



 $\label{lem:approx} A\ Pakistani\ boy\ lies\ semi-conscious\ from\ diarrhoeal\ dehydration.$

Lack of sanitation is a public health disaster. It consigns nearly 3 billion people — half of humanity — to life in almost medieval conditions, without access to latrines and unable to practise such basic hygiene as washing their hands in safe water.

SANITATION FOR ALL

Promoting dignity and human rights

ccess to sanitation facilities is a fundamental human right that safeguards health and human dignity. Every human being deserves to be protected from the many health problems — including dysentery, cholera and other serious infections — posed by poor disposal of excreta.

Children, usually the first to fall sick and die from these diseases, deserve better. Their rights to an adequate standard of living and to the highest attainable standard of health are enshrined in the Convention on the Rights of the Child, a treaty ratified by nearly every country in the world.

Unless immediate action is taken, the number of people without adequate sanitation will climb to more than 4.5 billion in just 20 years. Hardest hit will be the marginalized poor living in densely populated cities that even today manage to provide only two thirds of their population with sanitation services.



Poor waste disposal is not only unsightly but unsafe in this neighbourhood on the outskirts of Lima.

An unconscionable toll

...on children

Diarrhoeal dehydration claims the lives of nearly 2 million children every year and has killed more children in the last 10 years than all the people lost to armed conflict since World War II.

Bacteria, viruses and parasites are common environmental hazards linked to poor sanitation, and they cause diarrhoea, one of the two most deadly diseases in developing countries. A study in Burkina Faso showed that children's risk of being hospitalized with severe diar-

rhoea increased 30 to 50 per cent when their stools were not discarded safely.

Infestation with parasitic worms (helminths) is another major health problem stemming from unsanitary conditions. Children in developing countries commonly carry up to 1,000 hookworms, roundworms and whipworms at a time, which can cause anaemia and other debilitating conditions.

Infections caused by poor sanitation commonly impede a child's ability to digest and absorb food, causing a loss of

COUNTING THE HAZARDS

One gram of faeces can contain:

- ▲ 10,000,000 viruses
- ▲ 1.000,000 bacteria
- ▲ 1,000 parasite cysts
- ▲ 100 parasite eggs.

precious nutrients. Many children die as a result; those who live often lack the vitamins and minerals essential for their growth, learning and development. Studies also suggest that unsanitary conditions can cause a constant, low-level challenge to children's immune systems that impairs their growth.

...on girls and women

In many cultures, girls and women wait until after dark to defecate if they have no latrine in the household, experiencing discomfort and sometimes serious illness as a result. When girls and women have to walk to a place distant from their home for excreta disposal, particularly at night, they are vulnerable to harassment and assault.

Girls also commonly miss out on an education if school sanitation facilities are inadequate. And if schools lack separate facilities for girls and boys, many girls do not attend, especially during their menstruation. In Bangladesh, a UNICEF-supported school sanitation project that promotes separate facilities has helped boost girls' school attendance 11 per cent per year, on average, since the project started in 1992.



In many countries, girls are more likely to attend school when sanitation facilities protect their modesty or when separate facilities are provided for girls and boys. Here, Chinese girls enjoy class at their local school.



This popular beach in Rio de Janeiro (Brazil) was closed in 1999 because of the city's sewage problems, which also affected commercial fishing.

...on the sick and the elderly

Sick and elderly people face special difficulty and a loss of dignity when sanitation facilities are not available nearby. This loss of dignity is especially acute for elders, for whom honour and respect are important.

...on society

When sanitation is poor, disease breeds and medical costs pile up. A study in Karachi, for example, found that people living in areas without adequate sanitation or hygiene education spend six times more on medical treatments than do people who have such services.

Sanitation-related illness also depletes national economies when people miss school or cannot work; when rivers and shorelines become so polluted with waste that agriculture and tourism are affected; and when highly infectious diseases such as cholera sweep through communities.

In Peru, for example, an outbreak of cholera in the early 1990s cost \$1 billion in lost tourism and agricultural exports in just 10 weeks.

The price of progress

RETURNS ON INVESTING IN ENVIRONMENTAL SANITATION:

- ▲ lower rates of death and sickness
- ▲ savings in health costs
- ▲ higher worker productivity
- ▲ better learning capacities of schoolchildren
- increased school attendance, especially by girls
- **▲** strengthened tourism
- heightened personal dignity and national pride.

Providing global access to low-cost sanitation facilities and safe water will require about \$25 billion a year for 10 years, about three times what is currently spent on these services. Yet this amount is far outweighed by the current costs of poor sanitation, including medical treatment and lost days of school and work. Moreover, cost-sharing among those who benefit from sanitation programmes can ease the financial burden, and an investment in sanitation produces high returns for nations.

