloting and technical assistance, helped Tanzania develop its new national HWTS strategy in 2011, while similar processes led to the incorporation of HWTS into national sectoral strategies in Cambodia, Ethiopia, Kenya, Rwanda, Uganda and Viet Nam.

In 2011 new comprehensive WASH in Schools (WinS) standards were developed with UNICEF support in Bangladesh, Lebanon, Nepal, Nicaragua and other countries, as well as in four Indian states. UNICEF advocacy and support helped to leverage new funding from both government and donors for WinS in Indonesia, Tanzanian, Timor Leste and elsewhere.

In 2011 UNICEF also helped to formulate a comprehensive new WASH cluster strategic plan for 2011-2015, which is currently being used as the reference point for support for donors to the humanitarian WASH sector (see Section 4.2).

Increasingly, UNICEF support for building enabling environments centres on SWA-related processes and commitments, which result in new comprehensive planning instruments and coordination mechanisms, improved targeting of funds and also new funding in the sector (see Section 2.2).

3.2 Hygiene and Sanitation

Promotion of Handwashing with Soap

The Global Handwashing Day (GHD) was a key vehicle for the promotion of handwashing with soap in countries around world in 2011. Tens of millions of people were reached with a wide range of promotional messages, and school children took the lead in mass handwashing promotion activities. In 2011 over a million schools formally participated in GHD events, the most ever. UNICEF provided support to GHD-related events in more than 70 countries in 2011.

In keeping with the slogan of 'more than just a day', the GHD is an important instrument for promoting continuous and sustainable hygiene promotion programmes. High-profile GHD events are prompting

increased political leadership for hygiene promotion, which is in turn leading to the development of new policy instruments and to the integration of handwashing into government programmes and plans.

There were numerous examples of this shift towards institutionalised handwashing promotion programmes in 2011. Several countries – including Afghanistan, Ghana, Mali and Tanzania – issued new policies that highlight handwashing with soap. In Nepal the comprehensive National Hygiene and Sanitation Master Plan developed with the support of UNICEF was approved by cabinet and launched by the president in 2011. Elsewhere, handwashing with soap was institutionalised into government programmes, such as in Malawi, where the National Hand Washing Campaign was launched and in Sri Lanka, where the financing and management of GHD-related promotional initiatives were taken over by the national government.

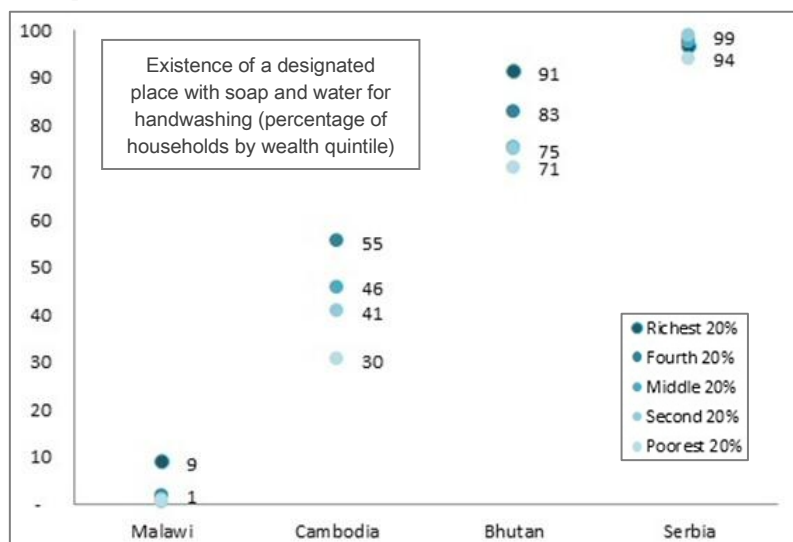
In 2011 about half (74) of UNICEF country offices reported the existence of a national communication programme that promotes handwashing with soap. This is fewer countries than in 2010, mainly because standards for what constitutes a national programme are more rigorous than in the past. UNICEF is moving towards more robust indicators of the effectiveness of hygiene promotion efforts than simply the existence of communication programmes. It has helped to include handwashing indicators in key sectoral monitoring instruments (see below), and it is developing global guidelines for more systematic monitoring of promotion programmes. An example of country level progress in this area is in India, where UNICEF and its government partners have developed a results-based framework for systematizing hygiene behaviour communication programmes. UNICEF is also moving towards the direct measurement of hygiene behavioural change through support to impact studies such as in Bangladesh (see Section 7).

In addition to supporting media and other mass communication initiatives, UNICEF continues to promote improved handwashing practices directly through engagement with communities, households and schools. In schools, for example, UNICEF works on many fronts, ranging from the development of hygiene education modules in the national curriculum and the training of teachers, to direct support to school clubs. In communities and households, UNICEF promotes hygiene through the public health extension network, by including hygiene promotion in Child Health Day initiatives (which in some countries reach hundreds of thousands of people) and, increasingly, by incorporating hygiene promotion into CATS programmes. Country offices estimate that about 39 million people were reached with these programmes in 2011.

The two main sources of sector monitoring data based on household survey – the Multiple Indicator Cluster Surveys (MICS) and the Demographic and Health Surveys (DHS) – now employ a standardized set of household hygiene proxy indicators (as reported in last year's WASH

Annual Report). With these new datasets, country analysis of the hygiene situation is improving. Figure 6 shows how the data can be used to track the relationship between handwashing and poverty.

Figure 6: Poverty and Handwashing Facilities: Four-country Example



More than Just a Day: India's Swachhta Utsav Campaign

The Government of India launched the Swachhta Utsav (Cleanliness Festival) in 2011, a multi-channel nation-wide hygiene and sanitation promotion drive that ran for a month in October and November. The campaign incorporated GHD activities, and was influenced by the GHD model as well as experiences from India's long history of hygiene and sanitation promotion initiatives. UNICEF provided support for the design of the media plan, and translated communication materials into 11 of India's regional languages. The campaign drew on the significant resources of state and district government bodies for a wide range of promotional activities, and attracted the interest and support of politicians and other decision makers. A key aim of the campaign is to reach children: a range of tools was used, including competitions, rallies, demonstrations, mass pledges and the institutionalisation of handwashing before meals in schools' daily routine. An estimated 89 million children participated in these activities, about double the number of children participating in the one-day GHD campaign in 2010.



UNICEF/India 2011-00451/Vishwanathan

Sanitation and the Elimination of Open Defecation

Since 2008, UNICEF and a growing number of other organizations have been working to expand CATS-related models into new countries through a south-south programme of engagement focusing on advocacy, demonstration and capacity building. This groundwork is yielding substantial results.

UNICEF estimates that through its own directly supported programmes alone more than 29,000 communities with a total population of 13 million people have achieved open defecation free (ODF) status (Table 2).

Table 2: Communities Achieving ODF Status with UNICEF Support by Region⁹

Region	Number of ODF Communities	ODF Population
Latin America and the Caribbean	104	16,154
Eastern and Southern Africa	19,231	7,295,213
East Asia and Pacific	666	528,166
Middle East and North Africa	24	23,493
South Asia	4,922	3,405,052
West and Central Africa	4,251	2,183,323
Totals	29,198	13,451,401

These gains made with direct UNICEF support show only part of the picture: far more people now live in ODF communities through government programmes, through programmes supported by NGOs, CSOs

⁹ Population figures here are only of communities that have been declared ODF. The number of people that now have toilets as a result of CATS programming initiatives in communities that have not yet obtained ODF status is significantly higher.

and other external support agencies, and through their own efforts. For example, the CATS-related Total Sanitation programme in India (supported indirectly by UNICEF) has helped 80 million people achieve certified ODF status. Nonetheless, these numbers are still small, given that 1.1 billion people worldwide practice open defecation and 2.5 billion are without improved sanitation.

But the pace of progress is accelerating rapidly. This is evident in UNICEF's own programme of support to CATS, which now accounts for most non-emergency sanitation beneficiaries. More importantly, overall progress as measured in the number of people and communities achieving ODF status is also climbing rapidly. In West and Central Africa, for example, the number of people who have achieved ODF status has increased almost exponentially since CATS was introduced in the region in 2008 (see Figure 7).

This rapid progress has prompted a shift in the nature of UNICEF CATS programming towards one of consolidation, focusing on the provision of support to government and other partners to scale up national programmes. This is a challenge: in 2011 at least a dozen countries were incorporating the CATS model into national policy with some – including Madagascar, Malawi and Kenya – setting ambitious national ODF targets.

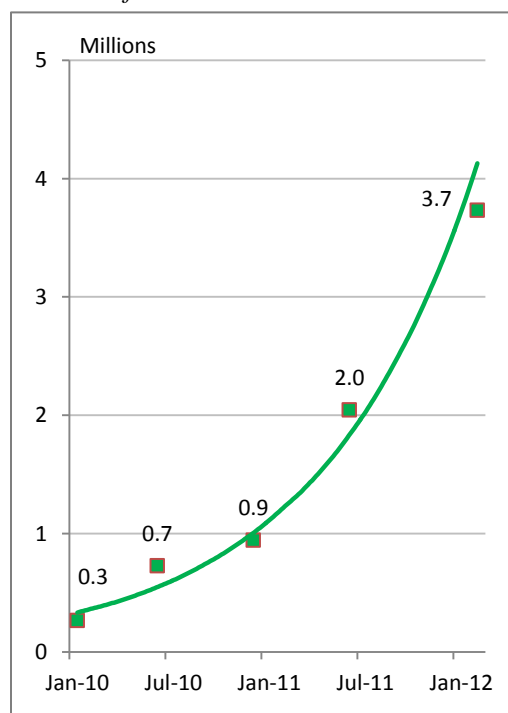
To improve designs and contextualize CATS into the national development context, UNICEF sponsored major evaluations and studies in Mozambique, Nepal, Ethiopia, Bolivia, Sierra Leone, Zambia and several other countries in 2011. UNICEF also worked to improve communication and triggering tools using social norms approaches at both the country level (e.g., Ghana and India), and through a social norms course for WASH and communication staff. In some countries work on programme design has led to the development of distinct local versions of CATS, such as Pakistan's PATS model (see box, below).

In several countries, UNICEF is working with partners to develop new sanitation marketing approaches to ensure that the demand created by CATS can be met by local markets. This involved the sponsorship of market surveys in some countries, and the development of marketing guidelines in others. Related to marketing are efforts to ensure the quality and sustainability of locally built latrines, ensuring that the poor in particular have access to local products.

