

#### **UNICEF's Mission**

UNICEF is mandated by the United Nations General Assembly to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential.

UNICEF is guided by the Convention on the Rights of the Child and strives to establish children's rights as enduring ethical principles and international standards of behaviour towards children.

## **United Nations Millennium Development Goals**

The Millennium Development Goals have been described by United Nations Secretary-General Ban Ki-moon as "our common vision for building a better world in the twenty-first century."

In 2000, all 189 United Nations Member States committed to the Millennium Development Goals as well as to the Millennium Declaration. Since then, the United Nations has expanded to 192 Member States and all are committed to the Goals and the Declaration.

By 2015, all 192 United Nations Member States have pledged to:

- 1. Eradicate extreme poverty and hunger
- 2. Achieve universal primary education
- 3. Promote gender equality and empower women
- 4. Reduce child mortality
- 5. Improve maternal health
- 6. Combat HIV/AIDS, malaria and other diseases
- 7. Ensure environmental sustainability
- 8. Develop a global partnership for development

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# Soap, toilets and taps

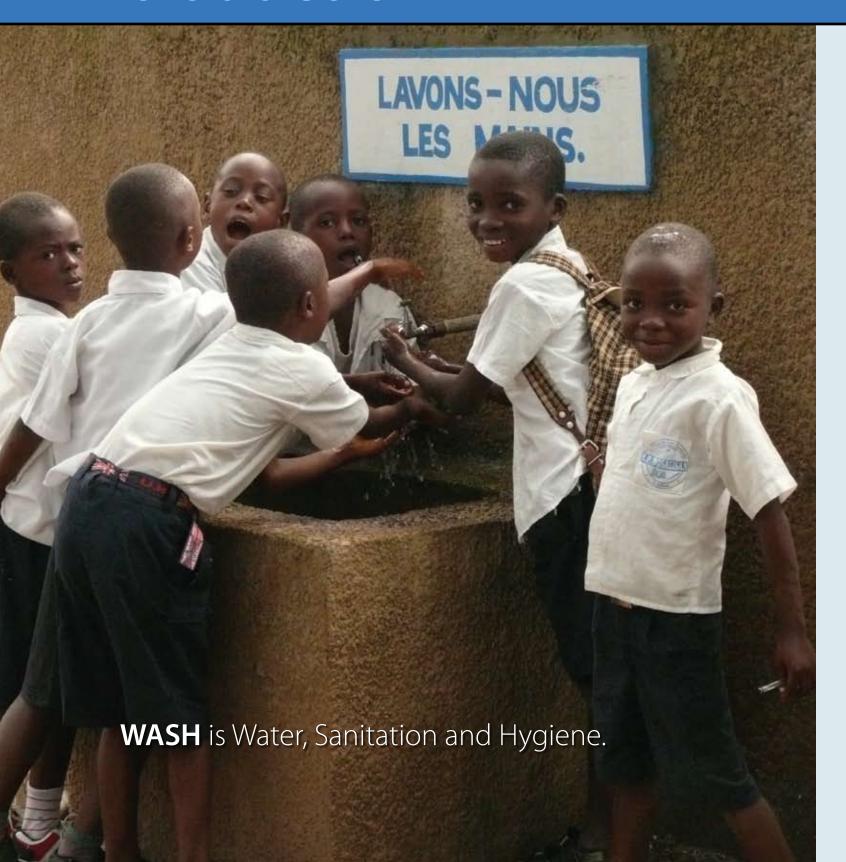
## A FOUNDATION FOR HEALTHY CHILDREN

## HOW UNICEF SUPPORTS WATER, SANITATION AND HYGIENE

## **Table of Contents**

Introduction	3
Global Access to Water and Sanitation	4
WASH Makes a Difference	8
UNICEF's Water, Sanitation and Hygiene Strategy	12
Good Hygiene is Critical to Good Health	16
A Toilet in Every Household	20
Improving Access to Sustainable Water Supplies	24
Ensuring Water Quality – in the Home and at the Source	28
WASH in Schools	32
WASH in Emergencies	36
WASH, Environment and Climate Change	40
Scaling up WASH.	42

## Introduction



NICEF's long-standing support to improving water supply, sanitation and hygiene stems from a firm conviction, based on evidence, that these are central to ensuring the rights of children to survive, grow and develop into healthy and fulfilled citizens of the world. In the broader context, UNICEF's activities in Water, Sanitation and Hygiene (WASH) contribute to the achievement of the Millennium Development Goals (MDGs).

While progress in water supply and sanitation is generally tracked through MDG target 7c – to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation – the contribution WASH makes to other MDG targets, particularly related to child mortality, disease reduction, primary education, environmental sustainability, gender equality and poverty reduction, is clearly recognized.

The strong link with child mortality in particular is one reason why UNICEF, in its Medium Term Strategic Plan, has included WASH as a key component of a cross-sectoral package of high-impact interventions, together with health, nutrition, and HIV/AIDS, to achieve rapid progress in child survival and development. This strong focus on child survival and development is an organizational priority and, as such, has led to the strengthening of the WASH component of UNICEF country programmes and renewed advocacy on intersectoral linkages with Governments and other partners.

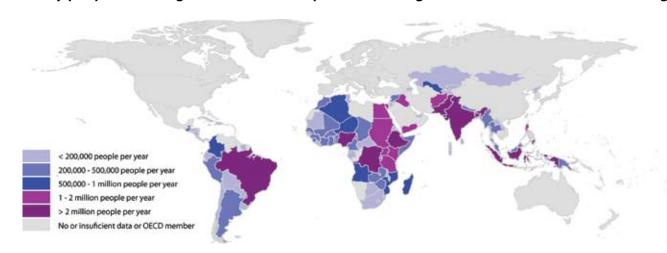
UNICEF also recognises the important contribution that WASH makes to achieving the MDGs 2 and 3: to achieve universal primary education, and promote gender equality and empower women. Having adequate and appropriate water supply and sanitation facilities in schools is a major factor influencing whether children, and especially adolescent girls, attend school.

UNICEF's long history of practical support to water supply in particular, dating back to the early 1960's, has given us a unique position of trust with our government partners in the countries in which we work. Our partners know that they can rely on UNICEF to work with them in a pragmatic and supportive manner. UNICEF's standing, both with government and other key sector stakeholders, enables us to play an important role in establishing and maintaining the collaborations which are vital, in order to meet the challenges faced.

UNICEF does not attempt to tackle all the challenges across the broad spectrum which is the water supply and sanitation sector. There are some areas where we have a comparative advantage and track record of success. There are other areas which are better covered by other organizations. This document outlines our activities in those areas which are of key importance to UNICEF's overall mission, against the overall perspective of the global challenges in water supply, sanitation, hygiene, and child survival and development. It gives examples drawn from our work in Africa, Asia and Latin America. And it examines how UNICEF is preparing for new challenges by building appropriate humans resources, leveraging partnerships and providing leadership within and beyond the United Nations on water, sanitation and hygiene.

## Global Access to Water and Sanitation

How many people need to gain access to an improved drinking water source to meet the MDG target?



Population to gain access to an improved drinking water source annually (2006-2015) to meet the MDG drinking water target

Source: UNICEF 2009, based on data in the WHO-UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) 2008 Report. Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

1.2 billion people in the world have no sanitation facility and defecate in the open

ince 1990, 1.6 billion people have gained access to safe drinking water and 1.1 billion have gained access to improved sanitation facilities. There has been a great deal of investment and notable progress has been made. However, the global community is still unlikely to achieve the Millennium Development Goals (MDGs) target; to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.

The number of people who continue to suffer from a lack of access to improved water and sanitation is still far too high. The figures are well known:

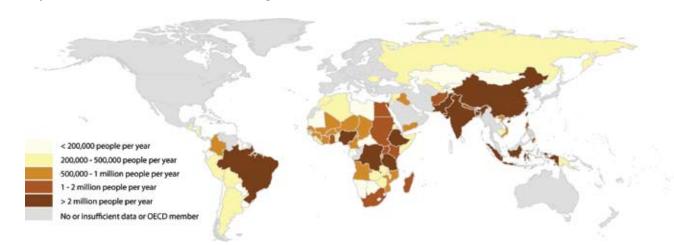
- More than 2.5 billion people, or 38 per cent of the world's population, lack adequate sanitation facilities.
- Almost one billion people still use unsafe drinking water sources.

The world is not on track to meet the MDG sanitation target and Africa is off track for both water supply and sanitation targets. In Africa alone, 404 million more people will need to gain access to improved sanitation and 294 million additional people require safe water by 2015 in order to meet the MDG targets.

The number of people globally not using an improved water supply has dropped below one billion. While this is very welcome news, attention now has to focus on those without access – most of whom are the poorest, most isolated and most marginalized.

Efforts must be increased and scaled up more effectively and more quickly, to get back on track for reaching the MDG targets. And even if these targets are achieved, the work of reaching every single person with improved water supply and sanitation will need to continue.

## How many people need to gain access to an improved sanitation facility to meet the MDG sanitation target?

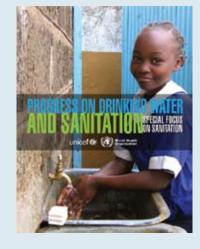


Population to gain access to an improved sanitation facility annually (2006 - 2015) to meet the MDG sanitation target

Source: UNICEF 2009, based on data in the WHO-UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) 2008 Report. Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

## Measuring Progress in Water Supply and Sanitation

The WHO¹/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) is the mechanism which tracks global progress towards the water supply and sanitation MDG targets. In its 2008 report, the JMP highlighted the key issues behind the global coverage estimates².



#### **Types of Sanitation Practices**

The 2008 report breaks down the coverage figures into four categories, i.e. people who:

- use improved sanitation
- use shared facilities
- use an unimproved facility
- defecate in the open

The results give some cause for optimism. Significant reductions in the practice of open defecation have taken place in recent years, indicating that people are adopting better sanitation practices.

