

INTERNATIONAL YEAR OF SANITATION 2008: OVERVIEW

INTRODUCTION

2.6 billion people or nearly half of humanity lives without access to adequate sanitation, an often overlooked component of safe water¹. This silent global crisis constitutes an affront to human dignity on a massive scale causing widespread damage to human health and child survival prospects; social misery especially for women, the elderly and sick; depressed economic productivity and human development; and pollution to the living environment and water resources. Lack of sanitation is one of the single biggest challenges facing the world today.

Generating momentum behind global sanitary transformation will lead to better health, especially for children, who are the key to our common future, as well as social and economic development, personal dignity, and the protection of the environment, all of which contribute to breaking the cycle of poverty.

SANITATION AND THE MDGS

The eight Millennium Development Goals (MDGs) – which range from reducing child mortality to providing universal primary education, by the target date of 2015 – are the world's time-bound, inter-dependent, and quantified targets for addressing extreme poverty in its many dimensions. Together, they form an unprecedented blueprint agreed to by every country in the world along with many leading development institutions. These targets recognise among other things, that sustainable access to improved sanitation is fundamental to human rights, health and dignity. Millennium Development Goal 7, Target 7c - to reduce by half the proportion of people without access to improved sanitation - is central to meeting all the MDGs, yet is one towards which very little progress has been made.

WHY INTERNATIONAL YEAR OF SANITATION?

At the current rate of progress, many countries will not reach the 2015 MDG sanitation target until 2026. To put the global community on track, while recognizing the impact of sanitation on all the Millennium Development Goals, the General Assembly (GA) declared 2008 the International Year of Sanitation (IYS), following a proposal brought by 48 countries at the recommendation of the UN Secretary General's Advisory Board on Water and Sanitation (UNSGAB).

The United Nations Department of Economic and Social Affairs (UNDESA) is the lead coordinating body for IYS, working with the UN-Water Task Force on Sanitation which is coordinated by UNICEF and includes members of FAO, UNDP, UNEP, UN-Habitat, UNU, WHO, WSP/World Bank, WSSCC, and the United Nations Secretary-General's Advisory Board on Water and Sanitation (UNSGAB) chaired by His Royal Highness, Prince Wilhelm-Alexander of the Netherlands. UN Agencies will also be working in close collaboration with State Governments, NGOs, the private sector and academia to support IYS.

THE ISSUE

Human excreta is the essence of the sanitation challenge.

One gram of faeces can contain:

- 10,000,000 viruses
- 1,000,000 bacteria
- 1,000 parasite cysts
- 100 parasite eggs

Without sanitation facilities to safely contain and dispose of human faeces, which are the primary source of diarrhoeal pathogens, the health of a community, especially its children who are most vulnerable to disease, is put at risk. It is estimated that globally more than 200 million tons of human waste and untold millions of tons of wastewater are discharged,

uncontained and untreated, into watercourses every year.

As a result, bacteria, viruses and parasites are communicated through the water, soil, food and unwashed hands and contaminate everything in their path, causing diarrhoeal disease (including dysentery and cholera), parasitic infections, worm infestations and trachoma. Diarrhoeal disease occupies a leading position among diseases as a cause of death and illness, killing 1.8 million people every year². Poor hygiene and lack of access to sanitation together, contribute to 88 per cent of all deaths from diarrhoeal disease, with children paying the highest price³. It is the second leading cause of under-five child mortality⁴, accounting for 5000 deaths a day⁵. In addition, hundreds of millions of children suffer reduced physical growth and impaired cognitive functions due to intestinal worms.

Schools that do not have private and separate sanitation facilities for boys and girls will not only have an increased incidence of diarrhoeal disease and lower attendance but also a higher dropout rate, especially for girls whose parents may remove them from the education system when they start menstruating.

GLOBAL OVERVIEW

The Johannesburg Plan of Implementation of the Millennium Development Goals advocates a holistic approach in addressing the target on water and sanitation, yet despite significant efforts to raise awareness and shift political will, progress on sanitation has been slow and uneven. Over the period 1990 – 2004, an estimated 1.2 billion people gained access to improved sanitation, an increase of 10 per cent, but to meet the Millennium Development Goals' sanitation target, over 1.6 billion more will need to be reached by 2015, with developing countries facing the biggest challenge⁶. Globally, this translates into 626,000 people per day being given access to an improved sanitary facility.

Many regions are on track to meet the MDG sanitation target. The East Asia/Pacific region recorded the largest increases, with sanitation coverage increasing from 30 per cent in 1990 to 51 per cent in 2004, putting it on track to reach its target of 65 per cent⁷. The Middle East/North Africa and Latin America / Caribbean are generally on track to meet their MDG sanitation targets.

The areas with the least access are West and Central Africa (36 per cent coverage), South Asia (37 per cent) and Eastern and Southern Africa (38 per cent)⁸. In terms of absolute numbers, the greatest improvements have been in South Asia, which more than doubled its coverage from 17 per cent in 1990 to 37 per cent in 2004⁹. Yet the increase is still not sufficient for the region to meet its MDG sanitation target of 58 per cent by 2015.

Urban-Rural Discrepancies

Access to improved sanitation was more than twice as high in urban areas than in rural areas in 2004 (80 per cent in urban areas versus 39 per cent in rural areas). Of the 2.6 billion people currently without access to improved sanitation, 2 billion (77 per cent) live in rural areas. The urban-rural disparity is largest in South Asia, where only 27 per cent of the rural population is served, compared to 63 per cent in urban areas. Only in industrialized countries is urban and rural coverage comparable.¹⁰

CHALLENGES

• Sanitation Policy and Oversight

In many countries, sanitation and hygiene have not been given the priority they deserve with funding and policies to match, although the costs of inaction are staggering. Faced with competing social demands, bigger vote-winning issues and the ingrained belief that sanitation is a private concern of the family, many governments push it to the bottom of their agenda. Often, sanitation is a political "orphan" with no one minister bearing full responsibility for its oversight.