UNICEF is also involved in improving monitoring systems for ODF and increasingly provides leadership in the area of ODF verification and certification protocols (e.g., in Kenya, Malawi and Nigeria). This is another area where UNICEF support for south-south cooperation has been particularly valuable: countries newly embarking on formal certification processes are benefiting from the long-running experiences in Bangladesh and other countries.

In an increasing number of countries, UNICEF and other stakeholders are incorporating handwashing promotion into CATS messaging and triggering tools, and making handwashing with soap a requirement for certification. Experience to date has shown that handwashing promotion fits well into CATS,

Figure 7: Population in Communities that have Achieved ODF Status in West and Central Africa



increasing potential health benefits without distracting from the primary message of stopping open defecation.

Beyond CATS, UNICEF also works in the areas of school sanitation (see Section 3.4), emergency sanitation (see Section 4) and sanitation in health facilities. This latter area of interest is expanding as UNICEF responds to clear needs for improved facilities (including sanitation and handwashing facilities), especially in rural and maternal health posts serving marginalised populations. In some countries (e.g., Kenya, India and the Philippines) UNICEF is active in upstream engagement with national health authorities on issues such as facility design and standards, and hygiene promotion training programmes for health staff. In 2011 UNICEF helped build WASH facilities in 1,340 health centres in 30 countries.

Pakistan Approach to Total Sanitation (PATS)

The Government of Pakistan and its partners have implemented a variety of CLTS projects in the country since 2004. Based on these experiences and lessons from abroad, the Ministry of the Environment, with a core group of support agencies (WSP, Plan, WaterAid and UNICEF), developed the Pakistan Approach to Total Sanitation (PATS) in 2009. **By the end of 2011, UNICEF-supported PATS initiatives helped an estimated 1.1 million people gain access to sanitation and 820 communities declared ODF.**

Like other CLTS models, PATS starts with a community-wide multi-step process to encourage the total elimination of open defecation. In the PATS model, this process emphasizes people's dignity and pride in their community. Once demand for sanitation is triggered, the model focuses on the supply side of the equation, demonstrating a range of appropriate household sanitation options while helping to ensure their availability in local markets through engagement with the private sector. PATS also includes strong hygiene promotion and safe water handling components.

The need to help communities recover from the devastating 2010 floods, along with the availability of humanitarian funding for reconstruction, was an opportunity to scale up the PATS model. This has proven to be an effective approach: an independent evaluation of an initiative in Punjab province showed a significant number of people constructing new toilets, improving their hygiene and drinking water handling practices, and succeeding in achieving ODF status for their communities. The success of PATS also demonstrates the capacity of UNICEF to maximise synergy between humanitarian and development results on a large scale.

3.3 Water Supply and Water Quality

Water Supply

UNICEF direct support helped 21.9 million people gain access to improved water supplies in 2011, 6.8 million from development programmes and 15.1 million through emergency response. Over the last five years, over 100 million people have benefited from water supplies constructed or rehabilitated with the support of UNICEF. This is an indication of the continuing importance of water supply within the UNICEF WASH programme, especially in sub-Saharan Africa, where UNICEF direct support accounts for a significant proportion of the overall coverage gains documented by the JMP over the last 20 years (see box, next page).

UNICEF support goes well beyond service delivery. In many countries, including those with limited support for water point construction, UNICEF works extensively in the areas of policy and governance,

contributing, for example, to water policy reviews in Cote d'Ivoire, DR Congo, Timor Leste and Togo in 2011. UNICEF is also a persistent advocate with governments, bilateral agencies and development banks for the targeting of funding towards marginalised populations to improve the equity of national water supply programmes. This is achieved through involvement in SWA and through membership on multi-stakeholder forums such as SWAPs and national donor coordination mechanisms.

Service delivery is rarely carried out in isolation: outside of some emergency interventions, all UNICEF-supported water supply programmes include both service delivery and sector development components. Mozambique's One Million Initiative is a case in point. The programme (funded by the Government of Netherlands) is on track to reach its service delivery targets, but it is also making an impact in the spheres of institutional development, sector coordination, planning and notably, third-party monitoring systems to ensure sustainability (see Section 7 for more detail on sustainability monitoring).

Sustainability was emphasized in other countries as well. In sub-Saharan Africa UNICEF supports national initiatives to strengthen handpump maintenance systems, such as in Zambia, where three new district-wide spare parts supply chains were established in 2011; in Mali, where mobile phone SMS software is used to monitor the status of water points; and in Guinea and other countries where UNICEF supports handpump artisan training.

Continuing work started in 2010, UNICEF took further steps to use its own procurement system to strengthen local handpump and spare parts markets in programme countries. In 2011 UNICEF issued a set of guidelines to help country offices pre-qualify local handpump suppliers in three categories: for handpump and spares supply; for supplies plus handpump installation services; and for supplies, installation and maintenance services. As one of the world's largest handpump buyers (especially in sub-Saharan Africa), UNICEF hopes in this way to stimulate local private sector interest in establishing robust supply chains for pumps and spares, ultimately improving maintenance and reducing breakdown rates.

Sub-Saharan Africa Countries with More than 500,000 Beneficiaries from UNICEF Direct Support in 2011

- | | |
|------------------------------------|----------------|
| • Chad | • Nigeria |
| • Democratic Republic of the Congo | • Sierra Leone |
| • Ethiopia | • Somalia |
| • Kenya | • South Sudan |
| | • Sudan |

Building on earlier work, UNICEF expanded its role in the promotion of self-supply as a model to improve the sustainability and reduce the costs of water supply programmes in sub-Saharan Africa. In Ethiopia, for example, UNICEF sponsored a benchmark study that led to the recognition of self-supply as a legitimate water supply option within the national programme and supported the development of national guidelines. Elsewhere UNICEF worked with the Rural Water Supply Network (RWSN) and other partners to promote the self-supply approach, including through a three-country forum in Ghana and through support to a variety of local initiatives, including work in Sierra Leone and Ghana combining HWTS and self-supply initiatives.

Beyond Spare Parts: Frameworks for Sustainability in Kenya, Ghana and Ethiopia

In Kenya, UNICEF is working with partners to develop an approach to sustainability that goes beyond hardware and supply chains to address a broader set of factors. This 'sustainability matrix' is used to underpin the design of UNICEF programmes of support for water in the country.

In Ghana, UNICEF has proposed a new model for water supply sustainability that is based on a similar analytical framework. This model identifies a set of seven sustainability factors. Priority intervention areas are identified at different levels (from national policies to community structures) and with different sets of actors (including government and private sector actors).

In Ethiopia, government and its support partners are stressing decentralisation as the key to the long-term sustainability of water supply systems. Under this Community Managed Projects model, local WASH committees participate in an intensive capacity-building programme, gradually taking on greater responsibility for the planning, implementation and management of their own WASH services, including the local procurement of some supplies and services. Ultimately government funding and other resources earmarked for WASH services are transferred directly to the WASH committees.

Kenya Community Water System Sustainability Matrix	
Financial	<ul style="list-style-type: none">• community choice of tariff structure• provisions for the poor
Institutional	<ul style="list-style-type: none">• strengthened sector reform institutions• targeted support at district level• registration of water users associations
Social	<ul style="list-style-type: none">• pro-poor implementation plan• meaningful participation by women• conflict resolution
Environmental	<ul style="list-style-type: none">• water safety planning• watershed management and protection
Technical	<ul style="list-style-type: none">• high-quality facilities• professionalization of maintenance• robust supply chains

Water Quality

As population pressure, pollution and environmental threats put water supplies at risk, UNICEF is increasingly active in the area of water quality. Key areas of focus are HWTs, water safety planning, testing and mitigation, and work with partners on standards and monitoring.

UNICEF encourages domestic water providers and regulatory authorities to adopt water safety planning approaches that use risk assessment techniques. This involves a combination of advocacy and capacity building with both national and local counterparts. In Viet Nam, for example, UNICEF supported the development of specific water system plans as well as new national operationalization guidelines, and in India, UNICEF supports the water safety planning approach at various levels, from entire districts to individual schools. A similar initiative in Kenya carried out in 2010 is the subject of exchange visits by government staff from other countries.

In most countries the focus is on preventing microbial contamination of drinking water, which affects the health of hundreds of millions of people around the world. But in countries where water supplies are threatened with arsenic, fluoride and other chemical contaminants UNICEF provides specialised support. This includes support centres for the testing of water supplies and communication programmes to inform communities about the problem and available solutions. Examples include the private, fee-for-service well-testing programme in Bangladesh that is being scaled up country-wide (along with the third wave of

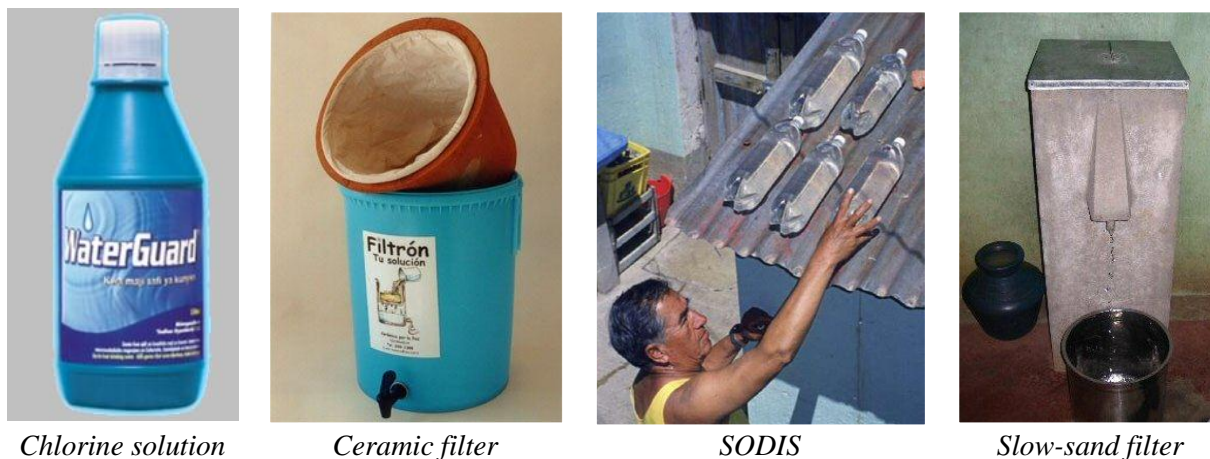
a national mass communication programme), new comprehensive fluoride mitigation initiatives in two Indian states, expanded arsenic testing campaigns in Cambodia and Myanmar, risk assessment surveys in Burkina Faso and Ethiopia, and an updated national plan of action for arsenic mitigation in Pakistan.