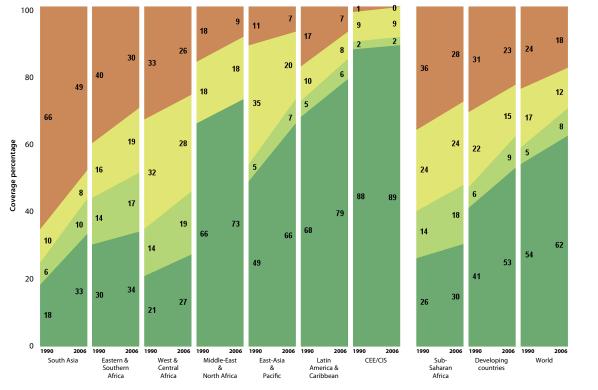
### **Sources of Drinking Water**

The JMP also reports marked improvements in water supply coverage between 1990 and 2006, resulting from improved advocacy and increased commitment from the global community during that timeframe. However, rural access to improved drinking water sources remains low. Of the global population using unimproved sources of drinking water, 84 per cent are rural inhabitants (746 million people). In urban areas there is some concern that coverage is not keeping pace with urban population growth. From 1990 to 2006 the world's urban population grew by 956 million people, whereas use of an improved water supply in urban areas grew by only 926 million, i.e. 30 million fewer.

To provide enough new improved water supplies and basic sanitation to meet the MDG target by 2015 will require investment of around US\$18 billion per year<sup>3</sup>

### Open defecation is decreasing

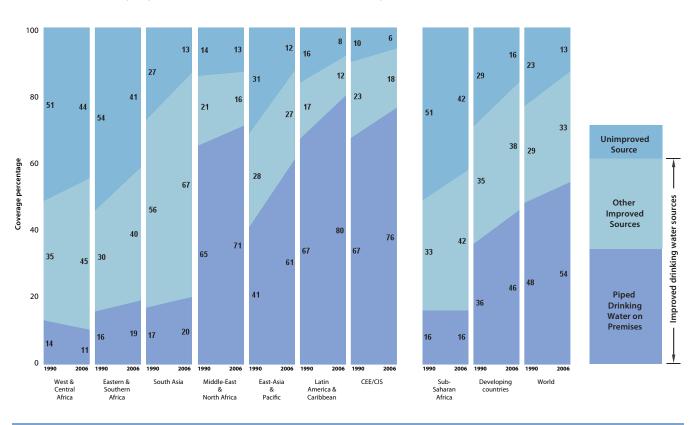
The figures below show the changes in use of sanitation facilities from 1990 to 2006, for the various regions of the world. In both Africa and Asia, big reductions in the practice of open defecation have been seen.



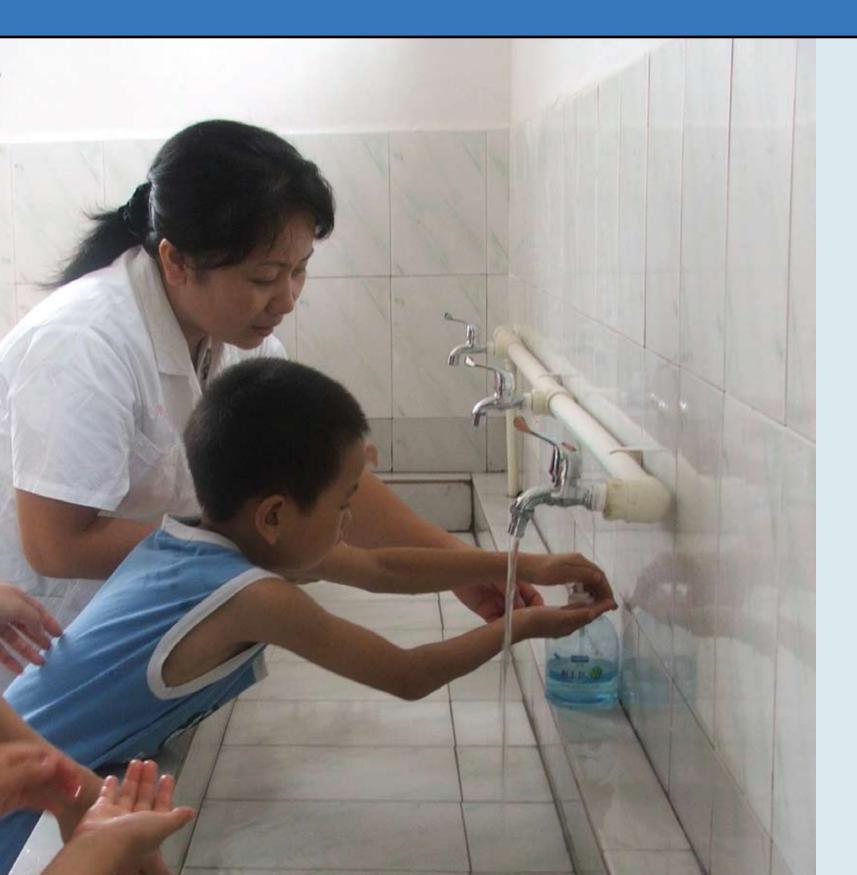


#### Africa lags behind in use of improved drinking water sources

The figures below show the changes in use of drinking water sources from 1990 to 2006, for the various regions of the world. 42% of people in Sub-Saharan Africa still use an unimproved source.



## **WASH Makes a Difference**

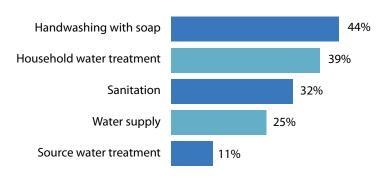


he immediate benefits a household receives from using an improved water supply and improved sanitation make achieving the MDG targets for water supply and sanitation a highly worthwhile aim in itself. However the impact of using safe drinking water, basic sanitation and improved hygiene practices goes way beyond the convenience of having the facilities. WASH makes a major difference particularly in health, education and socio-economic development. WASH is a significant factor in terms of achieving almost all of the Millennium Development Goals.

#### **Core Evidence for WASH**

Recently there has been considerable research focus on the impacts of WASH, particularly in terms of its contribution to reducing major childhood illnesses, such as diarrhoea and pneumonia, as well as the cost-effectiveness of WASH programmes. The evidence, researched by highly respected academics and published in major research journals, such as The Lancet, makes a compelling case for investing in WASH.

## WASH interventions significantly reduce diarrhoea morbidity<sup>4</sup>



% reduction in morbidity from diarrhoeal disease

## Achieving the MDG targets for water supply and sanitation has wide-ranging benefits<sup>5</sup>

Below are some examples of the benefits expected from achieving the MDG targets for water supply and sanitation.

#### **Economic benefits**

- Total payback of US \$7.40 per year for each US \$1 per year invested
- 320 million productive days gained each year due to improved health
- Time savings of 20 billion working days per year from more convenient water supply and sanitation services

#### More healthy days for children

- 272 million school-attendance days gained each year due to improved health
- 1.5 billion additional healthy days each year for children under five

#### **WASH for Life**

MDG 4 – to reduce by two-thirds, between 1990 and 2015, the under-five mortality rate among children – is the main focus for UNICEF's cross-sectoral approach to child survival and development. Together, the Health, Nutrition, HIV/AIDS and WASH programmes in UNICEF support a package of interventions that have the highest impact on young child health.

WASH also has significant impact on education outcomes and the achievement of MDG 2 – to achieve universal primary education. As will be described later in this

document, schools without adequate water supply and sanitation facilities are not able to offer their pupils the most supportive learning environment.

As children grow into adults, the importance of improved hygiene practices and use of safe drinking water and basic sanitation remains. Recent evidence on the positive impact of handwashing by mothers and birth attendants on the survival rates of new-born children is just one illustration of the importance of WASH throughout the life cycle.

## In Practice...

In Casamance, Senegal, a long-running civil insurgency has made life unstable for the local population. UNICEF is working to ensure that children can attend and stay in safe, healthy schools through the 'Building for Life' programme.

Construction of water points and separate toilets blocks for boys and girls are a core feature of the programme. But the programme

does far more than simply provide facilities. As the name implies, 'Building for Life' brings benefits that will help keep children in schools, keep them healthy and give them skills which will help them in their lives and pass on to future generations. Students are taught skills that include stress management and conflict prevention, environmental awareness, and health and hygiene practices.

The programme's benefits reach far beyond the basic WASH needs of the school day. The schools receive food rations from the World Food Programme, and the available clean water makes it easier for the roster of volunteer mothers to prepare the daily meal and wash up afterwards. The water points also constitute an emergency stand-by for the community in times of drought. The toilet blocks are open for use outside of school hours by members of households who do not yet have their own household toilet — so long as they leave the cubicles clean. The high level of community involvement not only helps ensure that facilities will be maintained into the future, but also that the hygiene practices learnt by the children at school are adopted by the whole family in the home.

In this region of insecurity, revitalizing the schools helps in building a peaceful and vibrant community, an essential foundation for a healthy and productive life.





## Growing up with **WASH**

#### Life stage

## **Newborn infants**

#### Why WASH matters

Handwashing by birth attendants before delivery has been shown to reduce mortality rates by 19 percent, while a 44 percent reduction in risk of death was found if mothers washed their hands prior to handling their

newborns<sup>6</sup>.

#### Children under five years

Poor WASH causes diarrhoea which is the second biggest cause of death in children under five years<sup>7</sup>. Diarrhoea is an immediate cause of undernutrition.

#### School-aged children

Children prefer to attend schools having adequate and private WASH facilities. Schools provide an excellent opportunity for children to learn about hygiene practices.

Older girls

Giving girls the knowledge and facilities necessary for good menstrual hygiene is key to their dignity, their privacy, their educational achievement, and their health.

**Mothers and caregivers** 

Handwashing with soap at critical times is important for protecting the health of the whole family. By being a role model, mothers and care givers can also help instill in their children the good hygiene practices which will serve them for

#### Children in emergencies

During emergencies, children are especially vulnerable to the effects of inadequate access to water and sanitation services. WASH is a key component of any emergency response.