It is crucial to allocate sufficient resources to make a difference in providing access to sanitation. Gains made over the last decade have not kept pace with population growth. As a result, the number of people without access to latrines and toilets increased by some 400 million.

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Where sanitation fails

Who are the nearly 3 billion people denied access to sanitation? Most live in rural areas of the developing world. Less than a fifth of rural dwellers — as little as 12 per cent of those in Asia and the Pacific, for example — have adequate sanitation facilities. Yet the problem is worse for urban squatters in densely populated communities, where disease can spread rapidly in the absence of safe water and sanitation.

Sanitation access in developing countries and countries in transition ranked best (1) to worst (4)

1 2 3 4 No data

Note: This map groups countries in broad categories to provide a simplified picture of the world's sanitation situation. The countries are ranked from 1 to 4 in order of access to a sanitary means of excreta disposal, either in the dwelling or at a convenient distance. Since the definition of sanitation access varies by nation, the data are not strictly comparable on a global scale. It is also important to note that access to facilities is only one aspect of a nation's sanitation level and might not reflect a country's overall achievements in waste management and promotion of good hygiene.

High rates of literacy do not

always correlate with better sanitation. For example,

Paraguay, where a large

percentage of people can read and write, ranks 3 on

the sanitation scale. By

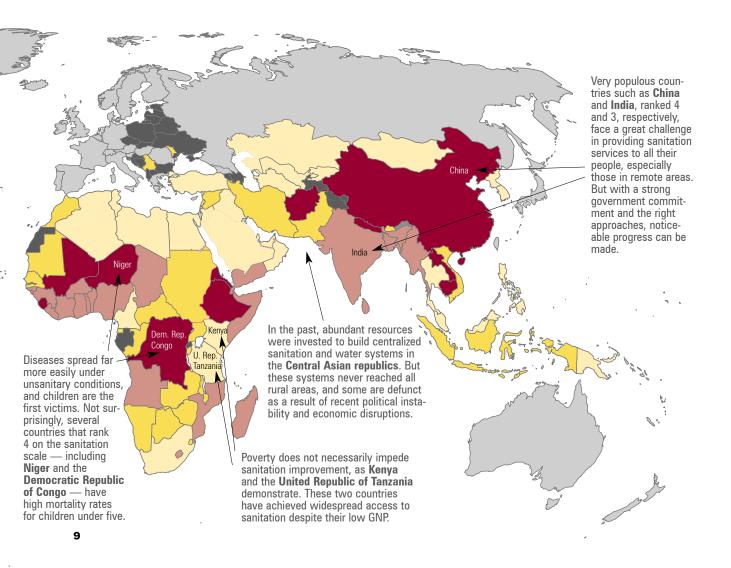
contrast, **Nicaragua**, with a much lower literacy rate,

ranks at the top. Hygiene education and sanitation

promotion are key compo-

nents of good sanitation.

This map does not reflect a position by UNICEF on the legal status of any country or territory or the delineation of any frontiers. Dotted lines for India and Pakistan represent approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties concerned.



What works and what doesn't

WORKS Political will and a strong government role. Governments have a major role to play in rallying all sectors of society to the cause of improved sanitation. Sanitation programmes should cut across government divisions, and local authorities should be encouraged to develop their own plans.

DOESN'T Giving sanitation

low priority. Sanitation has often lost out to other social services, including provision of safe water. It is commonly believed that safe excreta management requires large quantities of water but, in fact, a number of disposal systems require little or no water at all. Sanitation issues are also sometimes ignored because they are seen as embarrassing.

WORKS Promoting behaviour

change. Providing adequate facilities is not enough. Families need to know about health-promoting practices and be motivated to adopt them. Even when modern facilities are not available, families can protect themselves from disease by disposing of excreta safely. It is also important to reinforce traditional knowledge and practices that are beneficial, such as washing before entering a place of worship, common in much of Asia.

DOESN'T A narrow focus on

technology. Good facilities make little difference in households where it is considered safe to leave children's faeces on the ground; when children are afraid of latrines or are forbidden to use them; or when family members neglect to wash their hands after using the latrine. Hygiene education goes hand in hand with technology.

WORKS Reaching schoolchild-

ren. Schools are one of the best places to teach good hygiene, and childhood is the best time to learn about it. Good habits developed in childhood can last a lifetime and are likely to be passed on to the next generation. In Mali, a hygiene awareness programme in schools and on radio helped halve the number of people suffering from dracunculiasis (Guinea worm disease), contracted from unsafe water.