An informal survey of 69 of the many countries in which UNICEF works, offered a glimpse into some of the challenges of meeting the MDG sanitation target globally. While preliminary, the information received suggests the following:

- Approximately 25 per cent of the countries had no lead agency for sanitation.
- Where a lead agency was in place, it was most commonly the Ministry of Health for rural sectors, and the Ministry of Health or Water for urban areas.
- In schools, the lead agency for hygiene and sanitation was generally the Ministry of Education at times in collaboration with others.
- In many countries, responsibility was split across several ministries, suggesting that no one agency was taking the lead in making overall sanitation improvements.
- 38 per cent indicated that they had neither a policy nor a strategy to reach the MDG sanitation target.
- 5 per cent had national sanitation committees that work on policy and sectoral coordination

• *Talking about Faeces*

How we dispose of our bodily wastes is a highly personal matter, so private in fact, it is not discussed openly in most cultures. To many, excreta is considered a "dirty" or "bad" word, especially in so-called polite company. Sanitation and hygiene are also not discussed openly because many people find it embarrassing. Because of this social stigma, the sanitation crisis is not being addressed and the lives of billions of people are affected as a result.

• *Generating Demand*

Another obstacle has been the failure, where infrastructure is lacking, to generate demand for sanitation at the community level, where sanitary decisions are made by individual households. Furthermore, entrenched sanitation and hygiene habits coupled with

the failure to integrate hygiene education with latrine construction have often reduced the impact of previous programmes.

• *Keeping up with Population Growth*

Population in the developing world is growing rapidly, especially in urban areas, and even if the MDG target is met, 1.8 billion people will still be living without access to sanitation¹¹. Without oversight and policies in place which are designed to meet this ongoing challenge, the resulting problems will grow exponentially pushing already disadvantaged sections of society into deeper illness, poverty, and indignity.

NEXT STEPS

Affordable and practical solutions are at hand, and there are plenty of sanitation success stories. A recent study by the Water and Sanitation Program (WSP), on Scaling up Rural Sanitation examined eight case studies and found three key factors for success. These include focusing first on stopping open defecation rather than simply building facilities; investing in hygiene promotion and social mobilisation, at community and household level; and providing affordable design options. Additionally, since children can be effective advocates of change in their communities, ensuring that every school has adequate sanitation facilities and teaches personal hygiene is essential. Meeting the MDG sanitation target, which is achievable, requires coordinated action at all levels of government, and the formation of partnerships between private companies, bilateral donors, development agencies, financial institutions, NGO's, civil society and local communities.

The designation of the International Year of Sanitation 2008 provides a unique opportunity to act – and to act immediately.

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INTERNATIONAL YEAR OF SANITATION 2008: GLOBAL FACTS ON SANITATION

LACK OF SANITATION IS A SILENT GLOBAL CRISIS

- 2.6 billion people have no access to improved sanitation services. That is 41 per cent of the world's population or two in every five people¹²
- Globally, only 39 per cent of people living in rural areas have access to improved sanitation facilities compared to 80 per cent of people living in urban areas. The largest regional disparities are found in South Asia¹³
- 88 per cent of diarrhoeal deaths are due to a lack of access to sanitation facilities, together with inadequate availability of water for hygiene and unsafe drinking water¹⁴
- More than 5,000 children under five die every day due to a lack of sanitation and hygiene, resulting in more than 1.5 million diarrhoea-related deaths among children. This amounts to 18 per cent of all under-five deaths¹⁵
- Of the approximately 120 million children born in the developing world each year, half will live in households without access to improved sanitation facilities¹⁶
- 980 million children under 18 live without access to improved sanitation facilities, 280 million of which are under five years old¹⁷
- Diarrhoea is the 2nd highest single cause of child mortality after pneumonia¹⁸
- The annual cost of meeting the water and sanitation MDG targets by 2015 is \$11.3 billion¹⁹; \$ 9.5 billion of which is for sanitation alone²⁰

BENEFITS OF IMPROVING SANITATION

- The average economic benefit of a \$1 investment in sanitation is \$9.1 - it is \$4.4 on water²¹
- Achieving the MDG sanitation target would result in \$66 billion of annual economic benefits including time savings, value of productive and school days gained, value of averted illness and death, and savings in related medical expenses²²
- Washing hands with soap or ash at critical times can reduce the number of diarrhoeal cases by 47 per cent²³ and reduce acute respiratory illnesses by 50 per cent²⁴
- Providing private and separate sanitary latrines in school can increase girls' enrolment by 11 per cent²⁵
- For every 1 percent increase in female literacy (due to increased school attendance where proper sanitation facilities exist), a country's economy can grow by 0.3 per cent²⁶
- Improved sanitation alone can reduce diarrhoea-related morbidity by more than one third; when combined with hygiene awareness and behaviours can reduce it by two thirds²⁷

IMPROVING SANITATION FACES CHALLENGES BUT HAS MADE PROGRESS

- Between 1990-2004, 1.2 billion people gained access to improved sanitation²⁸
- Due to population growth, 1.6 billion people need to gain access to improved sanitation by 2015 to meet the MDG sanitation target²⁹
- In 2015, the world population is expected to be 7.2 billion³⁰
- If the MDG 2015 is achieved, 1.8 billion people will still be without improved sanitation³¹

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INTERNATIONAL YEAR OF SANITATION 2008: KEY MESSAGES

SANITATION IS VITAL FOR HEALTH

- *Lower rates of diarrhoeal disease and infection*
- *Lower child mortality and malnutrition*
- *Better public health*

In a recent poll by the British Medical Journal, sanitation was voted the greatest medical milestone since 1840 by some 11,000 medical professionals - ahead of vaccines, the successful use of anesthesia, and mapping of the human genome³². In the eyes of these independent medics, proper sanitation has made the biggest contribution to improved human health in over 150 years.