# UNICEF's Water, Sanitation and Hygiene Strategy



n its work in water, sanitation and hygiene, UNICEF delivers long-term results by working closely with developing country governments, bilateral agencies, NGOs, the private sector, communities and households. Our global WASH strategy aims to maximize the impact and sustainability of our own interventions and the efforts of the sector as a whole.

UNICEF's WASH Strategy was approved in 2006 and is valid up to 2015, the target year of the MDGs. The Strategy has two key targets: achievement of the MDG targets for water supply and sanitation, and ensuring all schools have adequate water and sanitation facilities and hygiene education programmes. The Strategy sets out three key areas of intervention, which together lead to the achievement of enhanced child survival and development, namely:

- Enabling Environments: ensuring policy, capacity, a viable private sector, partnerships and decentralized management are all in place to facilitate sustainable access to water and sanitation
- Behaviour Change: supporting the improvement of sustained hygiene, water safety and environmental sanitation practices by users.

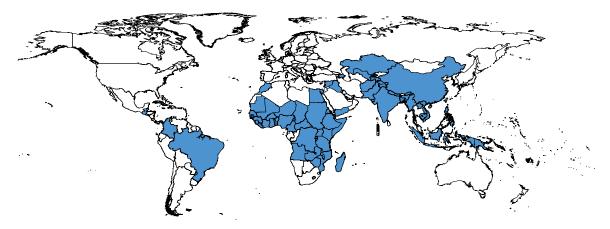
 Water and Sanitation Services: greater choice and use of safe and reliable water supplies and clean, private sanitation facilities in households, communities and schools.

UNICEF is putting a high priority on building up its WASH programmes in 60 countries with high child mortality and low WASH coverage. These countries are mainly in Africa, South Asia and East Asia. WASH activities also continue to take place in another 36 countries, for a total of 96 country WASH programmes.

#### **Partnerships**

Within the United Nations system, UNICEF works with sister agencies on a variety of programming collaborations. The UN Water inter-agency mechanism is promoting more coherent approaches particularly at the global level. At the country level, UNICEF programming takes place within the context of the United Nations Development Assistance Framework (UNDAF) and, increasingly, the 'One UN' initiative. UNICEF also collaborates particularly closely with the Water and Sanitation Programme (WSP), the World Bank and the African Development Bank.

#### **UNICEF'S 60 Priority Countries for WASH Programming**



Based on the United Nations world map. The boundaries shown on this map do not imply official endorsement or acceptance by the United Nations.

UNICEF has important partnerships with key bilateral agencies and funding foundations, mobilising resources not only to support UNICEF programmes but also for the sector in general, within the mechanisms for harmonisation of aid assistance. UNICEF also partners with many of the NGOs active in the sector, such as WaterAid and Plan International, at both global and country levels. There are also partnerships with the private sector at both levels, a good example being the Global Public Private Partnership for Hand Washing with Soap.

At country level our primary partnership is with the country government. All UNICEF activities take place within the framework of programmes of cooperation, which are developed jointly by the country governments and UNICEF. This joint-planning process with governments ensures that UNICEF's contribution to the sector is strategic and focused on using UNICEF's comparative advantage to achieve the best results for the sector. Increasingly, the planning process for UNICEF country programmes is a sub-set of the broader sector development process, thus minimising the transaction costs of working with UNICEF.

### Global Advocacy and Leadership

Beyond UNICEF's contributions to improving WASH in individual countries, UNICEF is also a global leader in the sector. UNICEF's position as Coordinator of UN Water's Task Force on Sanitation enabled us to be a driving force behind the International Year of Sanitation (IYS) in 2008. Together with WHO, we manage the Joint Monitoring Programme for Water Supply and Sanitation, monitoring progress towards MDG target 7c. UNICEF is also the lead agency for the IASC (Inter-Agency Standing Committee) WASH Cluster, with major responsibilities for improving global capacity to ensure adequate safe water supplies and sanitation during major natural and man-made emergencies.

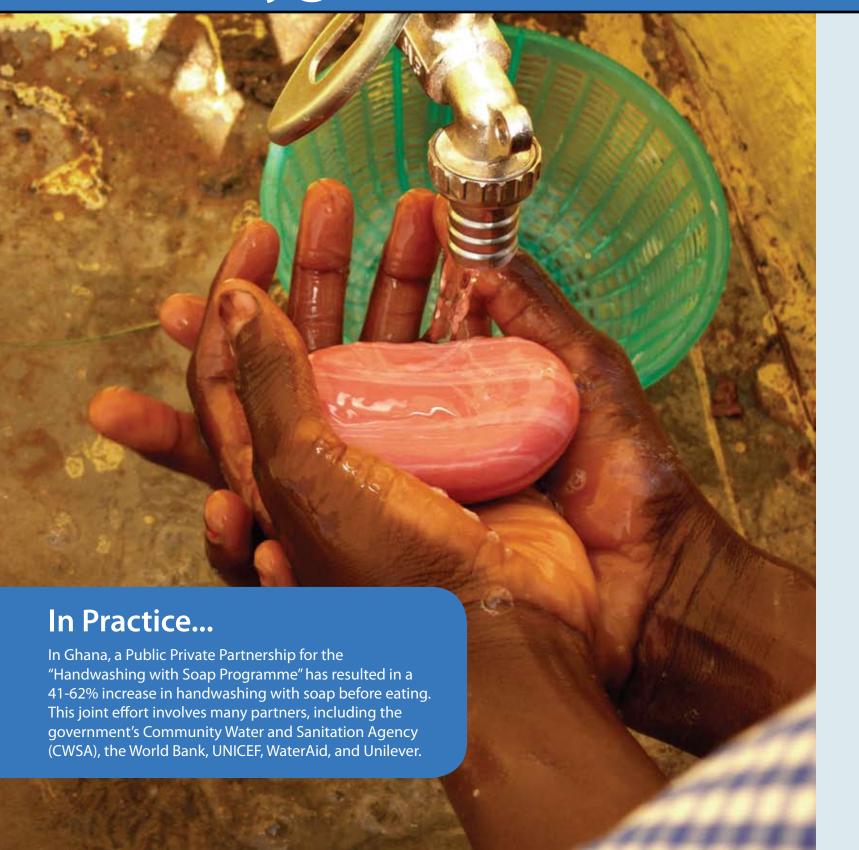
## **UNICEF WASH Guiding Principles**

The UNICEF Global WASH Strategy includes the following principles which guide our WASH programming.

- 1. Rights-based programming. WASH strategies and programmes will be guided by a rights-based approach.
- 2. **Working in-country, with governments.** The primary focus will continue to be supporting governments, in the context of their Poverty Reduction Strategy Plans (PRSPs) and sector-wide approaches (SWAPs), through the UNICEF country programme process and the UNDAF.
- 3. **Working with partners to develop innovative approaches and leverage resources.** UNICEF will use its position as a lead WASH agency to encourage greater coordination and collaboration, improve knowledge management, use and sharing, and actively leverage resources for the sector.
- 4. **Gender.** Women and girls have a central role in WASH, as the main providers of domestic water supply and sanitation and as maintainers of a hygienic home environment. UNICEF will advocate for the full involvement of women, particularly in decision-making roles, in all WASH activities.
- 5. **Pro-poor approaches.** Meeting the rights of the poor to WASH is at the heart of the UNICEF mission. UNICEF will undertake concerted efforts in advocacy for the development of improved poverty-specific approaches and improved monitoring and mapping to identify and effectively reach the poor.
- 6. **Evidence-based advocacy and programme design.** UNICEF will aim to ensure that programme designs are based on the best available information and knowledge and that advocacy is based on rigorously analysed evidence.
- 7. **Learning-based approaches guided by effective knowledge management.** UNICEF will seek to use its role as a sector leader to encourage an open, enquiring and learning-based approach to providing WASH services to the poor and will also support the consolidation of quality sector knowledge, both nationally and globally.



# Good Hygiene is Critical to Good Health





## In Practice...

In Bangladesh, Shamina is a hygiene promoter, trained with UNICEF support and now working in her community to help people improve their hygiene practices. Shamina comments, "Before this job I didn't realize I could do anything. Now I want a high-level managerial job. The hygiene work gave me the confidence that I can do it if I want."

ccess to improved water and sanitation facilities does not, on its own, necessarily lead to improved health. Evidence shows that handwashing with soap is the single most effective WASH intervention for reducing diarrhoea, the second leading cause of death amongst children under five years old. Good handwashing practices have also been shown to reduce the incidence of other diseases, notably pneumonia and other respiratory diseases, trachoma, scabies, and skin and eye infections. The promotion of hand-washing with soap is also a key strategy for controlling the spread of Avian Influenza.

Community awareness of the importance of handwashing can be quite high, however the challenge is to establish handwashing as a routine practice performed in homes, schools and communities worldwide. The key to increasing handwashing with soap is to motivate behavioural change through a variety of processes.

Multi-media campaigns, community participation and facilitation, peer-to-peer education techniques, life-skills-based hygiene lessons for school children, and the encouragement of children to demonstrate good hygiene to their families and communities are some of the components of UNICEF's hygiene promotion programmes. Involvement in hygiene promotion activities can provide basic life skills that help women and children build their confidence and become empowered in other areas of their lives.

Handwashing with Soap is among the most effective and inexpensive ways to prevent diarrhoeal diseases and pneumonia, which together account for 3.5 million child deaths annually.

### **Partnerships for Handwashing**

Sustaining hygiene behaviour change on a large scale requires a multi-dimensional approach. UNICEF is an active member of the Global Public-Private Partnership for Handwashing with Soap, which is a global initiative aimed at promoting the use of handwashing with soap in developing countries. Other members of the partnership include the World Bank, the Water and Sanitation Programme, Academy for Educational Development, London School of Hygiene and Tropical Medicine, USAID, Bank-Netherlands Water Partnership, and various private sector organisations. The aim is to use public-private partnerships to promote handwashing with soap, implement large-scale handwashing interventions, and use the lessons learnt to promote the approach on a global basis.