Household Water Treatment and Safe Storage (HWTS)

HWTS is becoming a core part of the UNICEF WASH programme, with supported activities in more than 45 countries in 2011 (compared to about 38 in 2010 and 29 in 2009). Programmes of support in these countries include comprehensive HWTS programmes that combine work at the upstream level (such as support for incorporating HWTS within national WASH policies) with extensive field work, as well as more modest initiatives, such as working within a consortium on promotional campaigns.

Estimates from country offices indicate that direct UNICEF support for HWTS benefited 6.7 million people in 2011. Most of these beneficiaries are from programmes that market low-cost chlorine-based water treatment products or, in emergency situations, distribute such products free of cost. A smaller number of people (about 135,000 in 2011) benefited from initiatives that promote ceramic, slow-sand or other household filters, which have a much higher up-front cost but last for years and have minimal operating costs. Beneficiary numbers are difficult to estimate and may not give an accurate picture in a given country: the goal of HWTS programming is to create demand and appropriate supply options within the local market – once that happens, the beneficiaries are not only difficult to count, they are no longer considered 'direct' beneficiaries.

Figure 8: Some of the Household Filter Technologies Used in UNICEF Programmes¹⁰



Chlorine solution

Ceramic filter

SODIS

Slow-sand filter

Comprehensive UNICEF programmes address both the demand and supply sides of the HWTS equation. In Asia, Africa and the Americas UNICEF and its partners have employed a variety of strategies to stimulate the local manufacture of filters and of chlorine solution. These efforts and the increasing involvement of the private sector have increased the availability of treatment products worldwide. For example, UNICEF now routinely purchases locally produced filters and chlorine products in countries around the world, including in fragile states such as Haiti and Somalia.

The greater challenge is creating large-scale demand for HWTS products, encouraging their consistent and correct use, and promoting safe water handling practices. In these efforts UNICEF works with specialised partners, including Population Services International (PSI) and the Program for Appropriate Technology in Health (PATH), as well as with local communication partners. Increasingly, HWTS promotional messaging is also included as a core component in UNICEF high-impact health

¹⁰ Photos: PSI, Practica, EAWAG and CAWST.

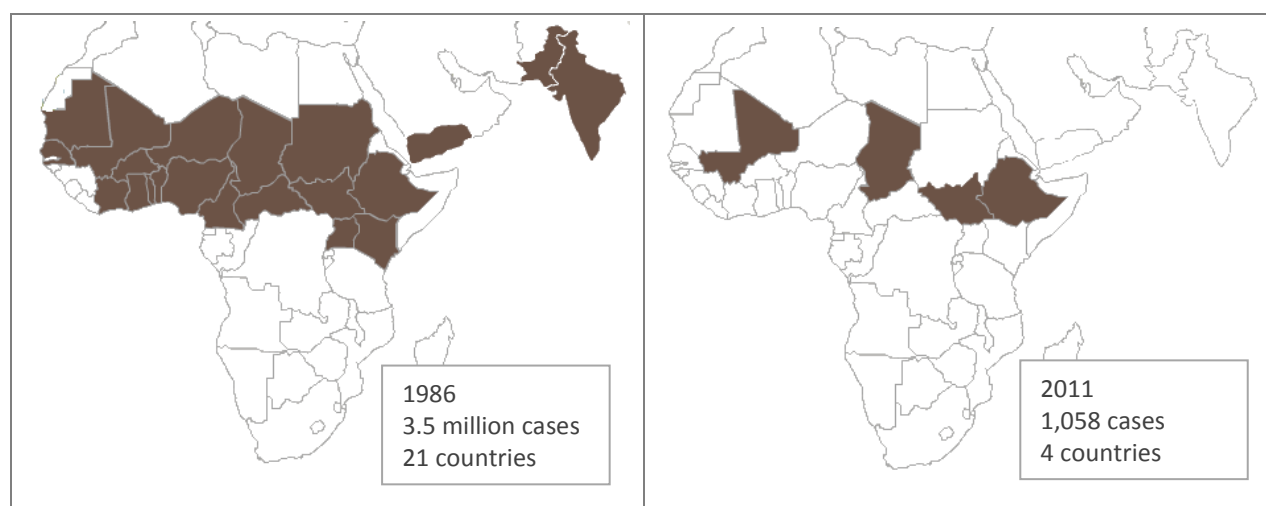
communication campaigns, which reach millions of people in some countries. Programme success depends on a good understanding of factors such as user preferences, product availability, willingness to pay and the potential effectiveness of different promotional approaches. In Tanzania a comprehensive study covering these and other factors was instrumental in the design of the new national HWTS programme. Similar studies are ongoing in Ghana, Kenya, Mali and other countries, and past studies and experience are being incorporated into new national strategies in several countries, including Cambodia, Ethiopia, Rwanda, Uganda and Viet Nam.

UNICEF co-hosted the International Network on Household Water Treatment and Safe Storage (INHWS) with WHO in 2011. This role allows UNICEF to contribute its field experience to influence global initiatives in the areas of advocacy, research, and monitoring and evaluation.

Guinea Worm Eradication

UNICEF's long-standing support to the guinea worm eradication effort has contributed to the substantial reduction in the scope and prevalence of the debilitating disease over the last 25 years (see Figure 9). In 2011 the global case load dropped by 41 per cent from 2010, Ghana reduced its number of cases to zero and the formerly endemic countries of Burkina Faso and Togo were certified as transmission free. Only four countries are now endemic, including South Sudan, which is host to 97 per cent of all remaining cases.

Figure 9: Guinea Worm Eradication Progress, 1986-2011¹¹



UNICEF contributes to the overall guinea worm reduction effort, continuing to focus most of its resources on the water supply component. Over the last three years UNICEF spent an average of \$2 million annually on guinea worm-specific programming, significantly more if 'multi-purpose' water supply activities are included.

Reaching guinea worm endemic areas is in most cases the same as reaching the most marginalised populations in a country, which is consistent with the organizational emphasis on equity-based approaches. South Sudan is a good example, where UNICEF-supported borehole drilling in the guinea worm endemic areas of Eastern Equatoria and Warrap states are reaching some of the most isolated and vulnerable communities in the world.

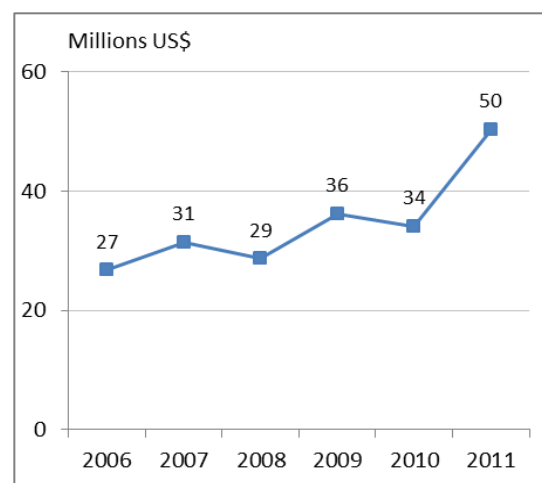
¹¹ Data from *Guinea Worm Wrap-Up*, Carter Center, March 2012 (2011 case data is provisional).

3.4 WASH in Schools

The scale of UNICEF involvement in WASH in Schools (WinS) has expanded from a relatively modest set of activities in a limited number of countries a decade ago, to a significant programme component in 95 countries in 2011. Expenditure on WinS has risen accordingly, almost doubling from \$27 million in 2006 to \$50 million in 2011, accounting for 14 per cent of the overall WASH programme and 21 per cent of non-emergency expenditure.

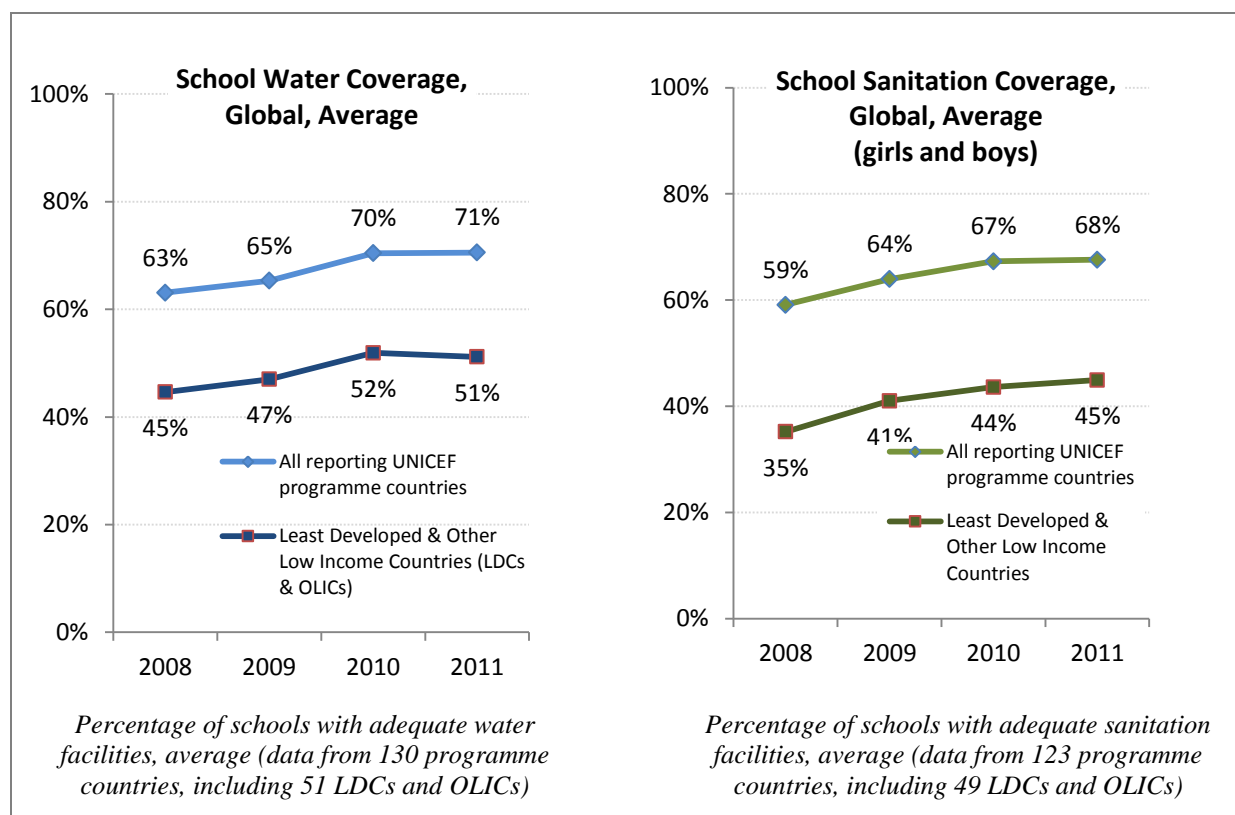
This expansion is in response to need. The growing body of evidence on WinS is increasingly clear on two points: one, poor WASH facilities (and lack of hygiene education) has a negative impact on child development, and two, many schools in developing countries still do not have adequate WASH facilities and programmes.