Without sanitation facilities to safely contain and dispose of human faeces, which is the primary source of diarrhoeal pathogens, public health is put at risk. Diarrhoeal disease is a leading cause of under-five child mortality and can be reduced by improving sanitation. Additionally, worm infections impair children's health, nutrition uptake and cognitive development. Children weakened by diarrhoea are more susceptible to other infections, namely respiratory ones, which are another leading cause of child mortality. Improving sanitation is key to maintaining good public health, which is a critical building block necessary for a country to advance toward self-sustaining development and economic well-being.

SANITATION GENERATES ECONOMIC BENEFITS

- *Better worker productivity*
- *Savings in direct and indirect medical costs*
- *Higher return on investment in education*
- *Increased GDP and tourism revenues*

Improving sanitation has a significant positive impact on reducing poverty and increasing a country's economic growth, enabling it to become a stronger and more self-reliant partner in the global economy. According to a

WHO study, every dollar spent on improving sanitation to reach the MDG target generates an average economic benefit of \$9.1.³³ This includes the savings associated with treating sanitation-related illnesses, gains in productivity and school days due to lack of sickness, time and effort gains due to close and adequate sanitation facilities, and improvement of the environment. Increases in female literacy (due to increased school attendance where proper sanitation facilities for girls exist) also contribute to economic growth.

The cost of inaction is tremendous; the 1991 cholera outbreak in Peru, for example, which started in slums and squatter settlements, cost the national economy an estimated \$800 million according to WHO, due to food trade embargoes and adverse effects on tourism, which was much greater than the cost of the sanitation improvements that could have prevented it³⁴. Also, the cost of implementation is only rising; what required tens of millions to improve sanitation infrastructure 10 years ago, can cost hundreds of millions today.

SANITATION CONTRIBUTES TO SOCIAL DEVELOPMENT

- *Greater personal dignity, pride and self-respect*
- *Increased school attendance; children get the education they deserve, especially girls*
- *Higher female literacy*
- *Improved cognitive development*

Improving access to sanitation is a first step towards creating a physical environment that enhances dignity and self-esteem. By offering privacy and convenience, nearby latrines also provide safety and security, especially for women and girls who risk sexual harassment and assault when defecating during nightfall and in secluded areas. Women, who are the primary caregivers, also spend less time

caring for the sick and have the opportunity to dedicate themselves to leading more productive lives.

Also, improving sanitation in schools benefits both learning and the health of children. Child-friendly schools, which offer private and separate facilities for boys and girls, attract and retain students, especially girls. Those who are menstruating are reluctant to attend school if there is no private toilet where they can attend to their feminine hygiene needs. It is estimated that one in four girls does not complete primary school compared with one in seven boys.³⁵

Finally, healthy children means higher school attendance. WHO estimates that 194 million schooldays, resulting from fewer incidents of diarrhoea, would be gained annually if the MDG sanitation target were met.³⁶ Providing improved sanitation has a profound effect on human development, with substantial benefits for women and girls.

SANITATION HELPS THE ENVIRONMENT

- *Less contamination of the environment including water and soil*
- *Protection and enhanced biodiversity*
- *Increased sustainability of resources*

In regions where a large proportion of the population does not have improved sanitation facilities or wastewater treatment, sewage flows directly into streams, rivers, lakes and wetlands, affecting coastal and marine ecosystems, fouling the environment and exposing billions of people to disease.

Particularly in the context of urbanization, the improper discharge of domestic wastewater, sewage and solid waste presents a variety of concerns, from creating breeding grounds for communicable disease vectors, to

contributing to air, water and soil pollution. Contamination, however, is not limited to the developing world, as everyone shares the earth's resources. The results of poor waste management also contribute to a loss of valuable biodiversity. In the case of coral reefs, urban and industrial waste and sewage dumped directly into the ocean or carried by river systems from sources upstream, increase the level of nitrogen in seawater. Increased nitrogen causes overgrowths of algae, which in turn, smothers reefs by cutting off their sunlight.

SANITATION IS ACHIEVABLE

- *Political will is starting to shift*
- *Affordable, community-led solutions exist*
- *Progress has been made*
- *The time to act is now!*

Building on the successes already achieved can be done through the co-operation of the full spectrum of the global community, from households and communities to local and national governments, civil society, and private companies, all working together with the common goal of reaching the sanitation target.

Recent progress in countries like India, Malawi, Ethiopia, Bangladesh and Indonesia demonstrate that sanitation plans can be developed and implemented to the benefit of all. Innovative schemes – for example, declaring open defecation-free communities – show that promoting a culture of sanitation can happen, and rapidly. However, to achieve universal sanitation, governments and their various partners need to take decisive action by making strategic decisions about budget and resource allocations. They need to put sanitation – with its own ministers, policies, strategies, and funding - high on their development agenda.

INTERNATIONAL YEAR OF SANITATION 2008: WHAT IS SANITATION?

Sanitation can generally be described as the collection, transportation, treatment and disposal or reuse of human excreta, domestic wastewater and solid waste.

“Improved” sanitation, as measured by MDG 7, Target 7c, refers to the safe management of human excreta, a crucial distinction that basic sanitation, such as a latrine over a body of water, does not accomplish. Specifically, it should prevent human contact with human faeces, resulting in a clean and healthy living environment both at home and in the community. Access to “improved” sanitation also includes safety and privacy in the use of these services. “Improved” hygiene refers to the consistent practice of washing hands with soap after defecation and before coming into contact with food. The percentage of people using such improved sanitation facilities is the main indicator for measuring progress towards the MDG sanitation target.

SANITARY FACILITIES

Toilets may seem like an unlikely catalyst for human progress—but the evidence that they are is overwhelming. Almost everyone living in the developed world has access to a private flush toilet served by a continuous supply of piped water, with taps and toilets in close proximity. Human waste is channeled by pipes into sewerage systems and treatment facilities, ensuring that drinking water is separated from the pathogens carried in faecal material. Meanwhile, taps located in sanitation facilities enable people to maintain personal hygiene. But at the other end of the sanitation spectrum are the billions of people who are forced to defecate in bags, buckets, fields or roadside ditches, or practice open defecation and do not have access to safe water with which to wash their hands.