## **Private Sector Partners**

Increasingly, UNICEF is working around the world with private sector partners in recognition of the key role they play in making soap widely available and creating demand for it. At country level, UNICEF works with national and multinational soap manufacturing companies and marketing agencies in handwashing promotion campaigns. Harnessing the distribution networks and marketing expertise of the private sector creates opportunities to work at scale. At the global level, we are engaged with the private sector in a number of ways, including an initiative with Unilever to better understand what triggers the behaviour change needed to increase routine handwashing with soap.

## **Global Handwashing Day**



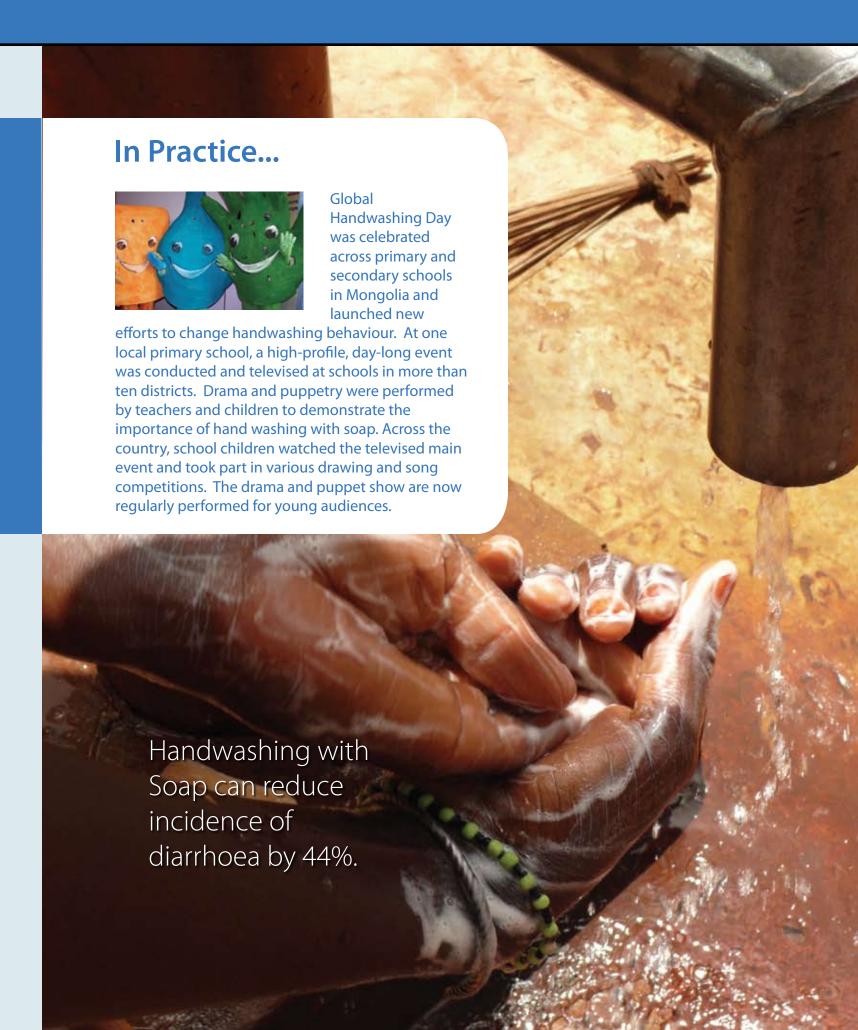
The first-ever Global Handwashing Day was launched on 15<sup>th</sup> October 2008. This multi-partner global awareness-raising initiative was celebrated in 85 countries, with large and small events often involving the participation of children. The focus of Global Handwashing Day was

on schools and school children. Many countries used it as an opportunity

to raise awareness and to launch year-round programmes in schools. Global Handwashing Day is now set to become an annual event.

In Afghanistan, for example, children promoted handwashing in television spots; in Bolivia, community handwashing fairs were held; and in Yemen, mobile phone messages reached a million people. In India, over 100 million children signed pledges to wash their hands with soap before their midday meal. And in Bangladesh, in one school, 1213 school children set the Guinness World Record for simultaneous handwashing with soap.





## A Toilet in Every Household



mproved sanitation will contribute to the prevention of the 1.75 million child deaths due to diarrhoea each year. Sanitation also contributes to reducing malnutrition in children, improves the quality of life and dignity of girls and women, protects the environment, and generates economic benefits for communities and nations.

## **Ending Open Defecation**

In recent years, a number of organizations have introduced various community-based approaches to achieving sanitation improvement. These include the Total Sanitation approach led by the Government in India, School-Led Total Sanitation (SLTS) in Nepal, and Community-Led Total Sanitation (CLTS) in several countries, including India, Bangladesh and Zambia. These approaches focus on the elimination of open defecation in the community, developing an understanding in the community that poor sanitation affects everyone, and that a collective approach is required. Through such initiatives, communities have been able to achieve remarkable progress with very limited external support, including the elimination of direct hardware subsidies to households.

UNICEF believes that the best approach to achieve opendefecation-free communities will vary from country to country, depending on the conditions and culture. Based on the experiences to-date with the various communitybased approaches, UNICEF has developed a set of basic principles for Community Approaches to Total Sanitation (CATS). Using these principles, sanitation programmes can be tailored to the specific context in a particular country. UNICEF is using this approach to support sanitation programmes in some 30 countries in Asia, Africa and Latin America.

Worldwide application of these community approaches has the potential to transform the rate of progress in sanitation and bring the MDG sanitation target within reach. UNICEF is now working closely with governments and other partners in many countries to mainstream the approach and make real impact at scale.

### **Policy and Advocacy**

To stimulate a rapid but sustainable expansion in national sanitation programmes, UNICEF helps government partners establish appropriate enabling environments including progressive policies, strategies, funding mechanisms and enhanced institutional capacity.

Our advocacy work is based on documented evidence that sanitation programmes can be successfully implemented, can be scaled-up and can make a difference in people's lives. Building up the evidence base is being done in partnership with key sector institutions, in a variety of country studies and applied research initiatives. For example, in South Asia we are studying how water and sanitation in schools impacts the inclusion of children who belong to groups perceived as being socially 'unclean', including menstruating girls, and children with communicable diseases.

## In Practice...

In Pakistan, UNICEF supported piloting of Community Led Total Sanitation (CLTS) in Mardan District of the North West Frontier Province. Based on the experiences of this pilot project, the Government included promotion of CLTS as one of the key elements of the National Sanitation Policy. Currently, CLTS is being scaled-up in all provinces and regions of the country with the support of the Government, UNICEF, Water and Sanitation Programme-South Asia, WaterAid, Rural Support Programme Network and other partners.



### **Technological Innovation**

#### Improved Toilets for the Disabled

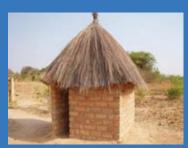
Many toilets are too small to be easily used by disabled people, who often require an attendant to assist them. Further, as many disabled people cannot stand, the standard squat plates used in many countries pose significant hygiene problems, as there is no clean area for the person to sit. UNICEF works with governments, NGOs, schools and communities to address the challenges faced by the disabled.

During the reconstruction following the Yogyakarta earthquake in Indonesia, UNICEF worked with German NGO Arche noVa to build 90 wheelchair-accessible latrines. Currently in India, UNICEF is developing a practical manual for the construction of disabled-friendly toilets for schools, which will be adopted by state governments.

#### **Ecological Sanitation**

UNICEF participates in the Sustainable Sanitation Alliance, which promotes more sustainable, ecological approaches to sanitation. Ecological sanitation aims not only to facilitate the safe disposal of human excreta but to do so in a way that enables the recycling of the nutrients found in human waste. To-date UNICEF has supported small-scale pilot work on ecological sanitation in several countries and continues to work with members of the alliance to find ways in which the approach can be used on a larger scale in a cost-effective and culturally acceptable manner.

## In Practice...



Community Led Total Sanitation (CLTS) in Zambia, spearheaded by UNICEF, has helped sanitation coverage increase from 38% to 93% across 517 villages during 2007. 402 of the villages have been declared Open Defecation Free. Over 14,500 toilets were constructed by households with no hardware subsidy and approximately 90,000 people gained access to sanitation in less than a year. It is estimated that 88% of toilets met the Government's definition of 'adequate' sanitation and 76% had hand-washing

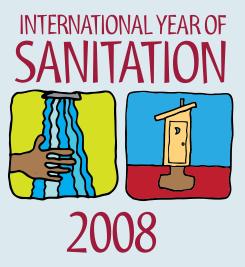
facilities. The approach has accelerated access to sanitation far faster than previous sanitation approaches (which used direct hardware subsidies) and has enabled communities to recognize that they can make progress using their own available resources.

## In Practice...

In 2007 in South Asia alone, more than 10,000 villages across the subregion were declared free from open defecation and more than 15 million latrines were built through initiatives supported by UNICEF and other partners.



UNICEF's position as Coordinator of UN Water's Task Force on Sanitation enabled us to be a driving force behind the International Year of Sanitation (IYS) in 2008 – a one-time opportunity to put sanitation firmly on the map. Ministerial sanitation conferences were held in East Asia, South Asia, Africa and Latin America – going a long way to influence government decision-makers. For example at the AfricaSAN 2008 Conference, African ministers signed the eThekwini Declaration in which they aspire to allocate a minimum of 0.5% of GDP to sanitation and hygiene. At country level, IYS-related initiatives helped to put sanitation on the national and community development agendas. UNICEF and our partners are now using the results and momentum of IYS as a springboard for future action.