Figure 10: UNICEF Expenditure on WASH in Schools, 2006-2011



As detailed in Figure 11, this is especially true in poorer countries, where only 45 per cent of primary schools have sanitation facilities and just over half have water facilities.

Figure 11: Water and Sanitation Facilities in Primary Schools, 2008-2011



In the case of water, coverage in schools is 15 percentage points *lower* than coverage in households (for sanitation it is generally higher in schools than in households).¹² The charts also show that progress is fairly stagnant for the construction of both water and sanitation facilities in schools. Continuing low coverage rates and slow progress are clear signs that significant challenges remain, especially in the prioritisation of WinS among decision makers in the education and WASH sectors, and among support agencies.

At the global level, UNICEF work in the area of WinS is increasingly in the context of a partnership framework structured around the Call to Action for WASH in Schools advocacy and support campaign. This group of partners expanded throughout 2011 and core members refined priority areas of support around five thematic areas: WinS standards formulation, monitoring, engaging at scale in countries, developing the national evidence base for WinS, and using this evidence to step up advocacy efforts. The UNICEF WinS programme also coalesces around these areas, as described below.

Setting Standards

UNICEF works with national partners to develop and upgrade standards for WASH in schools in programme countries in all regions. These efforts are based on local evidence and experience and underpinned by the 2010 UNICEF/WHO WinS global guidelines.¹³ In many cases, evaluations of long-running UNICEF-supported WinS programmes are the basis on which standards are developed.

In 2011 new comprehensive WinS standards were developed with UNICEF support in Bangladesh, Lebanon, Nepal, Nicaragua and other countries, as well as in four Indian states. Work on the development of new standards is ongoing in a number of other countries – including Belize, Fiji, Madagascar and Myanmar. In most cases the standards development process involves multiple stakeholders, such as in Tajikistan, where recently developed standards were drafted by the national WASH Working Group convened by the Ministry of Education, and in Haiti, where the newly formed National Alliance for WASH in Schools is collaborating on the development of new national standards.

Where national standards already exist, UNICEF works with partners to adjust them in light of new evidence and best practices. In Malawi, a UNICEF-sponsored school sanitation review identified problems with existing standards for handwashing water tanks, prompting a revision that will be incorporated into national standards. Other examples include Ghana, where UNICEF is working with government partners to incorporate in national standards new menstrual hygiene-focused designs for toilet blocks for girls in basic schools, and Gambia, where a similar approach has already led to a revision in the national standards.

Standard setting also incorporates hygiene education programming. For many years UNICEF has provided assistance to ministries of Education on the enhancement of hygiene education standards in national curricula. UNICEF is well-placed to provide this service: through its global WASH programme it has access to the latest best practices on hygiene education. In Honduras, for example, UNICEF worked with the Ministry of Education in 2011 to develop new curriculum and pedagogical standards, and make corresponding adjustments to the teacher training manuals.

¹² Based on a comparison of the JMP 2010 household coverage dataset in all developing countries with the 2011 data on WinS gathered by UNICEF country offices (for illustration purposes only: data gathering methodologies differ significantly).

¹³ *Water, Sanitation and Hygiene Standards for Schools in Low-cost Settings*, WHO/UNICEF, 2009.

Monitoring WASH in Schools

Over the last three years UNICEF has prioritised efforts to improve WinS monitoring in recognition that in many countries systems are weak or non-existent. Part of this effort was the launch in 2011 of a new global WinS monitoring package to help education authorities monitor key aspects of national and sub-national programmes.¹⁴ The package focuses on guidance and tools for incorporating WASH-related indicators into the routine national Education Monitoring Information Systems (EMIS) while also providing tools for comprehensive stand-alone national WinS surveys and techniques for engaging children in monitoring efforts.

In 2011, several countries conducted comprehensive WinS surveys for the first time, including Belize, Guinea Bissau, Iraq, Kyrgyzstan, Malawi, Mali and Papua New Guinea. In some cases, the surveys led directly to results, such as in Tanzania, where information from a wide-ranging national survey helped to leverage an additional \$15 million leveraged from donors for WASH in schools.

Incorporating WASH indicators permanently into national EMIS is a more complex and long-term proposition, but the advantages are clear: they show that the education sector is internalising the need for WASH in schools. In 2011 at least two countries – China and Tajikistan – successfully included a new set of key WASH indicators in national EMIS.

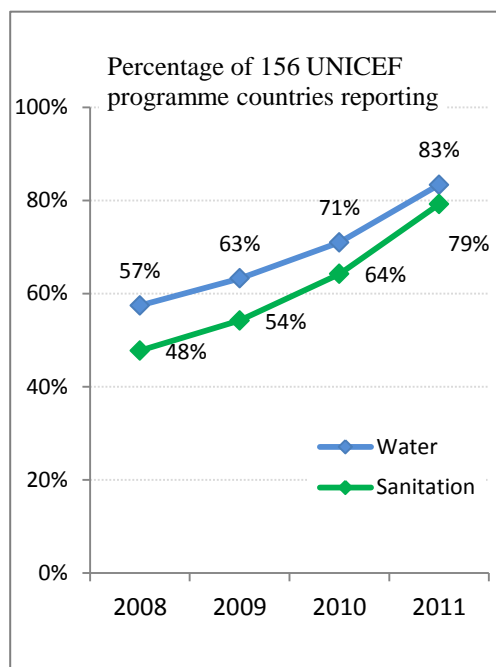
As shown in Figure 12, UNICEF is also becoming more successful in finding and reporting basic WinS data at the country level. However, this dataset is not comprehensive: it only includes information on the existence of water and sanitation facilities in schools based on standards that may not be up-to-date (e.g., standards that still allow high student-to-toilet ratios). The data also does not include information on functionality, gender-friendliness, the existence of handwashing facilities or hygiene education.

The quality of data available nationally and globally will improve as new national standards are developed to take into account global guidelines, and monitoring systems use these improved standards as benchmarks. When this happens, it is likely that WinS coverage figures in some countries will actually begin to drop. In fact, the plateauing of coverage shown in Figure 11 (in the previous sub-section), may be at least in part due to this phenomenon.

Engaging at Scale

Over five years from 2007 to 2011, UNICEF support has helped to build new water and/or sanitation facilities in over 79,500 schools worldwide, benefiting some 18 million students, mainly at the primary level. In 2011 alone, 4.5 million school children were reached, the most ever. The largest programmes measured by direct beneficiaries are in South Asia, where in 2011 new facilities were provided in over 5,800 schools. Other large programmes by this measure in other regions include DR Congo, Myanmar and Nigeria.

Figure 12: UNICEF Country Offices Providing WinS Monitoring Data, 2008-2011



¹⁴ WASH in Schools Monitoring Package, UNICEF, April 2011.

UNICEF's engagement in the area of hygiene promotion reaches even more schools and far more students: in 2011 an estimated 97 million school children were involved in promotional programmes supported by UNICEF and its partners. The largest numbers of students are reached through GHD-related campaigns; others are reached through national school-centred hygiene education initiatives and through direct school-based initiatives such as peer-to-peer promotion through WASH clubs.

In all countries UNICEF works with national partners to amplify service delivery efforts well beyond what could be achieved with its own limited resources. This always involves government partners and normally includes additional partners from the external support community and civil society. A good example is the programme in Mali, where UNICEF plays a coordination role in a large Dubai Cares sponsored initiative also involving Oxfam, Save the Children, CARE and WaterAid.

These efforts are not enough, however. The monitoring data shows that schools in poor countries do not have adequate WASH facilities and services. As part of its overall focus on equity, UNICEF is increasingly focusing its resources on these schools. One example of this is work with partners on a new 'laddered' approach to WinS in which schools progress through a three-star rating system of facilities and hygiene education programmes that stress the most effective and cost-efficient interventions at all rungs of the ladder. Modeled in part on the successful Fit for Schools approach in the Philippines and informed by CATS-related techniques, the approach will be rolled out and adopted to local programming contexts in an increasing number of countries in 2012.

Evidence and Advocacy

While direct support to service delivery is important, UNICEF works in other ways to help scale up WASH programmes in the educational system. Primary among these is advocacy for the prioritisation of WASH in schools, especially within national planning and budgetary instruments. These advocacy initiatives are producing substantial results. Examples in 2011 include new government funding for toilets in rural schools in Sri Lanka, new decentralised funding streams for WinS in Indonesia, funding for handwashing facilities in schools in Gambia, and significant new donor funding in several countries, including Tanzania, Timor Leste and Namibia.

Long-term advocacy efforts in India led to the 2011 ruling by the Supreme Court ordering state governments to provide toilet facilities in all schools, especially for girls. Building on this opportunity, UNICEF has deepened its engagement with state-level actors to accelerate ongoing efforts.

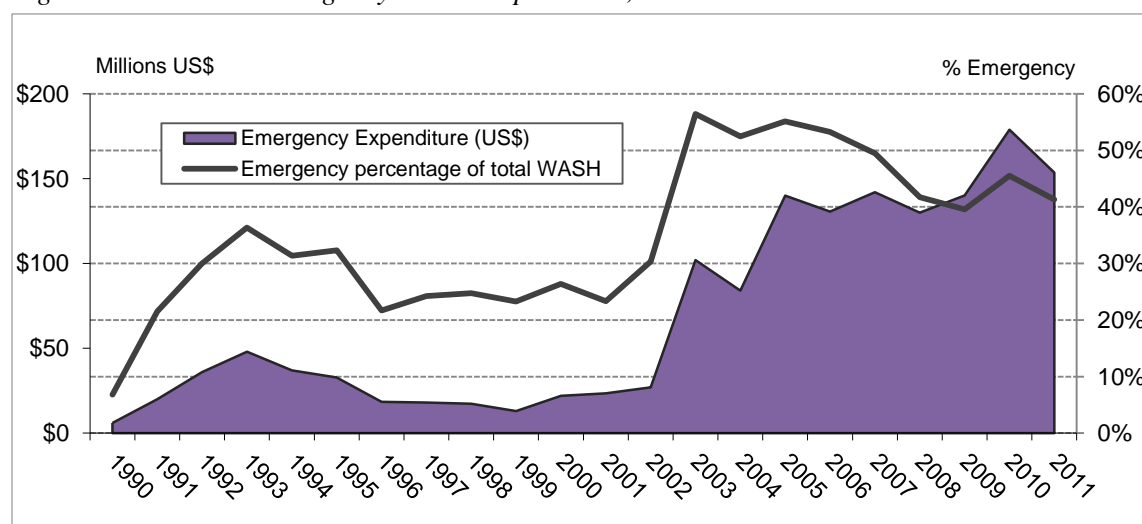
Another important mechanism for leveraging resources for WinS is to tap into school construction budgets, either by ensuring that national school construction standards include appropriate WASH facilities, or by advocating with financing agencies like regional development banks. A successful example of this in 2011 was in Lao PDR, where advocacy (based on a detailed analysis of EMIS data supported by UNICEF) led to an agreement among Education for All donors to fund school WASH facilities for 3,000 schools in the country's 61 most educationally disadvantaged districts.