Sanitation facilities fit into two categories according to The Joint Monitoring Programme

for Water Supply and Sanitation (JMP) of the WHO and UNICEF. These include:

Improved sanitation facilities

- Flush or pour-flush latrine, with either a latrine pit, septic tank, or piped sewer system
- Ventilated improved pit latrine
- Pit latrine with slab (dry toilet with a raised squatting slab or platform)
- Composting toilet (dry toilet designed and maintained to produce inoffensive compost).

Unimproved or basic sanitation facilities (which don’t count towards meeting the MDG) include:

- Shared or public sanitation facilities
- Flush or pour flush to street, yard, plot, open sewer, ditch, drain, or other unsafe location
- Pit latrine without slab
- Bucket (open vessel periodically removed for emptying)
- Hanging toilet or hanging latrine (defecation platform over a pond, lake, river or other water source)
- No facility (open defecation)

HYGIENE PROMOTION

There is increasing recognition that hygiene promotion is the single most cost-effective intervention to address high disease burdens such as those spread through faecal-oral transmission. The simple act of handwashing with soap or ash, especially after defecation and before touching food, can reduce the number of diarrhoeal cases by nearly 50 per cent³⁷ (as well as acute respiratory illnesses³⁸), making it the best option for prevention. Local governments and health extension workers have an important role in this process; as do public-private partnerships to promote handwashing through high-impact marketing campaigns and school-based hygiene promotion. Many lives could be saved every year if the practice of handwashing was universal at home and in schools, and it can



and must become commonplace in all countries.

The United Nations family of agencies have jointly agreed on a basic hygiene code which all families in the world should practice to assist in maintaining good health. This includes:

- All faeces should be disposed of safely. Using an improved toilet or latrine is the best way.
- All family members including children need to wash their hands thoroughly with soap and water or ash and water after contact with urine or faeces; before preparing or eating food, and before feeding others; after changing diapers or cleaning a child who has defecated; before and after tending to someone who is sick; after handling an animal or animal waste; and after handling garbage.
- Washing the face with soap and water every day helps to prevent eye infections

WASTEWATER MANAGEMENT

Cleaning and protecting a country's water resources is an enormous task, yet inadequate handling of wastewater has serious consequences for human health and the environment, including agriculture and aquaculture. Unmanaged wastewater contaminates the water supply, increasing the risk of infectious diseases and deteriorating groundwater and other local ecosystems, which ultimately impedes economic development.

Economic conditions, however, can impose strong limitations on the ability of nations and individuals to provide for appropriate wastewater management, particularly in urban settings. Because the cost can be very high, it is of great priority to address the financing challenges of providing adequate collection, treatment, reuse and reallocation to the natural environment within the framework of the 2015 MDG sanitation target.

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INTERNATIONAL YEAR OF SANITATION 2008: SANITATION CONTRIBUTES TO ALL MILLENNIUM DEVELOPMENT GOALS

MDG 1: Eradicate Extreme Poverty and Hunger

Currently, the richest parts of the global population are four times more likely to have and use improved sanitation than the poorest. The cost of not having clean, safe toilets, wastewater management and practicing good hygiene is significant. Lost productivity and time, additional health costs, lost school days due to mostly preventable diarrhoeal disease, as well as the long term costs of environmental damage, all can have a negative impact on a country's growth and economic development. Contaminated soil and water also reduces safe food supply, which contributes to hunger. Improving access to sanitation and promoting hygiene, the keys to keeping people healthy and productive, and keeping children in school, contributes immeasurably to eradicating extreme poverty and hunger.

MDG 2: Achieve Universal Primary Education

All of the initiatives that aim at Education for All have made significant strides towards making more resources available to increase access to a quality education. This includes creating an enabling learning environment in which children can perform to the best of their ability. However, due to the less than adequate sanitary and hygienic conditions in many schools, characterized by the absence of properly functioning water supply, clean and separate toilets for boys and girls, and hand washing facilities, many children must resort to open defecation, which ultimately compromises their performance and attendance. Due to a lack of privacy and inability to protect their modesty, girls are less likely to attend and stay in school, which deprives them of the education they have a right to receive. A study by the government of Bangladesh and UNICEF credited an 11 per cent increase in girls' enrolment mainly due to the provision of sanitary facilities.³⁹

MDG 3: Promote Gender Equality and Empower Women

Access to sanitation facilities enhances dignity, privacy, security, status, learning and economic opportunities for women and girls, who bear the greatest burden when it is not available. As the primary caregivers, women face severe social and economic losses because they spend so much of their time fetching water and caring for children and other family members sickened by sanitation-related diseases. Improved sanitation offers girls a means to get an education, and frees women to pursue other opportunities in life, including further education, civic involvement and income-generating activities. This empowers them to become equal and productive citizens, goals which are pivotal to the health and development of families, communities and nations.

MDG 4: Reduce Child Mortality

Diarrhoeal diseases resulting from unsafe water and lack of sanitation are responsible for the deaths of more than 1.5 million children under five every year.⁴⁰ Already vulnerable due to under-nutrition, a condition that is associated with more than half of all under-five deaths, children suffer the most from diarrhoea, with every episode reducing calorie and nutrient uptake, as well as setting back their growth and development. Improving sanitation strengthens a child's immune system, and reduces the risk of exposure to the deadly bacteria, parasites and viruses that claim so many young lives.

MDG 5: Improve Maternal Health

A healthy living environment with access to sanitation produces healthy mothers who are more likely to have healthy children. Preventing faecal contamination and the transmission of pathogens increases the likelihood that a woman can progress through her pregnancy with less risk of diarrhoeal

diseases and infections, among other complications. Improving the sanitary conditions in which women live, especially when they are pregnant, is a key factor in improving maternal health.