## In Practice...

In 2007 UNICEF helped devise a new rural sanitation policy in Eritrea, a country which currently has a very low sanitation coverage rate. In recent years we have strengthened national training institutes (in DR Congo, Viet Nam and other countries), helped to establish new sanitation coordination mechanisms (such as in Sudan and Nigeria), and supported decentralization initiatives through the strengthening of local government capacity (in Indonesia, Colombia and elsewhere).

## Improving Access to Sustainable Water Supplies



n 2006, for the first time since monitoring of global water supply coverage began, the number of people in the world without access to an improved water supply dipped below the one billion mark<sup>8</sup>. Nevertheless, with around 900 million people still in need of access, much remains to be done. Helping people gain access to a safe and convenient water supply remains a key aspect of UNICEF's WASH programmes. The challenge goes beyond the provision of new water points, with concerns over sustainability and water quality coming increasingly to the forefront.

As with sanitation, UNICEF supports both the provision of water supply services and the development of national enabling environments essential for scaling up and sustaining services. UNICEF has built up a reputation as a trusted partner, having worked in many countries for over forty years. This gives us access to the key policy-level discussions, such as Sector-Wide Approaches (SWAPs), and the ability to influence the use of the much greater resources of governments, multilateral development banks, private funding foundations and others.

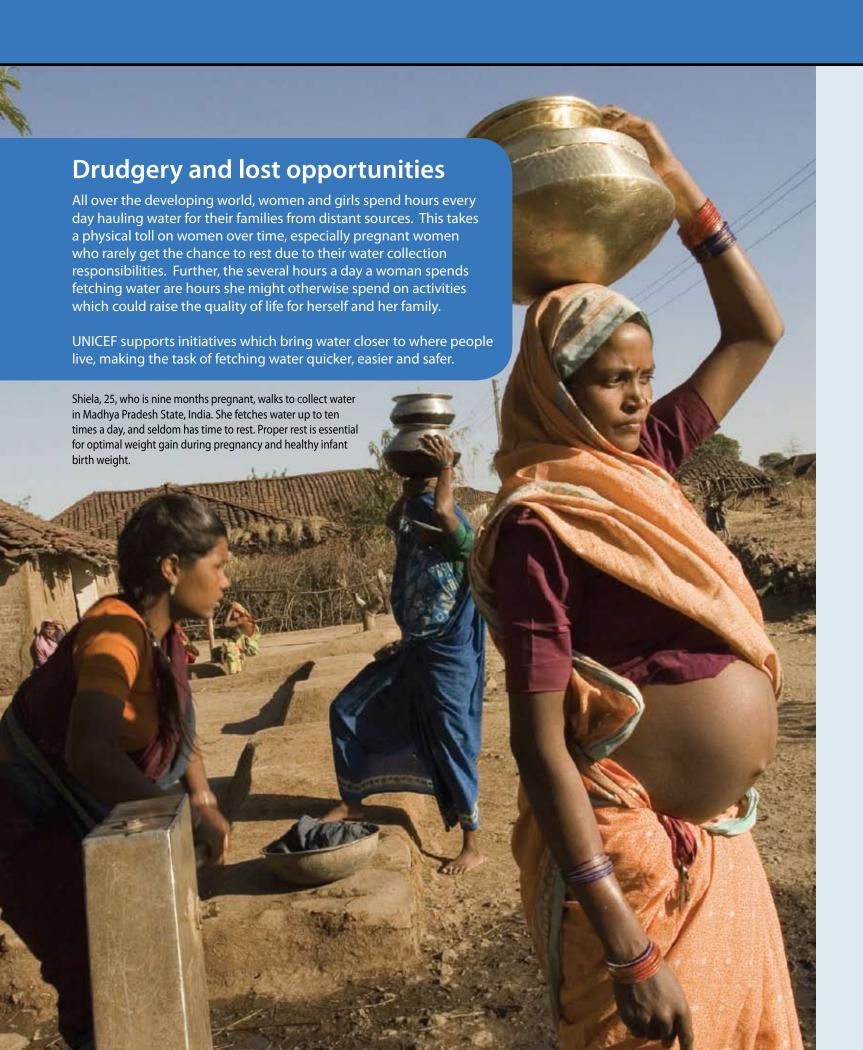
## In Practice...

**UNICEF** Zambia has supported indigenous private sector development for sustainable operation and maintenance of water supply systems by establishing Artisan Associations. Each Artisan Association is required to register with the National Registrar of Societies and the local authority provides a certificate of letter of recognition so that they are a formally recognized entity. Artisans have been trained to improve technical skills, market their services, and sustain service provision of high quality. In some districts the average downtime of handpumps has been more than halved and the number of communities approaching the local council to seek repair services has reduced dramatically.



## In Practice...

In Bangladesh, only women tend to remain in the home during the day and it is not normally acceptable for men to visit who are not part of the close family. Since men have traditionally been engaged as pump repair mechanics, this has made repairing household handpumps problematic. Through UNICEF-supported community-based training of women as pump mechanics, handpump maintenance has improved. The women mechanics have also gained an opportunity to earn income and seen their status in the community rise.



### **Innovative Approaches**

UNICEF has a history of supporting key innovations in the development of rural water supply technology and our commitment to develop new and improved appropriate options continues. For example, in sub-Saharan Africa, a substantial increase in the number and pace of boreholes installations is required in order to meet the MDG targets on water supply. UNICEF is working with key partners, such as the Rural Water Supply Network (RWSN), to develop new methods of low-cost drilling to make it easier for local drilling contractors to start up and operate as viable businesses. UNICEF is also working closely with Governments so that the new methods can be accepted and mainstreamed in order to make an impact at scale.

Through its WASH Section and Supply Division, UNICEF is also working to review the African handpump market and explore ways in which it can operate more effectively, to make pumps more affordable, supply chains stronger, and repair and maintenance tasks easier.

## **Challenge of Sustainability**

Sustainability of community water supplies remains a major challenge. In some countries breakdown rates often exceed 50 per cent. UNICEF is working with several partners to address the complex challenges faced, including the development of more effective spare-parts supply chains, and introducing more realistic community tariff schemes to fund operation and maintenance. We are also working with RWSN to explore alternatives to community management of water points, to see if other models for ownership or operation and maintenance might lead to a higher degree of sustainability.

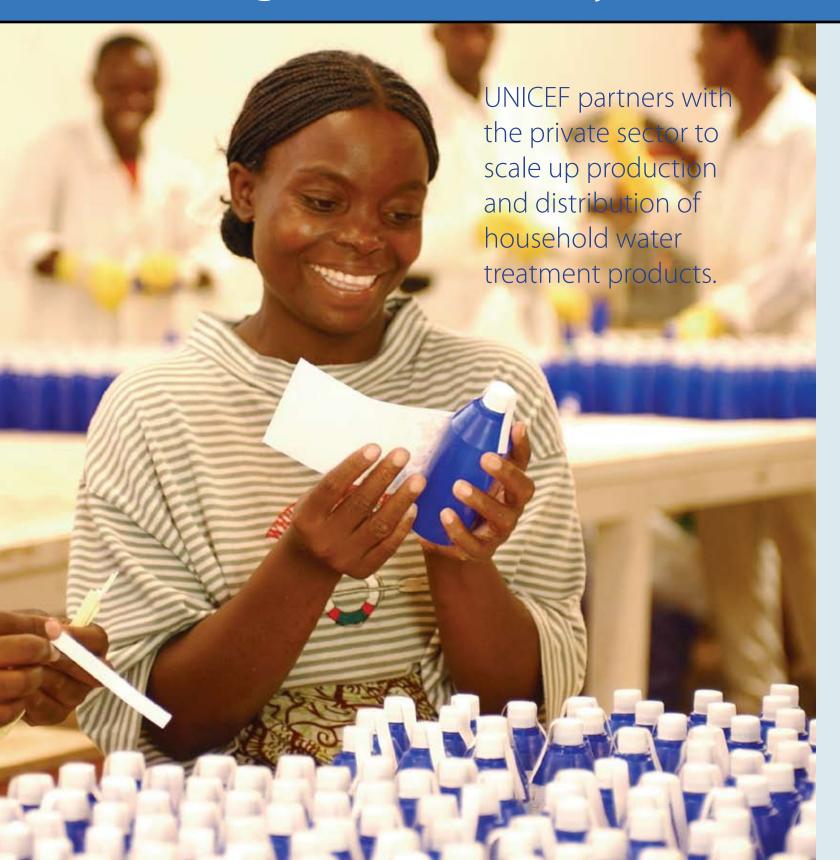




## In Practice...

In much of Africa, boreholes are expensive to drill and the number of boreholes drilled per year is low. This is sometimes due to the use of inappropriate heavy drilling rigs, when cheaper manual drilling techniques would suffice. UNICEF has engaged hydrogeology consultants to map out the potential areas for manual drilling in 20 countries in Africa. In Chad, Nigeria, Senegal, Niger and Madagascar, UNICEF has already seen small-scale manual drilling enterprises develop viable businesses, thus increasing the capacity of the sector to drill the boreholes that Africa so urgently needs.

## Ensuring Water Quality – in the Home and at the Source



ontamination of water can occur in a variety of ways. Chemical contamination – such as arsenic and fluoride – is often naturally occurring, while microbial contamination (bacteria, viruses, amoeba, etc.) is more often a result of nearby human or animal activity. Both types of contamination can be treated at the source and/or at the household level.

### **Household Treatment and Safe Storage**

Studies have shown that there is often significant deterioration of water quality between the time that water is taken from the source to the time it reaches the mouth. In such situations investing in conventional water treatment at the source will not prevent diarrhoeal diseases. Household Water Treatment and Safe Storage (HWTS) is a cheaper, more effective strategy.

As with sanitation, the promotion of water treatment at household level requires a behavioural change approach which goes beyond the mere provision of technology. Householders must have the motivation to treat their drinking water and the technologies and consumables must be affordable and easily available.



In the Democratic Republic of Congo, schoolchildren taste water treated with chlorine and learn about the benefits of household water treatment.