4 Emergency Coordination and Response

UNICEF continued to play a key role in humanitarian programming for WASH in 2011, as direct responder and as the lead coordination agency. While in some respects it seemed quieter than 2010, there were many serious emergencies in all regions of the world. Flooding and regional drought were widespread across Asia and Africa, and the impact of conflicts on children and their families demanded significant WASH response, especially in the Horn of Africa. Cholera was again a major threat, and extreme storm events caused major damage, especially in the Philippines and in the Americas. Pakistan again suffered from widespread flooding, and Haiti continued to struggle to rebuild. By the end of the year UNICEF had responded with emergency WASH inputs in four more countries in 2011 (64) than in 2010 (60).

UNICEF spending on emergency WASH peaked in 2010 with Haiti's ruinous earthquake and the massive flooding in Pakistan. In 2011 expenditure levels dropped from this peak to \$154 million, 14 per cent lower than in 2010. But for the ninth consecutive year, emergency programming accounted for over 40 per cent of the overall WASH programme (see Figure 13).

Figure 13: UNICEF Emergency WASH Expenditure, 1990-2011



4.1 Emergency Response

In 2011, UNICEF country offices responded to a total of 291 humanitarian crises (108 natural disasters, 73 socio-political crises, 83 health crises and 27 other emergencies). In most of these, WASH was a significant component of the programme of response. Altogether, UNICEF WASH humanitarian action helped an estimated 15 million people regain access to water supplies and 4 million to sanitation facilities, as well as reaching others through such initiatives as hygiene promotion.¹⁵

For the second year running UNICEF's largest WASH humanitarian response programme was in Pakistan, where monsoon flooding affected over 5 million people, many of them in poor, marginalised districts. The recurrent flooding not only added to the vast destruction caused by the floods in 2010, it hampered reconstruction and development efforts. Compounding the natural disaster was the ongoing

¹⁵ Beneficiary estimates vary depending on assumptions and standards. See Section 2.5 for details.

security crisis in parts of the country, to which UNICEF also responded. UNICEF direct response to the new floods reached over 830,000 beneficiaries with water supply and 470,000 with sanitation. Outside of this effort UNICEF continued to support recovery efforts from the 2010 disaster and to manage WASH facilities for almost 200,000 people displaced by conflict. In fact, UNICEF is the only agency still active in IDP camps in some insecure parts of the country.

UNICEF works to emphasize long-term development goals within humanitarian WASH responses, and this effort has paid off in Pakistan, where emergency funding has leveraged a renewed push towards the elimination of open defecation in the country through the successful Pakistan Approaches to Sanitation (PATS) initiative (see PATS box in Section 3.2).

Moving forward the development agenda while meeting emergency needs is a theme in other countries as well. In Zimbabwe, for example, the ongoing recovery and reconstruction programme has introduced a local total sanitation approach – ZIMCATS – and sponsored pioneering work in the areas of handwashing facilities for schools and the local manufacture of sanitary napkins. In Haiti, reconstruction efforts are increasingly complemented by sector development initiatives, including WASH programming in remote rural communities outside the earthquake zone where access to services is low, and the introduction of innovative local management and tariffing solutions for water supply services in slums.

UNICEF also invested significant resources in cholera response and prevention initiatives in 2011, notably in the Lake Chad basin, where major outbreaks have occurred over the last two years, and in Haiti, DR Congo and Zimbabwe. The overall cholera response programme was one of the largest in recent years, with 19 UNICEF country offices reporting cholera outbreaks lasting six months or more during the year. The extent of the cholera problem has prompted the development of new approaches, including a comprehensive response programme in the West and Central Africa region featuring mobile and community rapid response teams, cross-border coordination, and greater integration of Health and WASH inputs. In Haiti a massive effort involving

communication, water treatment and sanitation inputs largely prevented new major outbreaks in camps, despite the withdrawal of many NGOs and the cessation of water trucking. Haiti's successful SIS-KLOR system for water quality monitoring during cholera outbreaks is now being expanded regionally with the support of UNICEF and WHO/PAHO.

UNICEF significantly scaled up its already large WASH programme in Somalia for people affected by the famine and at risk of acute diarrhoea or cholera (including people in the Daadab camps in Kenya). By the end of the year 1.7 million people were being provided with safe water supplies and the first-ever major hygiene promotion campaign was conducted, including in South Somalia, where the entire programme was carried out through remote management of a network of local NGOs. Major cholera outbreaks were prevented in South Somalia, and the scope and success of this effort were made possible by extensive preparatory work, including capacity building, supply pre-positioning and other methods.

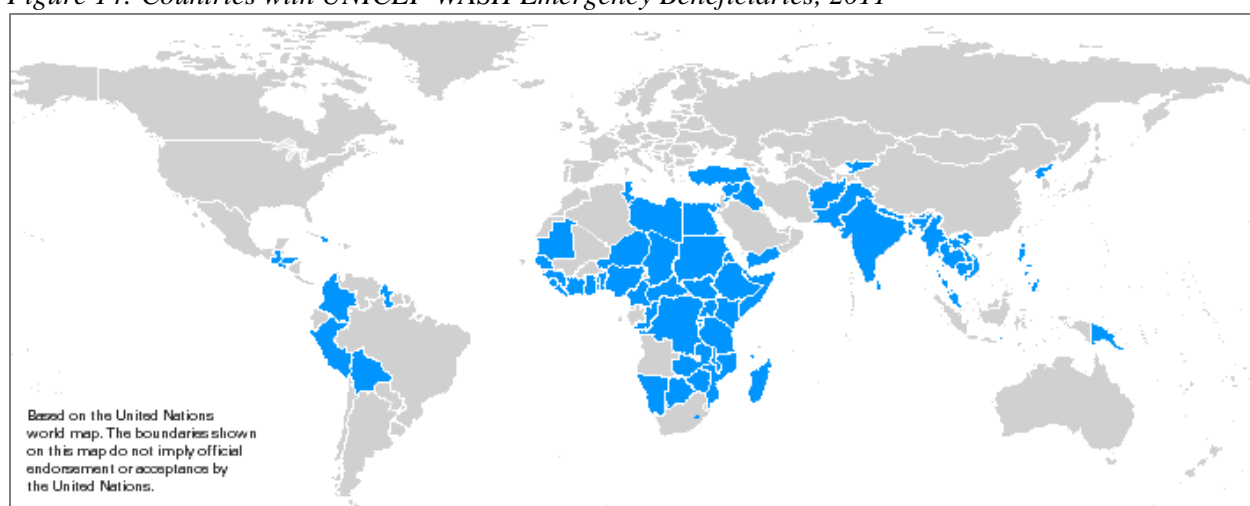
UNICEF Emergency WASH Programmes Exceeding \$1 Million in Expenditure in 2011

- | | |
|----------------------------|--|
| • Afghanistan | • Middle East and North Africa Programme |
| • Central African Republic | • North Sudan |
| • Chad | • Occupied Palestinian Territories |
| • Cote D'Ivoire | • Pakistan |
| • Djibouti | • Philippines |
| • DPR Korea | • Somalia |
| • DR Congo | • South Sudan |
| • Ethiopia | • Sri Lanka |
| • Haiti | • Yemen |
| • Kenya | • Zimbabwe |
| • Liberia | |

Preparedness and contingency planning were also key to the ability of UNICEF and its WASH cluster partners to support the new government in South Sudan with critical services in a volatile and fragile environment. By the end of 2011, new water sources had been provided to over half a million people in the new country and many others were reached through sanitation and hygiene promotion initiatives. The effort also strengthened inter-agency and government coordination mechanisms, building the capacity of the sector as a whole.

UNICEF responded with emergency WASH interventions in many other countries in 2011, including 21 countries where expenditure exceeded \$1 million (see box, above). Examples include extensive interventions in the Middle East, support for families affected by storms and flooding in the Philippines, drought response in Ethiopia, and comprehensive WASH emergency interventions in DR Congo. Outside of such large responses, UNICEF continued to mount smaller but critical emergency interventions in many other countries around the world (Figure 14).

Figure 14: Countries with UNICEF WASH Emergency Beneficiaries, 2011



4.2 Emergency Coordination and Capacity Building

Coordination

2011 was not a quiet year for emergency WASH coordination. UNICEF led or co-led the WASH cluster in 56 countries, one country more than in 2010. UNICEF assumed cluster leadership for WASH in more countries than for any other cluster in 2011.¹⁶

WASH cluster coordination represents a significant responsibility at the country level, one that requires funds and, more importantly, a substantial amount of time from skilled and experienced professional staff. In larger emergencies, dedicated cluster coordinators are often posted in-country, allowing UNICEF to concentrate on its own emergency response and development programmes. For example, in many large WASH countries – such as DR Congo, Ethiopia and Kenya – it is the norm to have large emergency and development programmes running concurrently.

¹⁶ In addition to WASH, UNICEF assumed leadership roles in the Nutrition cluster (41 countries), Education cluster (52 countries) and the Child Protection area of responsibility (46 countries).

In 2011 dedicated cluster coordinators were placed in about a quarter of the countries in which UNICEF led or co-led the cluster (13 of 56 countries – see Figure 15). In the other countries, cluster coordination was carried out by in-country UNICEF WASH staff, mainly in cases where the humanitarian crisis was short-lived, relatively small, or where coordination was supervised from outside of the country (see more on staffing below).

UNICEF continued to carry out its responsibilities as lead agency for the global WASH cluster in 2011, including hosting the global WASH cluster team (which coordinates the efforts of all WASH cluster participants worldwide) and five Regional Emergency WASH Advisors. UNICEF also helped to formulate a comprehensive new cluster strategic plan for 2011-2015, drawing on six years of WASH cluster experience. Various cluster partner agencies and donor partners have assumed responsibility for financing and realizing the plan's five strategic outcomes (see box).