MDG 6: Combat HIV/AIDS, Malaria ...

In many countries, excessive rates of disease and death reflect the interlocking effects of poverty. Measles can precipitate acute undernutrition, diarrhoea, or a fatal respiratory infection; undernutrition can increase vulnerability to, and mortality from, measles, tuberculosis, diarrhoea, and respiratory infections. Those weakened by disease, especially HIV/AIDS, are especially susceptible to infections brought on by the lack of access to sanitation. Clean, safe toilets, wastewater management and good hygiene practices reduce the spread of diarrhoeal disease, which in turn strengthens the immune system and offers protection against further infection. This can slow the progression of HIV and reduce the number of deaths related to AIDS and other diseases.

MDG 7: Ensure Environmental Sustainability

Addressing climate change, which has received increasing attention of late, is just one aspect of protecting the earth's resources and ensuring environmental sustainability. Sanitation is a key component for reaching this MDG, because when left unchecked, the contamination it causes is widespread, affecting both soil and water. As a result of this environmental pollution, public health, social and economic development are put at

risk. Expanding coverage to meet the sanitation target will improve the environment in which people live by improving the quality of these natural resources. In many cases, improving sanitation treats the cause of an unsafe water problem common in countries which already have the largest population increases and the most fragile environmental conditions. These countries also have limited financial means, the least adequate political and managerial resources to address the challenges, and usually bear the brunt of environmental hazards and degradation. Sanitation is the cornerstone of sound and sustainable environmental management.

MDG 8: Develop a Global Partnership for Development

Some countries in particular face challenges in meeting the MDGs, and need external resources to help them realise the goals of the Millennium Declaration, including official development assistance and direct foreign investment, especially for water and sanitation projects. While the ongoing sanitation reforms have provided opportunities for creating more efficient, customer-focused and autonomous water and sanitation utilities, the sector continues to face enormous challenges in meeting the ever-increasing demands of growing populations. Sanitation is a key sector in which developing global partnerships between the public and private sectors, which contribute to the development of sustainable and diversified financing strategies, will have maximum benefit.

INTERNATIONAL YEAR OF SANITATION 2008: PROGRAMMES AND EXPERIENCES IN SANITATION AND HYGIENE

Water, Sanitation and Hygiene (WASH) in Schools

“WASH” in Schools focuses on creating an effective and healthy learning environment for children in primary schools by providing sanitary facilities and promoting hand washing to maximize benefit. The initiative aims to ensure safe water and clean, separate sanitation facilities for boys and girls, and to develop hygiene skills for life among school children. What they learn today about the prevention of water borne diseases is most likely to be passed on to their peers, family members and their future children. Empowering young people through sanitation education will make schools safer and healthier for all children, and will provide entryways for hygienic change in families. Of the 96 countries in which UNICEF undertakes water and sanitation programmes, 86 reported WASH in School activities in 2007.

Case study: Child-Friendly Sanitation in Malawi

Through a UNICEF initiative in Malawi, children and their families are collaborating to assist in developing national standards for sanitation facilities and hygiene promotion in primary schools. Children have historically had little, if any, role in decision making, but approaches like child-to-child and student focus groups are beginning to honor their right to participate in their own development. National review teams interviewed children on what they liked and disliked about their sanitation facilities or lack thereof. The children spoke candidly and perceptively of the changes needed, and their insight is being used to modify technical designs. The process was innovative and a good starting-point for evaluating technologies suitable for schools. The children proved keen advocates for better sanitation in both their schools and at home. Their feedback is also guiding the work for child-friendly hygiene education such as comic books which have been designed for

grades five to eight on the importance of school latrines. Over the longer term, this school sanitation and hygiene promotion project offers the opportunity to create a larger school-based health programme.⁴¹

Public Private Partnerships for Hand Washing with Soap

The World Bank and the Water and Sanitation Program (WSP), in collaboration with Academic institutions such as the London School of Hygiene and Tropical Medicine (LSHTM) and the private sector and other partners, launched a global initiative aimed at promoting handwashing with soap through Public-Private Partnerships (PPP). Harnessing the combined efforts and expertise of soap companies and public agencies has been shown in pilot projects to be an effective way to increase the rate of handwashing with soap to reduce the incidence of diarrhoeal disease and decrease deaths, especially of children under five. It is a win-win partnership: the soap industry gains via market expansion, while public agencies gain by leveraging their health messages via marketing campaign strategies which are recognized, promoted, and practiced.

The success of the collaboration, however, requires an in-depth understanding of target customers' needs. Within the partnership, public and private organizations work together to produce consumer research and to design, implement, and evaluate subsequent handwashing promotion campaigns and implement large-scale country programs. In addition to increasing handwashing among target groups, the approach gives high visibility to the issues of hygiene and sanitation, often overlooked components of water supply projects. The initiative is currently active in 16 countries.

Case study: What Motivates Hygiene Behavior in Ghana

A newly published study by the London School of Hygiene and Tropical Medicine uses consumer research to investigate the factors that motivate handwashing with soap in order to develop and implement a national communications campaign for Ghana. It reveals that the strongest motivators are related to nurturance, social acceptance and disgust of faeces and inadequate latrines, especially their smell. Protection from disease is mentioned as a driving force, but was not a key motivator of handwashing behaviour. The authors of the study propose that, where consumer motivation is identified through traditional consumer marketing research methods by experts in the field, the target audience's needs will be better served and all partners' objectives achieved by basing future programmes on the findings.⁴²

Community Led Total Sanitation and Total Sanitation Approaches

The Total Sanitation Approach (TSA) and Community-Led Total Sanitation (CLTS) involves facilitating a process to inspire and empower rural communities to stop open defecation by building and using latrines without offering them external subsidies to purchase hardware such as pans and pipes. These approaches, while they use slightly different methodologies, are rooted in the belief that a community has, within itself, the power to initiate and sustain change if educated and convinced of the benefits. The process of developing and building latrine models by using locally available, low-cost materials and models of implementation, monitoring, community reward and penalty schemes are constantly developing. Interest is growing in TSA and CLTS. However, rapid institutional implementation faces challenges, including the difficulty in shifting the donor mindset away from subsidizing projects. While some agencies are still using pilot projects to try and learn more about the approaches before adopting them for their own sanitation programmes, others have

already institutionalized the TSA or CLTS approach with great success.