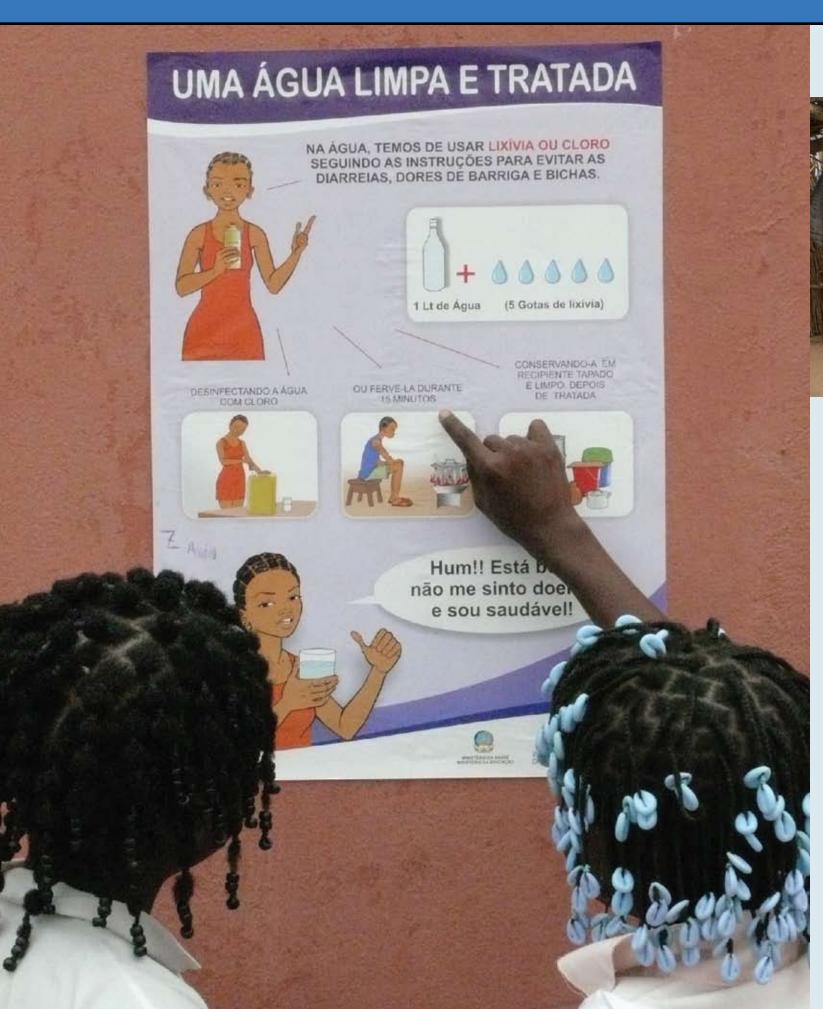
## In Practice...

In Cambodia UNICEF has sponsored a comprehensive study of locally produced ceramic filters. It showed not only that the filters were effective at removing pathogens from water, but that the regular use of the filters by householders resulted in a 46 percent reduction in diarrhoea incidence. These results have paved the way for an expansion of ceramic filter promotion programmes in other countries.

UNICEF promotes a variety of treatment methods such as user-friendly filtration, simple solar water disinfection (SODIS) and home chlorination. These are all low-cost, effective and manageable at the household level.

## **Ensuring Water Quality at Source**

Household water treatment is an important strategy, but ensuring the quality of water at source remains crucial. Unfortunately, this is an area of increasing concern globally. A prime example is the widespread natural occurrence of arsenic in the groundwater, notably in Bangladesh and India, but also in several other countries with similar hydrogeological conditions. UNICEF has been involved in arsenic mitigation programmes in more than 12 countries since the problem first emerged in the 1990s. UNICEF is also supporting programmes combating other chemical water problems, such as those caused by fluoride. We are working with national and multinational companies to make water quality testing technologies more appropriate for use in field situations by non-specialist technicians.





## **Eradicating Guinea Worm**

Guinea worm disease is a painful, debilitating disease, contracted when people drink water from contaminated ponds or wells. Since the mid 1980s, a global coalition of organizations, including UNICEF, has worked towards the goal of eradicating guinea worm. From over 3.5 million cases worldwide in 1986, there were only 10,053 cases reported in 2007. The goal of eradicating guinea worm disease is now within reach. The lessons learnt during the guinea worm campaign, with its key emphasis on ensuring household drinking water safety, can be used to help scale up other programmes tackling water quality problems.

### **Supporting Water Quality Systems**

At national and global levels, UNICEF supports government efforts to address water quality concerns in a systematic fashion. For example, UNICEF produced a handbook on the basics of arsenic mitigation, as well as commissioning an expert report on the likely global extent of arsenic contamination of water supplies. These two publications are being used to alert countries as to whether they might face a potential arsenic problem, and steps they can take to ascertain the extent of any problems and how they might mitigate the impact.

We are also working with our government partners to complement their water quality testing programmes with the more risk-based approach of using water safety plans, as promoted in the latest WHO Guidelines of Drinking Water Quality<sup>9</sup>.



## In Practice...

In Guinea, UNICEF has developed a strong partnership with the non-governmental organization PSI for the production of chlorine for household treatment of water. The partnership has resulted in a nationwide publicity campaign, including hygiene messages, the creation of a national network of sales points, and the sale of more than 350,000 bottles of "SurEau".

In Bangladesh, UNICEF supported the testing of over one million hand pump installations for arsenic contamination. Those with arsenic levels less than the Bangladesh standard were painted with green spouts. Those with higher levels were painted red.

## Water, Sanitation and Hygiene in Schools



Adequate, wellmaintained water supply and sanitation facilities in schools encourage children to attend school regularly and help them achieve their educational goals. nadequate water supply and sanitation facilities in schools, not only are a health hazard, but also affect school attendance, retention and educational performance. Reliable data showing the global coverage of water supply and sanitation facilities in schools is not available. However the limited data collected in a few countries in Africa and Asia has found that adequate facilities exist in maybe less than one third of schools. Field experience in most UNICEF programmes tends to support this view.

The target of ensuring that all schools have adequate child-friendly water supply and sanitation facilities and hygiene education programmes by 2015 is the second key target of UNICEF's Global WASH Strategy. The target has also been endorsed at the World Summit on Sustainable Development and by the Commission for Sustainable Development.

By the end of 2007, UNICEF was supporting WASH-in-schools activities in 86 countries in all regions where we work, double the number of countries in 2002. In 2007 alone, we helped to equip a total of 12,588 schools with water and/or sanitation facilities, benefiting an estimated 3.6 million school children.

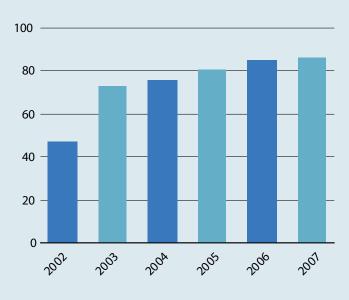
## In Practice...

In Bangladesh, UNICEF advocacy helped ensure that WASH in schools was included in the revision of the sector-wide approach for primary education.

## In Practice...

In 2006, UNICEF began piloting a 'WASH-in-Schools' initiative in 50 Child-friendly Schools in China. Within two years, all 50 pilot schools were teaching hygiene education and 22 had built school latrines with hand washing facilities, benefiting 15,000 students. Though the initiative was small, it was successful, enabling UNICEF to advocate for the government to expand the programme. The model has been adopted by several local governments, and the Chinese Ministry of Education has included WASH-in-Schools as part of the Child Friendly School National Standards.

## Countries with UNICEF School-based WASH Activities



## **Improved Designs**

Together with our partners, and with the participation of children themselves, we also help to develop locally-appropriate child-friendly toilet and handwashing facility designs that incorporate key criteria such as privacy and security for girls and user-friendliness for smaller children. In particular, in Malawi and Kenya, UNICEF is working with school girls on the design of appropriate urinals. These can be a cheap and effective way of increasing the number of facilities available to girls during recess.

#### **WASH-in-Schools at All Levels**

#### Local

UNICEF supports the strengthening of WASH-in-schools, though provision of facilities, planning and development of operation and maintenance systems with school management committees and local communities, training of teachers, and hygiene promotion for teachers and children.

#### National

UNICEF supports national policy development, establishing monitoring systems, developing design standards for water supply and sanitation systems, hygiene education curriculum development. UNICEF also supports advocacy to ensure adequate government support for WASH in schools, including allocation of budget.