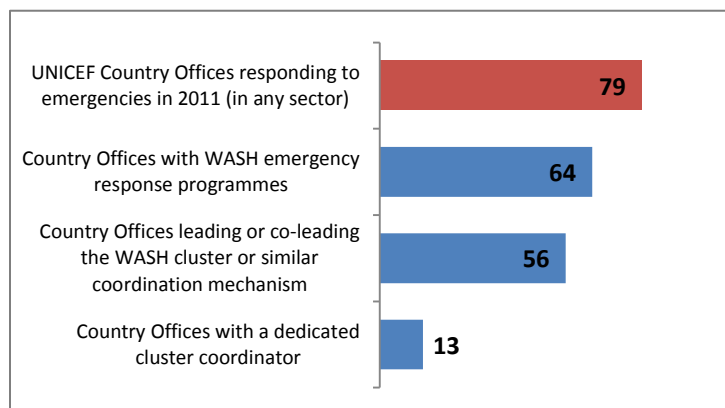
Coordination mechanisms and implementation standards established through the cluster approach continue to form the basis for longer-term cooperation among external support agencies and government counterparts as countries transition from emergency through reconstruction to development programming. Examples of this were cited by a number of country offices, including South Sudan and Sri Lanka.

Capacity Building

To meet emergency surge requirements for its Core Commitments for Children in Humanitarian Action (CCCs), UNICEF relies on three separate pools of qualified professionals: staff temporarily redeployed on mission from other UNICEF offices, external recruitment through a roster system, and previously arranged standby agreements with partner agencies. A total of 229 professionals were placed through this three-part system in 2010 and 2011, divided roughly equally (Figure 16). In addition, UNICEF relies on the WASH cluster Rapid Response Team (RRT) for deployment on demand within 72 hours. The RRT was deployed four times in four countries in 2011.

UNICEF took a number of steps to further improve this surge capacity system in 2011. It re-designed and expanded the roster system, which now includes 331 professionals who have cleared a multi-category technical vetting process. UNICEF also released a new Corporate Emergency Activation Procedure (CEAP) in 2011, involving the formation of trained, multi-sectoral staff teams on permanent standby for

Figure 15: Country-level Emergency Response and Coordination, 2011



Global WASH Cluster Strategic Plan 2011-2015

Cluster goal: Improve the predictability, timeliness, and effectiveness of a comprehensive WASH response to humanitarian crises

Strategic Plan Outcomes

1. Effective coordination and capacity of the Global WASH Cluster
2. Timely operational support to national WASH clusters as needed
3. Improved emergency preparedness and technical capacity of WASH stakeholders
4. Use of 'Accountability and Learning' to facilitate effective WASH cluster action
5. Operational advocacy for WASH an essential part of humanitarian response and communication in both emergency and development fora

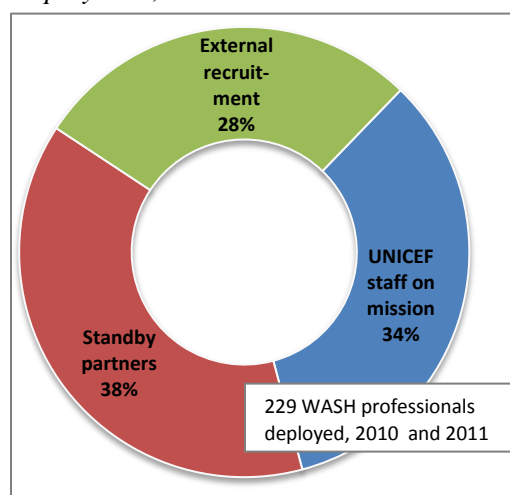
deployment in large-scale emergencies. Finally, UNICEF and its WASH cluster partners expanded the RRT from three professionals to nine (6 cluster coordinators and 3 information management officers).

In-country WASH teams are the first responders in most emergencies, and are often tasked with coordination responsibilities, at least for short periods of time. UNICEF continued to prioritise the development of this existing capacity through the continuing roll-out of the WASH in Emergencies (WiE) course, which covers key components of both emergency response and coordination. By the end of 2011, 230 UNICEF WASH professionals had completed the course.

Connected to the WiE training effort, UNICEF is developing new reference and guidance material for staff and partners. One example is the Water, Sanitation and Hygiene for Schoolchildren in Emergencies guidebook (published in 2011), and another is the cholera prevention and response toolkit, a compilation of best practices and reference material (under development).

UNICEF also continues to contribute to global efforts to build capacity and improve humanitarian WASH response through support to the Emergency Environmental Health Forum, the Emergency WASH Technical Group and to the Sphere Project review.

Figure 16: WASH Emergency Staff Surge Deployment, 2010 and 2011



5 WASH, the Environment and Climate Change

Recent analyses by UNICEF, WHO and the academic community show that children bear the brunt of the impact of climate change and global warming. Almost 90 per cent of the existing burden of disease caused by climate change occurs in children, and most is WASH-related. Children are also disproportionately affected by other impacts of climate change, including vulnerability to extreme storm events, loss of livelihood and increased poverty. Building the adaptation capacity of communities and families is an increasingly important part of ensuring the survival and development of children.

UNICEF continued work in this area on a number of fronts in 2011. It updated its comprehensive literature review on climate change and WASH, surveyed 60 country offices on climate change programming and combined this information to build a database to define country risk profiles. To date 50 countries have completed surveys and detailed risk assessments have been prepared for six countries. UNICEF also conducted staff training and technical workshops on climate change and WASH, including eight in-country workshops for staff and partners. In Nigeria, UNICEF is developing a comprehensive climate change adaptation course for water sector professionals in government and civil society.

UNICEF directly supports vulnerable communities to increase their adaptive capacity. In some countries this involves the development and use of new adaptive technologies, such as flood-resistant latrines, and in others, support for decentralised planning. UNICEF also uses its ongoing engagement with schools to sponsor WASH-related climate change activities. In Ethiopia, for example, UNICEF is piloting climate-resilient options for schools (see box, below), while in China, Madagascar, Rwanda and elsewhere adaptation and environmental activities have been incorporated into WASH in Schools programmes. In a number of countries UNICEF continues to support mainstreaming climate change and environmental education into the school curriculum. Data from UNICEF country offices shows that the number of programme countries that have succeeded in doing this has risen by over 50 per cent since 2008.

One of the greatest health threats to children is the presence of excreta in their immediate environment due to open defecation. UNICEF is recognized as a development community leader in reducing this threat. As a result, UNICEF takes on this role within joint environment and climate change endeavours at country level, such as in Pakistan where UNICEF leads the sanitation component of the Delivering as One UN programme on the Environment. UNICEF is also working on new ways to address the danger of excreta in slums and other densely populated poor urban communities. Specific support activities include Zambia's urban CATS initiative, Madagascar's promotion of a new compact urban toilet design and the Bangladesh office's support for the integration of WASH priorities into the National Urban Policy.

Schools as Hubs for Action on Climate Change in Ethiopia

In Ethiopia, where the impact of global warming is already affecting communities, UNICEF is working with government partners to build a national portfolio of climate change-resistant technologies and practices for schools and their host communities. The initiative is carried out through the African Adaptation Programme (AAP) financed by the Government of Japan. The focus to date has been on alternative water systems in changing environments, including solar powered pumps to tap deep aquifers and rain water harvesting systems. These activities are complemented by support for environment education for students, with an emphasis on understanding the impact in their own communities and practical adaption measures such as water conservation. The initiative aims to demonstrate ways in which climate risk and resilience can be integrated into national sectoral planning processes.

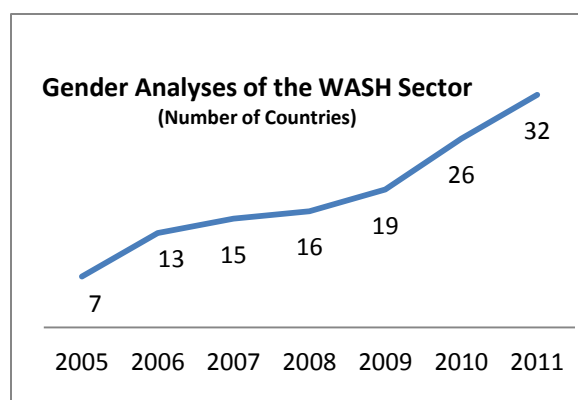
6 Gender and WASH

Gender inclusiveness is at the core of the UNICEF WASH programme and UNICEF works to strengthen the role of women in all supported activities, and through advocacy and example within the wider sector.

In field programmes an important part of this effort is making gender considerations a requirement for the location of WASH facilities, their use and management. In many countries this means strong advocacy for more women representatives on WASH committees and other management structures and increasingly, by influencing national policies, guidelines and regulations. Several country offices reported successes in this area in 2011, including the Central Africa Republic and Honduras. In Ethiopia this was taken a step further through the introduction of a new Quantitative Participatory Assessment tool, which helps to move the analysis beyond numbers on committees to the degree to which women are actually empowered as decision makers.

Another area where UNICEF takes a leadership role is in the design and promotion of gender-friendly WASH facilities in schools. As discussed in Section 3.4, this is an ongoing process that culminates in the modification of national standards for school WASH facilities, their financing, construction and maintenance. UNICEF works to ensure that such processes are not dominated by adults (or by engineers) by encouraging girls and boys to participate in key phases of the design process. In Cote d'Ivoire, for example, child participation led to modifications in facility design in 2011, and similar processes are ongoing elsewhere. The design and dissemination of tools for engaging with children are part of this agenda; they include the children's monitoring module and survey questions for girls in the WASH in Schools global monitoring package.

Figure 17: Programme Countries Undertaking Gender Analyses, 2005-2011



UNICEF expanded its role in menstrual hygiene management in 2011, working in an increasing number of countries and broadening the scope of its activities. Support is at both the upstream and downstream levels and encompasses three main areas: education for girls, ensuring adequate facilities are available for sanitary napkin handling in schools and health facilities, and promoting efforts to increase the availability of safe and affordable menstrual hygiene products in local markets. Country offices report results in all three of these areas. In Afghanistan, for example, UNICEF and its government partners implemented a comprehensive menstrual health and hygiene education programme in schools, using a design informed by a 2010 survey. In Tanzania new designs for menstrual hygiene management facilities (including private washing facilities and napkin incinerators) were field tested. And in several other countries – including Kenya, India, Nepal and Zimbabwe – UNICEF-supported napkin manufacture and distribution initiatives, in most cases centred on cooperatives and self-help groups.