Case study: Women Lead Total Sanitation Drive in Sakhara, India

Remotely located, acute poverty, poor hygiene, open defecation, inadequate solid and waste management and high incidence of diarrhoeal disease and death described this village in India. Information, education and communication campaigns (IEC) that built up sanitation as a societal concern were introduced by UNICEF to four local women's Self-Help Groups (SHGs), who energized their community and brought about dramatic and positive change. Their main objective became to create an enabling environment for themselves and their families, by developing an improved sanitation facilities plan and creating an open defecation-free environment.

Due to their vigilance, persistence, community participation and financial support from local contributions, they attained their sanitation goals. In November 2005, the village of Sakhara earned recognition in the district, receiving an award as the first 'open defecation-free' village from the State Government of Maharashtra. The SHG women understood, however, that any behavioral change is even more difficult to sustain than to initiate. Therefore, to maintain their village's status, they implemented a system of community monitoring. This involved frequent house visits to ensure proper usage and maintenance of toilets, and a village senior appointed to watch and warn people against open defecation.⁴³

Condominial or Simplified Sewerage

Simplified sewerage, often referred to as 'condominial sewerage,' is an off-site sanitation technology that removes all wastewater from the household environment. Conceptually, it is the same as conventional sewerage, but it focuses on eliminating unnecessarily conservative design features and matching design standards to the local

situation, which may include high density, urban, rural and peri-urban areas. It involves the collection of all household wastewater in small-diameter pipes laid at fairly flat gradients. The sewers are often laid inside the housing block, in the front garden or under the sidewalk pavement, rather than in the centre of the road as with conventional sewerage. It is equally suitable for existing unplanned slum areas and new housing developments with a more regular layout.

Simplified sewerage is most widely used in Brazil, where the water and sewerage company of Brazil and the Federal District, CAESB, started implementing the technology in 1991. Today, they consider it their standard solution. CAESB has over 1,200 km of condominial sewers in operation – the largest example of simplified sewerage in the world. Most installations have been successful although good operation and maintenance is essential for long-term sustainability. While the technology is widely known in Latin America, it is expanding to other parts of the world to suit various contexts.

Case study: Effects of Urban Sanitation on Childhood Diarrhoea in Brazil

A recent study in Salvador, Brazil, was conducted in parallel with a citywide sanitation intervention to raise sewerage coverage rates from 26 per cent to 80 per cent. The original objective of the project, called “Bahia Azul,” was to control the marine pollution in the nearby bay, which was largely caused by the discharge of domestic wastewater. Researchers from the Federal University of Bahia and London School of Hygiene and Tropical Medicine investigated the epidemiological effect of the sanitation program on diarrhoeal morbidity in children less than three years old. The study was conducted over seven years, allowing for a pre-construction baseline in high and low risk areas of the city and then for a post-construction evaluation in the same neighborhoods. The results showed that, overall, prevalence of diarrhoea fell by 22 per

cent. In areas where baseline prevalence was highest, i.e. poorer areas with low sanitation coverage rates to begin with, diarrhoeal rates fell by 43 per cent. These results suggest that urban sanitation is a highly effective health measure.⁴⁴

Ecological Sanitation

Ecological sanitation options are being included in national sanitation interventions to protect water resources, support agricultural production and sustain biodiversity, as well as to improve health and quality of life. Using these options, excreta is processed on site until it is free of disease-causing organisms. The sanitized excreta and resultant nutrients are then recycled for agricultural purposes, which helps to ensure food security. Ecological sanitation covers a wide range of toilet designs as well as different techniques for the collection and treatment of urine and faeces. These include ecological low and high-technology solutions for rural and urban settings, which allow for central and/or decentralized management and can be dry and/or waterborne. This range of options allows for appropriate sanitation solutions to be developed for a variety of different geographical and socio-economic contexts.

Case study: Ecological Sanitation in Uganda

In Uganda, ecological sanitation is used as one of the options for problematic environments such as collapsing soils, high rock or water tables. The Ministry of Water, Lands and Environment, through the Ministry’s Directorate of Water Development (DWD) plays a leading role in promoting urine diversion toilets as a means of protecting groundwater, and has constructed a number of these toilets countrywide. In May 2003, a total of 506 ‘EcoSan’ toilets were constructed in South Western Uganda. Of these, 437 were for households, 36 were institutional and 33 were public facilities. Currently, the urine-diverting dehydration toilet, called the Skyloo, is the most widely used, because it does not affect groundwater, can be built above ground and enables reuse of urine with



minimal health risks. When asked to indicate their best-preferred toilet, those who chose EcoSan toilets cited permanence, potential for agricultural productivity and hygiene as the appealing factors.⁴⁵

WASH in Emergencies

In emergency settlements such as refugee camps, sanitation is a first priority as the risk of diarrhoeal disease increases significantly. Amidst the chaos of post-disaster situations, relief agencies agree on two basic points relating to sanitation: that excreta disposal and hygiene promotion is a prerequisite for safeguarding public health; and that consultation with communities is a critical first step in being responsive to their needs and safeguarding their dignity and privacy in the design of hygiene and sanitation interventions.

UNICEF currently leads a global 'cluster' of international agencies on Emergency Water Sanitation and Hygiene (WASH). The aim of the global clusters is to improve the

predictability, timeliness and effectiveness of a comprehensive response to humanitarian crises through strengthened partnerships between NGOs, International organizations, the International Red Cross and Red Crescent Movement and UN agencies.