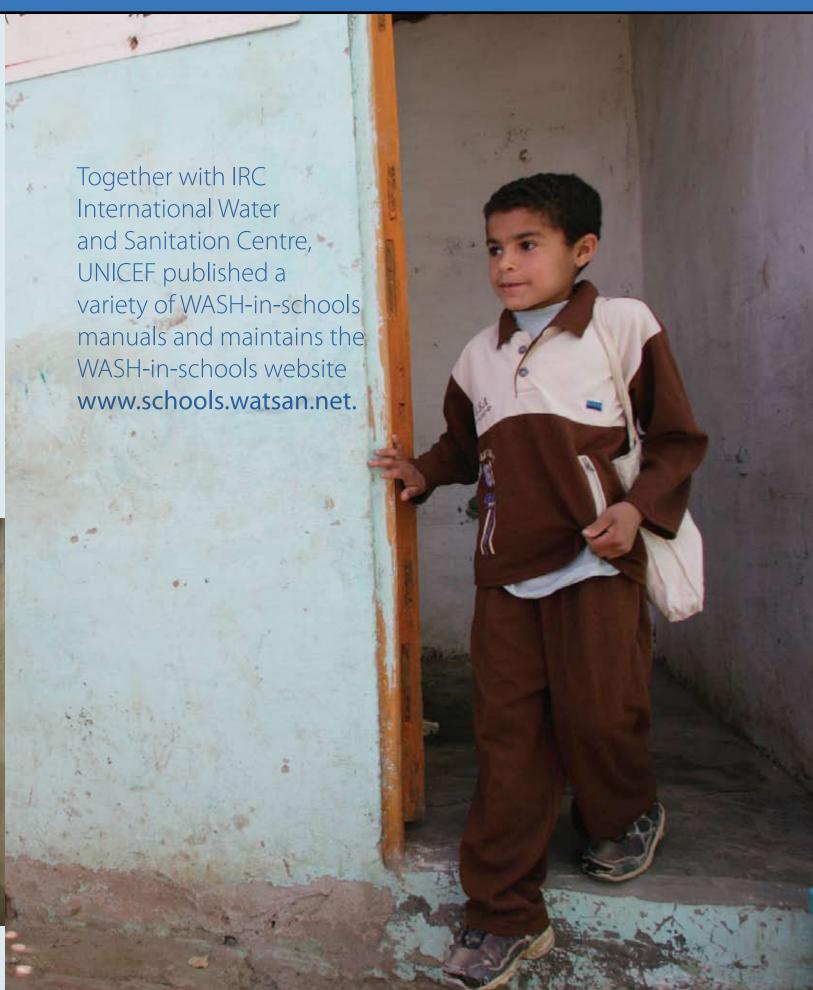
#### Global

UNICEF works with partners to increase political and professional support for school WASH initiatives through participation in key education sector processes such as Education for All (EFA) and the UN Girls' Education Initiative (UNGEI), through the sponsorship of school-themed side meetings at major WASH sector forums (such as during the Stockholm Water Week meetings and the World Water Forums) and through the organization of stand-alone events such as the 2005 Oxford WASH in Schools Roundtable Global meeting.

## Adequate WASH Facilities Keep Girls in School

Adolescent girls are especially vulnerable to dropping out as many are reluctant to continue their schooling because toilet and washing facilities are not private, not safe or simply not available. When schools have adequate facilities – in particular ones that facilitate menstrual hygiene – a major obstacle to attendance is removed. In India and Bangladesh innovative menstrual hygiene projects have demonstrated how this issue can be incorporated into broader WASH-in-schools interventions and how women and girls can be empowered through improved menstrual hygiene management.





# WASH in Emergencies



### **UNICEF Responds in Emergencies**

Humanitarian emergencies, be they rapid onset, chronic, natural or man-made, inevitably cause disruption to basic services. People are less likely to be able to drink safe water, use basic sanitation facilities and maintain improved hygiene practices. In recent times this has been experienced even in developed countries, for example during the 2007 floods in England and the 2005 Hurricane Katrina in New Orleans, USA.

Children, especially those under the age of five, are particularly vulnerable to the diseases which can result during emergencies. These diseases include diarrhoea, cholera, typhoid, respiratory infections, skin and eye infections, which are all likely to occur when water supplies and sanitation services are disrupted.

UNICEF has a major role to play in responding to emergencies. Our focus is on protecting and assisting children and women, ensuring that their rights are fulfilled even under emergency conditions. In its *Core* 

Commitments for Children in Emergencies, UNICEF has set out minimum standards of response for any emergency situation. These describe the life-saving actions which UNICEF will take within the first six-to-eight weeks of an emergency, along with the longer-term role in the subsequent weeks and months. Responding to water supply, sanitation and hygiene needs is a key component of the Commitments. Given our long-standing presence in a large number of countries in the world, together with our long experience of supporting water, sanitation and hygiene activities, UNICEF is uniquely placed to support the WASH sector response to any emergency.

In recent years UNICEF has seen the number and scale of emergency WASH interventions increase significantly, to a point where the expenditure on emergency response makes up more than 40% of UNICEF's total global expenditure on WASH. Recent responses have included the 2004 Tsunami, the 2005 Pakistan earthquake and the South Asia floods of 2007, as well as chronic emergencies in Darfur, Sudan and the Democratic Republic of Congo.

## In Practice...

In North Sudan, UNICEF has worked closely with sector partners to tackle the recurring problem of cholera and acute watery diarrhoea (AWD). The partnership instituted a programme of improved chlorination of water supplies, hygiene education and ensuring availability of supplies and capacity to respond quickly to any outbreak. As a result, the number of cholera/AWD cases significantly reduced from 9,973 cases in 2006 to 335 cases in 2008 and number of deaths from 362 to 16 in the same period.

The results have been even better in Darfur, where no cholera or acute watery diarrhoea cases were reported in 2007 and 2008, despite the difficult working conditions. This result has been made possible through continuous advocacy with the government, a coordinated response by all sector partners, coordination between health and WASH sectors, and timely funding from donors and government.

#### **IASC Global WASH Cluster Lead**

Within the overall context of reform of the United Nations system, the Inter-Agency Standing Committee (IASC) adopted a 'Cluster Leadership' framework, aimed at providing more clarity and predictability in humanitarian response during emergencies. Nine sectoral clusters were designated, each with a lead agency, with UNICEF being chosen as the lead agency for the WASH Cluster. The system came into effect on 1st January 2006.

Since then, UNICEF has been working with cluster partners to increase global capacity for WASH coordination and response in emergencies, as well as providing WASH Cluster leadership during major emergencies which have occurred. Through learning and reflection, the cluster system has enabled a process of continual improvement in WASH Cluster response. This is now being taken forward through a series of training programmes for cluster members around the world, as well as the preparation of toolkits and guidance documents. To-date, the WASH Cluster has been active in emergencies in over 22 countries.

#### **Emergency Preparedness**

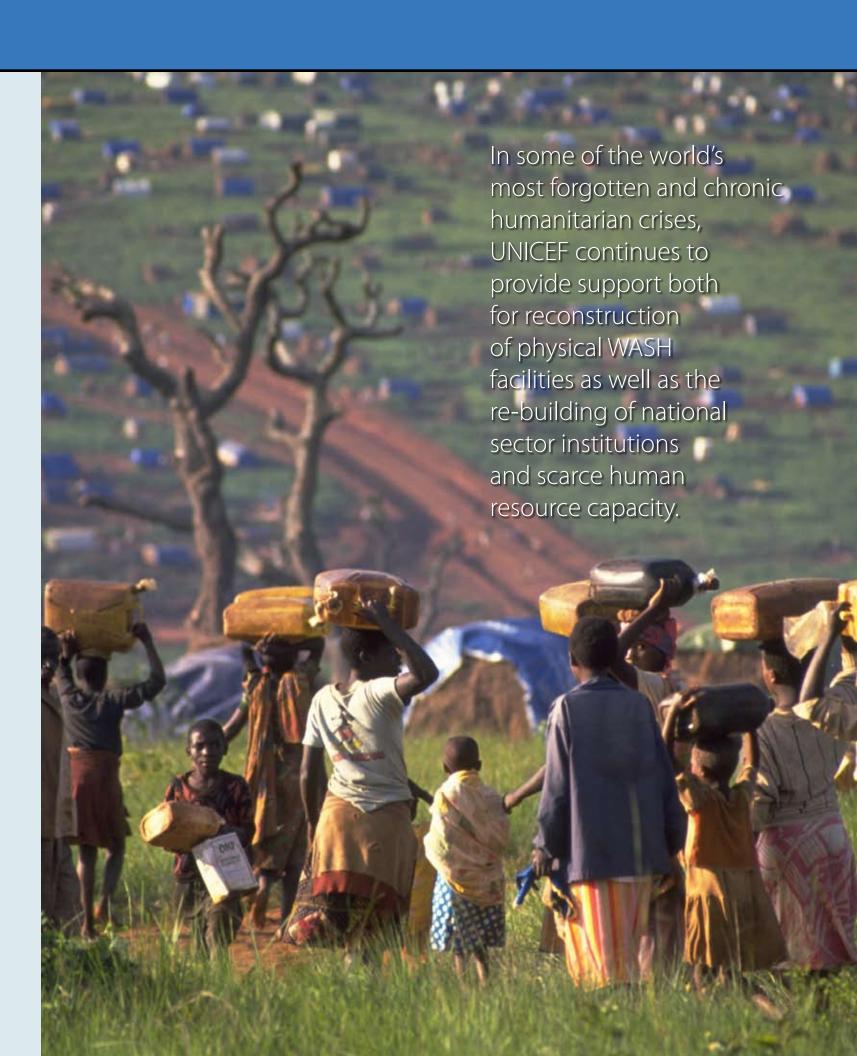
Preparedness is critical if UNICEF is to live up to the commitments it makes to protect and assist children and women during emergencies. Emergency preparedness and response planning takes place regularly within every country office. The response plans include: emergency staff deployment; pre-positioning of strategic supplies; development of long term agreements with both suppliers and implementing partners (such as water trucking providers); advance coordination arrangements with government counterparts and other sectoral stakeholders. Our longstanding presence in-country and strong relationship with government enable us to play an important role in the development of national preparedness and response plans. Our position as WASH Cluster Lead Agency reinforces the need for us to be active in supporting governments to strengthen country preparedness for emergencies.