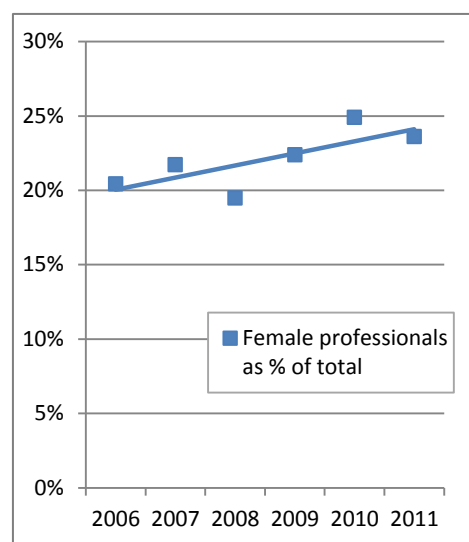
UNICEF also continues to support sectoral gender analysis and audit processes (Figure 17, above), and is active in promoting the use of gender-sensitive methodologies in planning, monitoring and evaluation. Gender analyses have been used to influence the design of national sectoral policy (e.g., Cambodia's new WASH policy), and have been shown to influence gender awareness among NGO partners (e.g., in Zimbabwe).

These and other efforts to address gender in WASH field programming are carried out in the context of UNICEF's organizational-wide efforts to promote gender-focused approaches. In 2011 this was strengthened through the issuance of a new set of operational guidelines on gender-based programming.¹⁷

Putting women and girls first in the WASH sector is not easy. Entrenched gender inequality in society is a major challenge at all levels, from households to national decision-making forums. Also a challenge is finding, recruiting and keeping qualified women in the sector. In Pakistan, for example, emergency and recovery WASH activities in 2011 were hindered by the difficulty in employing women hygiene promoters.

UNICEF confronts related challenges in its efforts to improve the gender balance of its own professional staff cadre: the number of female UNICEF WASH professionals increased to 126 worldwide in 2011, the most ever. However, there was actually a slight drop in the percentage of women in 2011, although the overall trend is positive (Figure 18).

Figure 18: Gender Balance of UNICEF WASH Professional Staff Cadre, 2006-2011



¹⁷ *Promoting Gender Equality: An Equity-Focused Approach to Programming*, UNICEF, 2011.

7 Sector Monitoring

UNICEF contributions to global sector monitoring focused on two areas in 2011: producing the JMP 2012 update report, and modifying the JMP to encompass new indicators and post-2015 targets.

The 2010 JMP database (used in the 2012 report¹⁸) is five times larger than that used in the 2000 report: it is based on data from more than 1,100 quality-vetted surveys and censuses from developing countries, an average of six per country.¹⁹ This increase in data points has greatly improved the accuracy of the JMP linear regression line estimates of coverage in developing countries, and opens the door to the use of more sophisticated statistical modelling methods in the near future.

In 2011 work continued on refining global sector monitoring methodologies through the JMP's three technical working groups on sanitation and methodology, water quality and monitoring in urban settings. The urban working group met in 2011 and issued a report that offers new methodologies for monitoring in urban settings, especially in slums and other poor urban settlements. In parallel to this process, the JMP initiated a broad stakeholder consultation to look beyond the 2015 MDG sectoral targets and to guide improvements in monitoring methodologies. In an inception meeting in May 2011, consultation participants agreed that the JMP should continue to be the main monitoring vehicle for the sector and that it should be modified and expanded to monitor post-2015 targets on basic access, while providing more detailed sector monitoring needs. The group also stressed the need to incorporate the human right to water and sanitation as a framework for monitoring efforts, and recommended that universal coverage of basic water and sanitation should be included in future targets.

In 2011 the JMP also published the thematic report *Drinking Water: Equity, safety and sustainability*. Produced in alternate years to the update reports, thematic reports are more in-depth examinations of key sectoral issues. The 2011 report provides a focused analysis of the equity issues behind the global and regional averages, examines the importance and status of water safety, and addresses the major challenge of the sustainability of water services.

At the country level, UNICEF continues to support a wide range of monitoring initiatives. Examples include support for the expansion of Ethiopia's WASH inventory system, advocacy and support for the standardisation of state monitoring systems in India, technical support to monitoring units in Rwanda, and sponsorship of third-party monitoring and verification systems for CATS in Kenya. In DR Congo, Liberia, Mali and other countries, UNICEF supports SMS-based data transmission systems for sector monitoring and water point mapping initiatives.

UNICEF also develops and disseminates monitoring tools, including the WinS monitoring package (published in 2011) and a set of handwashing with soap monitoring guidelines (under development).

In 2011 UNICEF began development of a new Marginal Budgeting for Bottlenecks (MBB) tool to improve tracking of key constraints (bottlenecks) impeding progress in the sector. Originally developed for use in the Health sector and used with significant success in a number of countries, the MBB tool will help to focus attention on key areas of concern and to influence investment decision making.

Evaluations were carried out in a number of countries, including evaluations of UNICEF-sponsored programmes and wider sector reviews and assessments. Evaluations that go beyond the measurement of project outputs to directly assess health and other impacts of WASH interventions are less common, due

¹⁸ *Progress on Drinking Water and Sanitation: 2012 Update*, WHO and UNICEF, 2012.

¹⁹ The database also includes 300 government reports from developed countries (household survey and census data in developed countries generally do not include any information on water and sanitation).

to resource and time constraints and other factors. However, UNICEF aims to carry out such evaluations where possible (see box), and plans to prioritise this work in future. For example, UNICEF will conduct a comprehensive multi-country impact evaluation of CATS programmes in 2012.

***Assessing the Impact of UNICEF WASH Programmes:
Notes from Mozambique, Bangladesh and Mali***

The mid-term impact assessment of the Netherlands-funded One Million Initiative WASH programme in Mozambique used quantitative and qualitative methods to measure impact over time and between project intervention locations and control locations. It also made use of third-party sustainability checks to assess the long-term viability of outputs. The evaluation found a statistically significant reduction in diarrhoeal disease in the target population specifically from the CATS component of the programme. Other evaluation findings were used to make recommendations for course corrections, notably the need for more emphasis on hygiene and safe water handling.

The hygiene component of the DFID-funded Bangladesh Sanitation, Hygiene Education and Water Supply-Bangladesh (SHEWA-B) project is designed to influence handwashing practices (and other behaviours) of 21.4 million people in rural and urban areas. It is one of the largest interventions of its kind ever attempted in a developing country. The impact of the project, which finishes in 2012, will be assessed through direct observation of handwashing practices instead of relying on self-reporting through conventional questionnaire-based techniques. Baseline work carried out in 2008 has already shown the value of this approach: existing conventional surveys indicated that handwashing after defecation was practised by 57 per cent of the population; while direct observation showed that it was actually less than 20 per cent.

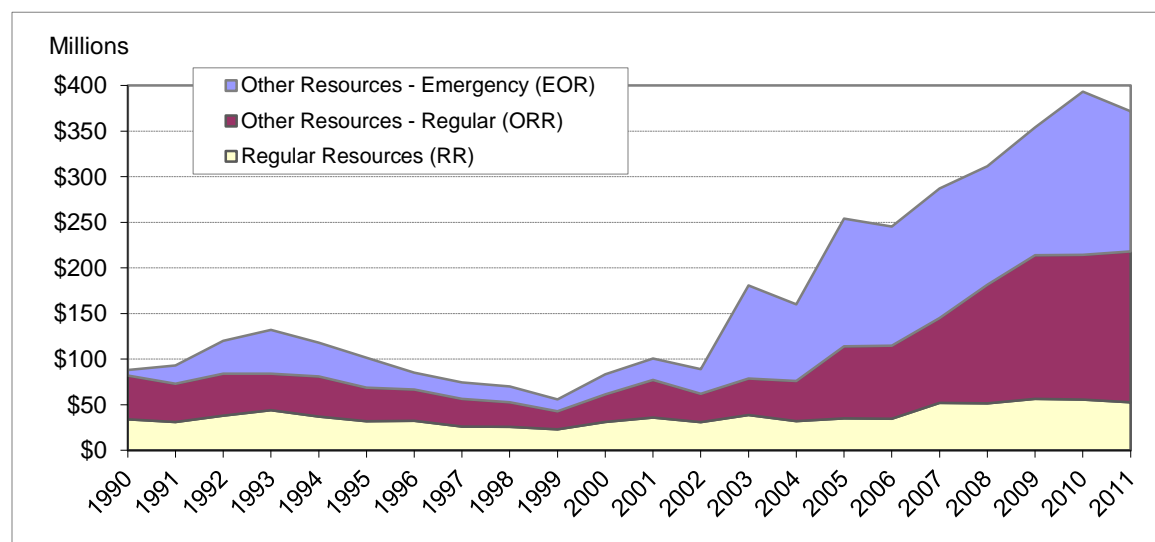
The Bill and Melinda Gates Foundation is financing an impact assessment of the UNICEF-supported CLTS programme in Mali by a multidisciplinary team drawn from several different academic, civil society and government bodies. The study is designed to assess causal relationships between project outputs and behavioural change and health outcomes, while comparing the relative effectiveness of project components. A variety of assessment tools will be used, including observation for hygiene behaviour change and child anthropometrics for health outcomes. Study results will be used to modify the model design before scaling up nationally.

8 UNICEF Expenditure for WASH

8.1 Expenditure Patterns and Funding Status

UNICEF total expenditure on WASH programming in 2011 was \$372 million, 5 per cent less than in 2010. This overall decrease is due to a 14 per cent drop in emergency expenditure, from \$179 million in 2010 to \$154 million in 2011 and a drop in WASH regular resources. On the other hand, support from funding partners for the regular (non-emergency) programme increased by \$6 million in 2011.

Figure 19: Total UNICEF WASH Expenditure, 1990-2011



Over 80 per cent of the total WASH expenditure in 2011 was in sub-Saharan Africa and South Asia (Figure 20).

Nine of the top ten countries by expenditure were also in these regions, the exception being Haiti (Table 3). These ten countries account for 51 per cent of all field expenditure, a reflection of the importance accorded to them by both UNICEF and its funding partners.

For the second year running, the most expenditure in a single country was in Pakistan, where UNICEF continues to support a massive reconstruction effort following the 2010 floods while responding with cluster partners to major new floods in 2011.