Preventing open defecation in Tanzania

In Tanzania during the 1994 Rwandan refugee crisis, one approach adopted in the immediate emergency phase, was to employ sanitation workers whose primary task was to forcibly prevent people from defecating in certain areas around the refugee camp and to direct them to alternative areas or facilities. This was especially important on the lakeside of the camp to prevent faecal contamination of the lake which was the main water source. Such an approach had to be managed carefully to avoid conflict within the affected population and was accompanied by appropriate hygiene promotion, highlighting the need to prevent water contamination at the earliest possible stage.⁴⁶

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INTERNATIONAL YEAR OF SANITATION 2008: ACTION!

MISSION

The mission of the Year is to accelerate progress for 2.6 billion people worldwide who are without improved sanitation facilities by promoting and giving momentum to sustainable sanitation and highlighting its contribution to the achievement of all the Millennium Development Goals. This includes advocacy and raising awareness, especially among decision makers, to give people the means to improve their lives by strengthening the sanitation sector.

WHAT NEEDS TO BE DONE?

IYS OBJECTIVES

1. **To increase awareness and commitment** from actors at all levels, both inside and outside the sector, on the importance of reaching the MDG sanitation target via compelling and frank communication, robust monitoring data, and sound evidence.
2. **To mobilize governments'** existing alliances (from national to local), financial institutions, sanitation and service providers, major groups, the private sector and UN Agencies via rapid collaborative agreements to mobilize the sector.
3. **To secure real commitments** to review, develop and implement effective action to scale up sanitation programmes and strengthen sanitation policies via the assignment of clear responsibilities at the national and international levels.
4. **To encourage demand driven, sustainable and traditional solutions**, and informed choices by recognizing the importance of working from the bottom up with communities and practitioners.
5. **To secure increased financing** via allocation commitments in national and

development partner budgets in order to jump start and sustain progress.

6. **To develop and strengthen institutional and human capacity** via recognition at all levels that progress in sanitation involves interlinked programmes in hygiene, household and school facilities as well as the collection, treatment and safe reuse or disposal of wastewater and human excreta.

7. **To enhance the sustainability** and therefore the effectiveness of available sanitation solutions, to enhance health impacts, social and cultural acceptance, technological and institutional appropriateness, and the protection of the environment and natural resources.

8. **To promote and capture learning** to enhance the evidence base and knowledge on sanitation which will greatly contribute to advocacy and increased investments in the sector.

STRATEGY

To accelerate progress on the MDG sanitation target, a far-reaching communications plan has been prepared to outline the contributions and inputs of the IYS partner agencies. The plan consists of activities both within and outside the UN-system to advance the implementation of sanitation-related decisions. It focuses on a course of action for the year and beyond, to leverage the sanitation investment needed to create immediate, tangible benefits for the health, environment, social and economic sectors.

The communications strategy includes among other things, an all-encompassing media plan targeting television, radio, print and the Internet, whose role in the success of the International Year of Sanitation 2008 is critical. Private sector partnerships are being formed by IYS partners to carry the messages



globally through social marketing such as the UNEP/ Canon Photo competition. Other activities include IYS postage stamps, behaviour change contests, the "Sanitation is Dignity Exhibition" made available by the German Toilet Organization, and the WASH in Schools Campaign and Media Awards sponsored by the WSSCC.

As a way to concentrate collective efforts for maximum impact and benefit, UNICEF's global IYS programme strategy focuses on the promotion of latrine construction in households, schools, institutions and public places, as well as hand-washing campaigns, due to their vital importance for health and development. The plan also stresses the development of the policies, institutions and other enabling environments to expand sustainable sanitation and hygiene programmes and to ensure progress in the years to come.

SUGGESTED INVOLVEMENT

What can the global community do to dramatically increase access to improved sanitation services and promote hygiene to ensure that they effectively contribute to achieving the Millennium Development Goals? The International Year of Sanitation 2008 provides a unique platform for the international community to address this question, scale up efforts, create and implement roadmaps, develop budget requirements and form public-private partnerships. The Year offers the opportunity to engage political and corporate leaders, celebrities, academics and especially women to advocate for the IYS objectives. Working together to promote the power and positive impact of sanitation and proper hygiene will generate the momentum needed to reach the MDG sanitation target.

All supporters of IYS are invited use the IYS logo which is available on the website with guidelines for its use. Please also **visit www.sanitationyear2008.org** for updates on events, conferences, a library of resources and other helpful information.

www.sanitationyear2008.org



INTERNATIONAL YEAR OF SANITATION 2008: KEY DATES FOR MEDIA

The United Nations officially launched the International Year of Sanitation 2008 on 21 November, 2007 and the event was attended by the Secretary General, the Honorable Prince of Orange, UN Member States, NGOs, citizen groups, academics and the private sector as well as members of the Secretary-General's Advisory Board. Please visit www.sanitationyear2008.org for updates.

MARCH

22 - World Water Day – this year's theme is Sanitation and will be observed by the UN on 20 March in Geneva and NY
Angle: lack of sanitation contaminates water resources

APRIL

7 - World Health Day

Angle: sanitation has greatest impact on public health

7-11 - 33rd Water Engineering Development Center (WEDC) International Conference "Access to Sanitation & Safe Water: Global Partnerships & Local Actions" - Accra, Ghana

23-29 - Education for All Week

Angle: sanitation in schools improves attendance, reduces dropout rate especially for menstruating girls, improves learning and retention

MAY

5-16 - United Nations Commission on Sustainable Development (CSD-16) UN Headquarters, New York

JUNE

5 - World Environment Day

Angle: uncontained human excreta pollutes water and soil and is a major cause of the unsafe water problem

11 June – 14 September - EXPO Zaragoza 2008, Water for Sustainable Development, Zaragoza, Spain . Sanitation technologies to be highlighted in thematic UN pavilion