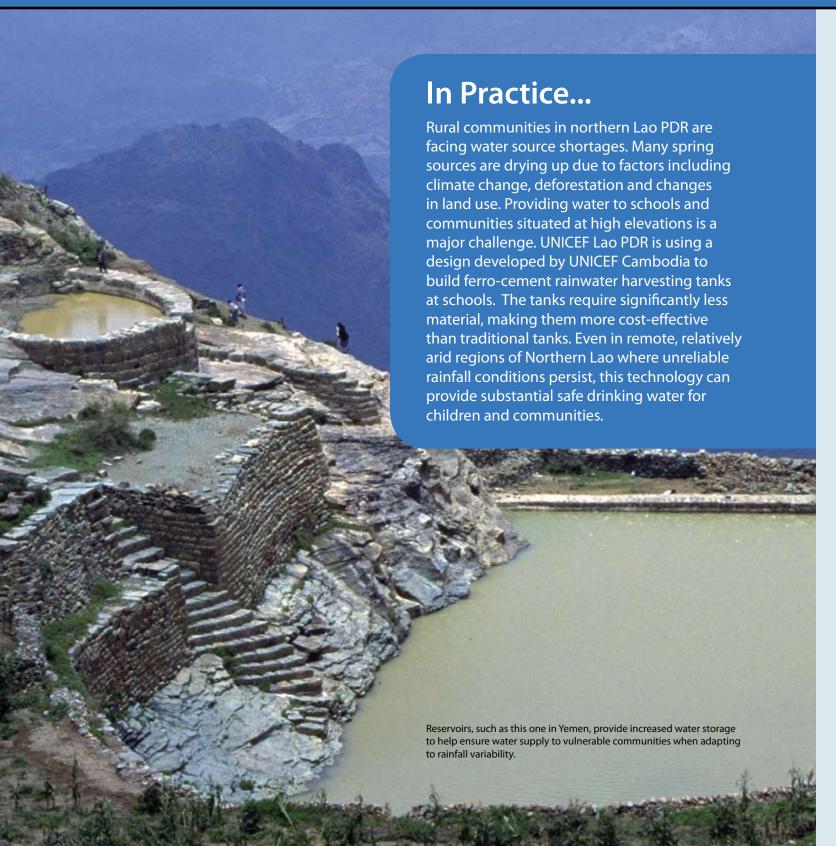
## Rapid Response Emergency WASH Supplies

UNICEF has developed a list of essential WASH emergency supplies, to be held in stock for rapid deployment in order for UNICEF to meet its Core Commitments for Children in Emergencies. These efforts complement a broader ongoing initiative by the IASC Global WASH Cluster to map existing WASH stockpiles maintained by UN agencies, NGOs, governments and other respondents.





# WASH, Environment and Climate Change



nshrined in the Convention on the Rights of the Child is the right of children to have access to a safe physical environment. Ensuring environmental sustainability is one of the Millennium Development Goals (MDG 7). UNICEF works to ensure its activities are implemented in an environmentally sustainable manner, and we are committed to integrating environmental considerations in both our development and emergency programming.

Climate change is one of the greatest environmental challenges facing the global community, and will have a worldwide effect on water sustainability, which in turn will impact child health and wellbeing. Water stress and water scarcity will occur due to changes in the seasonal rain and snow patterns, coupled with increased demand due to continued population growth. There is emerging evidence that climate-induced changes in temperature and precipitation patterns will increase water-related infectious diseases, especially diarrhoeal diseases. In addition, there is already evidence that climate change is resulting in rising sea levels, increased cyclonic activity, and increased intensity and frequency of floods and droughts.

These outcomes add urgency to UNICEF's mandate to address the water, sanitation and hygiene needs of the vulnerable. We see our actions falling into several categories:

Control of diarrhoeal diseases – already a foundation of UNICEF's work in WASH, this takes on even more significance in the face of predictions that diarrhoeal disease may become more widespread. Safe water, adequate sanitation and good hygiene practices will be vital to protect communities.

Emergency preparedness and response – will become even more important in the light of increasing occurrences and greater severity of natural disasters, such as floods and cyclones.

Attention to water sustainability issues - water extraction must consider current and potential water stress, and sanitation must be planned to protect water bodies from contamination. UNICEF is developing ways to include these considerations in all WASH programming. This has particular significance for UNICEF, as much of our programming has, in the past, been based on groundwater. We must be especially sensitive to the sustainable use of this resource.

Adaptation strategies – predictions of increased rainfall variability open up new opportunities for cost-effective, efficient and sustainable water technologies, such as rainwater harvesting and storage through roof catchment and artificial recharge of aguifers.

Reducing carbon footprint – long term mitigation will mean adoption of new solutions in the water sector to reduce environmental impact and energy dependency on water resources. Water lifting technology such as solar and wind pumps offer new options which UNICEF is investigating.

Policy advocacy - through advocacy and policy development, UNICEF is assisting countries to ensure that environmental considerations and response to climate change are on national agendas and within policy and planning instruments.



# Scaling up WASH



espite the real progress made, the world is still likely to miss the MDG target for sanitation. Sub-Saharan Africa is off-track for both the MDG water and sanitation targets. And even if the targets are met, millions of people will still be without access to improved facilities in 2015. Thus it is imperative that progress is made more quickly, and on a larger scale, than is currently being achieved.

UNICEF's long-term position as a trusted partner of government gives us a unique position to influence the adoption of policies and strategies which lead to sustainable solutions for WASH at scale. With the right blend of internal capacity and vibrant partnerships, UNICEF programmes can make a difference to the pace of progress.

UNICEF's long-term position as a trusted partner of government gives us a unique position to support scaling up WASH.

#### **Accelerating and Scaling up Coverage**

The WASH sector is vast with numerous government, NGO, multi-lateral, donor and private sector actors. Our strategy emphasises cooperation – working to create partners out of stakeholders. Only when we work together in a coordinated manner, utilizing all comparative advantages, can we comprehensively address the problems at hand and at the scale necessary. Thus, in all our country programmes we engage in sector-wide processes and aim to work in accordance with the principles of the Paris Declaration on Aid Effectiveness. UNICEF also places particular importance on coordination with our UN sister agencies, through processes such as the UNDAF (United Nations Development Assistance Framework) and the 'One UN' initiative.

One of the biggest contributions UNICEF can make is the scaling up of community-based approaches to household sanitation, hygiene behaviour, especially handwashing with soap, and household water treatment and storage. UNICEF also takes a lead in developing innovative technologies to address past shortcomings and to offer cheaper, more sustainable options to individuals and communities.

## Tailoring Programmes to the Needs of Each Country

The translation of the UNICEF Global WASH Strategy into action-oriented WASH programmes in the countries in which UNICEF works depends on the individual national context, including recognition of sub-national variations and disparities. In each country UNICEF goes through a country programme planning process with government partners and key sector stakeholders, to determine how best UNICEF can bring added value to the sector. In some countries, especially where government capacity is limited, UNICEF might take more of a role in management of implementation of major water supply, sanitation and hygiene promotion programmes. In other cases, UNICEF's focus might be more towards the facilitation of sectorwide approaches and sector policy development.

### **Providing the Required Capacity**

UNICEF employs over 400 WASH professionals worldwide. The vast majority – over 90 percent – are based in country offices. They are supported by a network of regional and headquarters senior WASH staff who provide advice and direction on policy and strategy. WASH staff are also guided by country office management teams who help to ensure that WASH programmes are in line with the overall strategic direction of UNICEF and contribute effectively to country programmes of support for children.

To respond to the changing nature of the WASH sector, and UNICEF's role within it, we need to ensure that we have the right staff with the right skills at all levels. We are responding to this challenge by carefully planning external recruitment, training existing staff in new approaches, improving career pathways for national staff, and exploring partnerships with relevant organisations to access staff with particular expertise.

## **Funding our WASH Programmes**

We are working in more countries than ever before, our programmes within countries are expanding and our expenditure levels are increasing.

In 2007, we supported WASH activities in 96 countries, the most ever. WASH expenditure has grown steadily over the years and now exceeds US\$300 million annually. The bulk of these funds come from our donor partners (including bilateral agencies, UNICEF national committees and others).

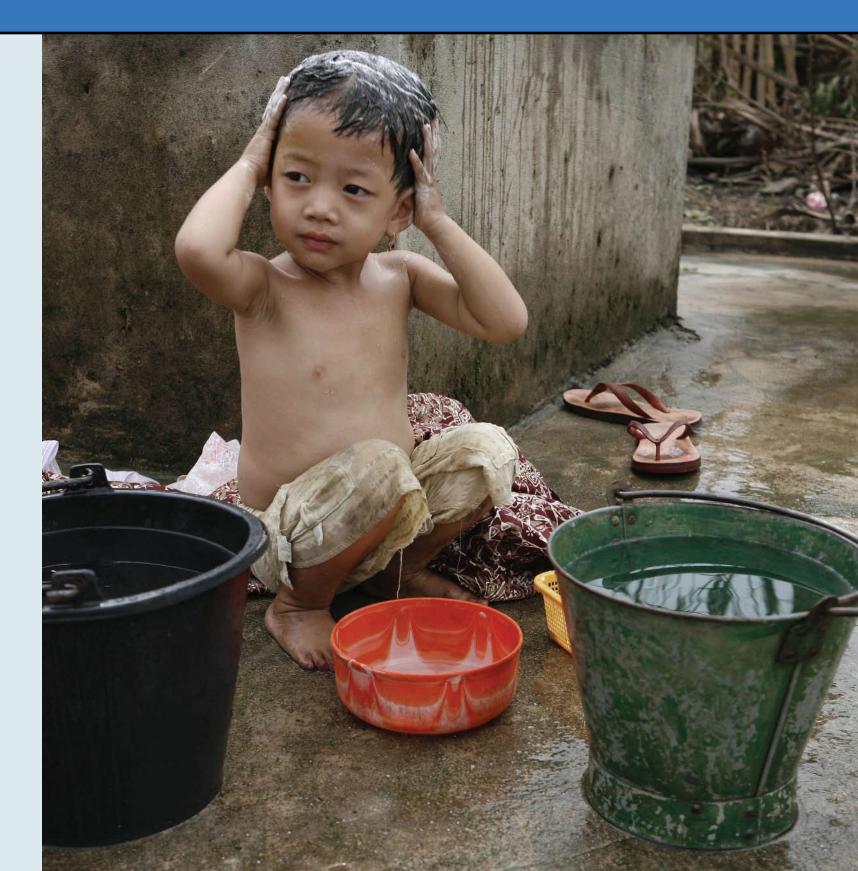
Despite the recent significant increase in overall funding to UNICEF WASH programmes, about half the priority countries are unable to implement the full strategy due to inadequate funding. Our efforts continue to obtain the financial resources needed to support the necessary WASH programmes in all our priority countries.

## **Endnotes**

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- 9 Guidelines for drinking water quality, incorporating first addendum. Vol 1, Recommendations. 3<sup>rd</sup> Edition. WHO 2006.

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