Figure 20: WASH Expenditure by Region, 2011

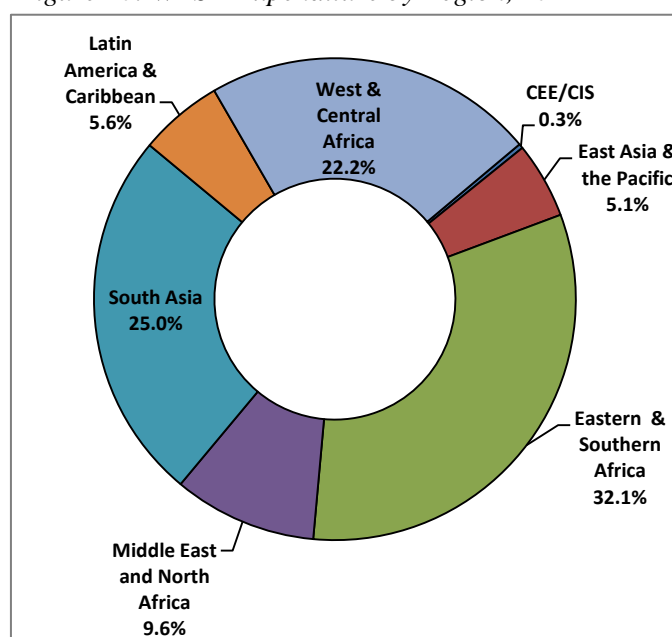


Table 3: Top Ten Countries by WASH Expenditure, 2008-2011 (millions of \$)

2011		2010		2009		2008	
Pakistan	43.5	Pakistan	51.1	Zimbabwe	23.3	Sudan	24.5
Ethiopia	24.4	Haiti	29.8	Sudan	22.8	Nigeria	19.9
Congo, Dem. Rep.	20.6	Sudan	25.5	Pakistan	20.8	DR Congo	15.7
Zimbabwe	16.2	Zimbabwe	19.1	Somalia	18.9	Bangladesh	15.0
Somalia	15.6	Kenya	16.4	Ethiopia	17.6	Ethiopia	14.8
Bangladesh	15.5	DR Congo	15.8	Bangladesh	15.9	India	14.3
Nigeria	14.9	Ethiopia	15.8	DR Congo	15.1	Indonesia	12.4
Afghanistan	12.7	Afghanistan	15.2	Afghanistan	14.3	Somalia	11.6
Haiti	12.4	Bangladesh	14.8	Mozambique	12.0	Mozambique	11.1
North Sudan	10.9	Iraq	12.7	India	10.9	Pakistan	10.4

UNICEF strongly focuses resources at the field level, with 98 per cent of expenditure occurring at the country level. UNICEF has actually strengthened its WASH regional and headquarters presence over the last five years in response to the need for enhanced involvement in coordination, advocacy and advisory services. However, cost efficiencies, such as the use of the webinar training platform, mean that headquarters and regional costs still account for only 2 per cent of total costs.

8.2 Funding Sources²⁰

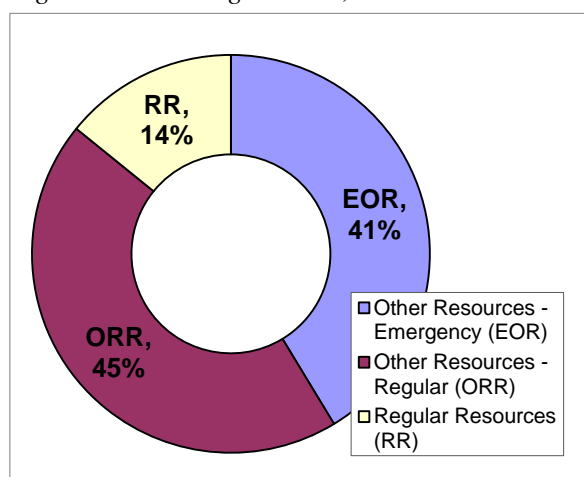
The majority of UNICEF WASH expenditure – 86 per cent in 2011 – is from donor partners with the balance from UNICEF ‘regular resources’ or core funds. Of these donor-provided funds (designated as ‘other resources’), 45 per cent was used for regular programming and 41 per cent for emergencies (Figure 21).²¹

For the fifth time in six years, the United Kingdom was the largest single donor for UNICEF WASH, providing \$45 million for 2011 expenditures. The European Commission and the Netherlands were once again the next two largest donors (Table 4).

The largest donors for the emergency portion of the programme were the governments of the USA, Japan and Australia, which together provided 56 per cent of all WASH funds used for emergencies by UNICEF in 2011.

UNICEF National Committees (NatComs) are also important funding partners for the WASH programme. In 2011 they provided \$28 million, representing 9 per cent of all donations. For the third year running the Swedish NatCom was the largest of the NatCom donors.

Figure 21: Funding Sources, 2011



²⁰ All figures on donor funding in this section are based on donor funds expended in 2011, not funds donated in 2011.

²¹ Donors also provide some of the funds for regular resources through annual funding commitments to UNICEF.

Table 4: Top Ten Donors by Total WASH Expenditure, 2007-2011 (descending order by size of total contribution – EOR plus ORR)

2011 (millions of \$)		2010	2009	2008	2007
United Kingdom	44.8	United Kingdom	EU	United Kingdom	United Kingdom
EU (EC + ECHO)	31.9	EU	Netherlands	EU	EU
Netherlands	26.0	Netherlands	United Kingdom	Netherlands	Netherlands
Japan	21.8	Japan	Japan	Japan	Japan
USA	19.5	Australia	USA	USA	USA
Australia	19.0	USA	Australia	Australia	Australia
Swedish NatCom	5.9	Sweden	Canada	Canada	Canada
Sweden	5.8	Spain	Swedish NatCom	Spain	German NatCom
Canada	5.5	Canada	Denmark	Norway	Norway
Spain	5.5	Swedish NatCom	Sweden	US NatCom	Sweden

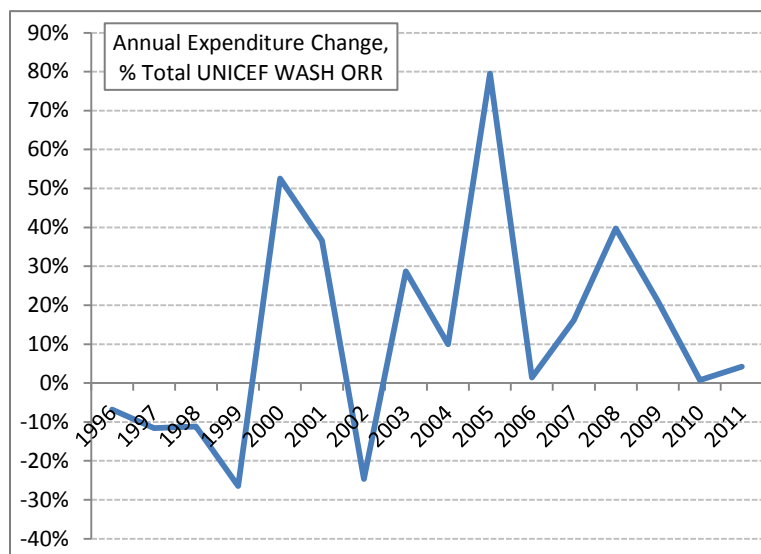
Table 5: Top Ten Donors by 2011 Emergency and Development Programme Expenditure (millions of \$)

Regular Programmes		Emergency Programmes	
United Kingdom	37.4	USA	18.4
EU (EC + ECHO)	23.7	Japan	14.6
Netherlands	21.7	Australia	13.2
Japan	7.2	EU (EC + ECHO)	8.1
Australia	5.8	United Kingdom	7.4
Swedish NatCom	5.7	Spain	4.8
Canada	4.6	Sweden	4.5
US Fund for UNICEF	3.8	Netherlands	4.3
Norway	3.2	Denmark	3.3
Finland	3.0	Belgium	2.6

Most donor funds are allocated to specific country programmes and are negotiated on a project-by-project basis with donor partners. As shown in Figure 22, this funding is highly volatile, even when the analysis is restricted to funding for the WASH development programme only (emergency funding is volatile by definition and thus not included in the chart).

Because donor funds account for the vast majority of the overall WASH development programme (86% in 2011), this limits UNICEF's ability to fill gaps in countries and programmes where donor funding is unavailable. It also limits multi-year planning and the ability to commit resources over the medium and longer terms. In response to this limitation, UNICEF has requested and received WASH thematic funding from the governments of Norway and Australia over the last several years, which is used to finance priority initiatives and fill temporary funding gaps. UNICEF is currently working with other donor partners to expand this thematic funding pool.

Figure 22: Volatility in Donor Funding for the UNICEF WASH Development Programme, 1996-2011



9 Challenges for 2011 and Beyond

In 2012 UNICEF will continue to strengthen its overall programme, while focusing on six key challenge areas:

Going to Scale with Sanitation

UNICEF will prioritise strategic interventions to help countries transform pilot and other small-scale CATS projects into national programmes. Activities of focus will be advocacy and support for financing at-scale programmes through the SWA and other mechanisms, technical support for strategy formulation and planning, and the sponsorship of evaluations and studies to ensure designs are robust and focused on results for children.

Moving Forward on Equity in WASH

Continuing its ongoing efforts, UNICEF will structure its programme of support around understanding inequities in WASH and acting on this knowledge. UNICEF will prioritise strategies explicitly designed to reduce disparities in its own programmes, and will structure advocacy efforts around the need to address inequities. WASH programmes will form an integral part of rolling out UNICEF's organisational drive on Monitoring Results for Equity.

Greater Emphasis on the Sustainability of Water Systems

UNICEF will increasingly leverage its experience and expertise in water supply towards addressing issues of sustainability, especially in sub-Saharan Africa, where breakdown rates continue to be unacceptably high. The focus of UNICEF efforts will be on demonstrating innovative approaches to improve sustainability, support for policy reform, and ensuring that its support for water supply service delivery (e.g., in emergencies) promotes national efforts to improve sustainability.

Strengthening Sectoral Monitoring Systems

The JMP, GLAAS and other sectoral monitoring bodies must adapt to meet the growing demand from stakeholders for more sophisticated assessment tools, and for the need to monitor a new set of post-2015 goals. UNICEF will leverage its role on the JMP to move this agenda forward, while at the same time sponsoring improved results-based monitoring and evaluation at country level.

Building Capacity for Humanitarian Coordination and Response

As the WASH sectoral agency with the largest in-country presence worldwide, as lead agency for WASH cluster coordination, and in its obligation to fulfill the core commitments for children, UNICEF will intensify its efforts to build staff capacity for WASH humanitarian action, and to strengthen surge support mechanisms for extending this capacity when needed.

Achieving Multi-sectoral Outcomes

Outcomes in water and sanitation, apart from being rights in themselves, support important development outcomes for children in other programming areas. For example, improved water, sanitation and hygiene can contribute to reduced child mortality, reduced stunting and the retention of girls in schools. These linkages are well understood, but there are fewer examples of programming approaches that achieve cross-sectoral results at scale. UNICEF is in a unique position to deliver programmes that provide outcomes across a range of functional areas and sectors and will prioritise programmes that deliver multi-sectoral outcomes.

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