16 - Day of the African Child

Angle: sub-Saharan Africa needs more support to reach MDG sanitation target

20 - World Refugee Day

Angle: to prevent spread of disease in emergency settlements, sanitation is a priority

AUGUST

17-23 – SIWI Conference: "Progress and Prospects on Water: For a Clean and Healthy World" Stockholm, Sweden

SEPTEMBER

8 - World Literacy Day

Angle: millions of school days a year are lost due to illness caused by lack of sanitation

OCTOBER

6 - World Habitat Day

Angle: urbanization poses sanitation challenges

12 - International Day for Natural Disaster Reduction

Angle: sanitation is key component for safeguarding society following a natural disaster

16 - World Food Day

Angle: lack of sanitation contaminates the food supply through water and soil

17 - World Poverty Day

Angle: sanitation, hunger and poverty are inter-connected and must be tackled together

TBA October - Global Handwashing Day and SACoSAN 3 (South Asian Conference on Sanitation)

NOVEMBER

4-6 - World Toilet Summit & Expo 2008 and World Sanitation Fund Forum, Macau

19 - World Toilet Day

Angle: 2.6 billion people are waiting to use the toilet

20 – World Children's Day

Angle: children bear the greatest burden when sanitation is unavailable

DECEMBER

10 - Human Rights Day

Angle: access to sanitation facilities is a basic human right that protects health and human dignity

INTERNATIONAL YEAR OF SANITATION 2008: Q & A

How is basic sanitation different from “improved” sanitation?

“Improved” sanitation, as measured by MDG 7, Target 7c, refers to the safe management and disposal of human excreta. This includes facilities for the treatment of waste that prevent contact with faeces. A latrine, which has the potential for either environmental pollution and/or oral-faecal contact due to inadequate design, poor construction, or location, is considered basic but is not considered “improved” because it is not safe. Although well-maintained public or shared facilities represent an improvement over rudimentary forms of sanitation, the likelihood of poor hygiene and the unsustainable use of these facilities also argues against counting them as improved facilities.

Since the two are inter-connected, how do you account for the impressive improvements towards meeting the MDG water target but not the sanitation one?

While sanitation is usually paired together with safe water as a single development goal, water has traditionally received greater emphasis and more resource allocation. The World Health Organization and UNICEF estimate that globally, between 1990 and 2000, safe water initiatives received \$12.6 billion annually, while sanitation received only \$3.1 billion. In Asia, the difference between spending on water and spending on sanitation is 5.5 times, in favour of water. Yet, improving sanitation generates far more economic benefit than treating contaminated water and as sanitation issues can impact water quality, it also addresses the root of the problem.

Whose responsibility is it to provide sanitation?

A government’s role in providing sanitation is to set policy and regulate the sector to ensure a clean and healthy living environment for it’s people. However, in some parts of the world,

sanitation is not prioritized or even addressed, although it is widely considered essential for the public good. At the same time, individuals and households bear responsibility for their own well-being, and that of their neighbors, by adopting improved sanitation and hygiene practices. This strengthens the overall commitment to progress.

What is Total Sanitation (TS) and why are individual households asked to contribute financially to sanitation improvements?

A Total Sanitation Campaign is a comprehensive programme designed to generate demand at the household level in rural areas for sanitation facilities with a broader goal of eradicating the practice of open defecation. It focuses on driving community demand for a sanitary environment by providing Information, Education, and Communication (IEC). When people are encouraged to make change, convinced of the personal benefits, play an active role in the improvement of their lives, and contribute financially, they become committed to achieving the goal, which is key to success.

Why is creating demand for sanitation important? And how is it being done?

Studies show that it is the desire on behalf of an individual and community to make change in sanitation and hygiene practices that produces sustainable results, not just having a toilet. Key interventions like building latrines are necessary to increase access, but getting people to use them regularly can be a challenge without accompanying sanitation marketing and hygiene promotion. A campaign designed to create demand, galvanises a community to effect long-lasting behavioural change, which makes every toilet a wanted one.

What is the business potential in sanitation?

The sanitation sector offers great business potential for both the developing and industrialised worlds. Large businesses that focus on wastewater treatment, facility upgrade and repair, or soap manufacturing, as well as a myriad of small enterprises ranging from plumbers to latrine-builders, have a lot to gain from sector mobilization. In Bangladesh, for instance, a social mobilisation campaign to create a market for latrine makers, replaced support for Government-sponsored latrine production centres (LPCs), which alone had made too little progress on achieving sanitation goals. This created market demand and was an incentive for small private workshops all over rural Bangladesh to start producing and selling latrines. Latrine coverage increased rapidly and thousands of new jobs were created in the private sector.

How feasible is it to change entrenched habits, like open defecation?

Numerous examples of successful change exist. Providing education designed to build demand among households, along with the availability of services, is a first step towards changing entrenched habits. Additionally, teaching school children facts about health risks and safe hygiene practices helps them develop essential life skills that they share with their families. These life skills also enable them to acquire and maintain healthy lifestyles, and to take greater responsibility for their own lives as they become adults with families of their own.

How is sanitation measured in urban slums?

Currently, estimates of water and sanitation coverage in urban areas include those living in urban slums. As a consequence, the statistics tend to mask the disproportionate lack of access found in these communities. Calculating separate estimates for slum and other urban dwellers poses formidable technical challenges. However, efforts are under way to improve the statistical methods used, so that a more accurate picture of the water and sanitation situation in slum communities can be presented.

What is the difference between environmental sanitation and ecological sanitation?

Environmental sanitation refers to keeping surroundings clean and free of contaminants, preventing pollution, which includes wastewater treatment and disposal, vector control and other disease prevention activities. Ecological sanitation, on the other hand, refers to solutions that are based on a closed loop system, which regard urine, faeces and water as resources in an ecological cycle.

What do successful programmes have in common?

Community-led and owned programmes, with a solid enabling environment and good partnerships between public and private sectors are common factors in achieving universal sanitation.

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