DOESN'T Ignoring the family

as a whole. Keeping the home safe and sanitary is difficult unless *all* family members learn about good hygiene. In Central America, the Healthy School and Healthy House programme provides hygiene education in schools and also trains community members to reach parents, grandparents and other caregivers at home.

works Giving families a choice. It is crucial that waste disposal systems be tailored to the cultural and social setting of each family and community. Latrines should be non-polluting, affordable, user-friendly and simple to construct and maintain. Families themselves are the best judges of what works. In Myanmar, where a UNICEF-assisted sanitation programme offered people a choice of latrines, enthusiasm for the programme was so high that 800,000 families built latrines in just one year.

DOESN'T A 'one system fits all' approach. Even the best technology will not work in the long run unless it has been chosen by community members who are given the range of options. Latrines chosen for families rather than by them commonly remain unused or improperly used.

works Community planning and management. Community members involved in sanitation programmes — from planning to management to sanitation promotion — feel a sense of ownership and show a greater willingness to help programmes succeed. Communities should be supported with training as well as access to parts, materials and financing. The participation of women is key. As guardians of family health, they should play a lead role as sanitation promoters and educators.

DOESN'T A top-down approach.

Programmes planned and implemented exclusively by central authorities often lack the flexibility and diversity required to respond well to local needs. Approaches lacking community participation are rarely sustainable; programmes ideally should involve all sectors of national and local government as well as civil society.

works Cost-sharing. When households share the cost of building latrines, overall building costs drop, latrine use rises and facilities are better maintained. But care needs to be taken to make special provisions for families too poor to participate equally.

to funds and credit. Experience has shown that once people understand the importance of good sanitation and hygiene, they create a demand for facilities and healthful environments. They commonly pitch in to community efforts with labour, materials and funds. Some even start small shops and other sanitation-related enterprises. All too often, however, these grass-roots initiatives for change are stymied by lack of funds or credit, which should be made more available.

Steps for policy makers



Hygiene begins with washing hands, as these Bolivian children are learning.

- MAKE SANITATION A PRIORITY. Formulate national policies that integrate the actions and resources of various sectors of government. Encourage local authorities to develop sanitation plans and budgets.
- 2 BUILD ALLIANCES WITH CIVIL SOCIETY, especially community-based and non-governmental organizations; youth, religious and women's groups; and the private sector. Work with media and the private sector to promote sanitation and create grass-roots demand for services.
- 3 ENSURE COMMUNITY INVOLVEMENT to achieve sustained results. Strengthen community initiatives by supporting microcredit schemes and revolving funds, focusing particularly on disadvantaged populations.
- 4 PROMOTE GOOD HYGIENE PRACTICES, especially safe disposal of faeces and hand washing, as the most cost-effective barrier to disease transmission, and use every occasion possible to set a good example in public.

- PAY ATTENTION TO THE NEEDS OF WOMEN. Address equally the needs and preferences of women, men and children, ensuring attention to the special roles and needs of women. Avoid placing the burden of improving sanitation primarily upon women by promoting the sharing of responsibilities in the household.
- MAKE SCHOOL PROGRAMMES A PRIORITY. Help schools encourage positive lifelong behaviour change. Support interactive teaching about hygiene and environment issues and the construction, use and maintenance of sanitation facilities.
- PROVIDE ACCESS TO SANITATION DURING CRISES. Strengthen the procedures and capacity to provide sanitation facilities and promote hygiene during crises, taking special measures to respond to the needs of women and girls.
- 8 GATHER AND SHARE INFORMATION. Establish indicators that will pinpoint problems and gauge successes. Data will have a greater impact if broken down into categories of gender, age group, rural/urban setting, income level and other key variables.



Good latrines can be simple, like this one made from local materials in rural Banéladesh.

Successful action...

In Central Asia, the ARAL SEA area schools offer hygiene education to more than 17,000 children. Schools have also upgraded their sanitary facilities and received equipment and supplies — such as washing basins, soap, repair tools and desalination units for water — as part of a UNICEF-assisted Aral Sea project for Environmental and Regional Assistance.

In ZAMBIA, with central government support, villages in 10 of the country's most deprived districts work with local governments to plan, maintain and manage their own water and sanitation facilities. Since the programme began in 1995 several villages have provided sanitation to all residents.



Hygiene instruction is an important activity at this community health centre in Mali.

Urban communities in GUATEMALA manage and finance their own water and sanitation systems: In El Mezquital, a settlement outside Guatemala City, community members have worked with several organizations, including UNICEF, to provide access to water and environmental sanitation. Money collected for water usage is spent to pipe water into houses, construct and repair latrines and lay sidewalks. Around 2,000 families have participated in environmental sanitation education activities.

...takes many forms

In INDIA, communities help operate 'zero subsidy' sanitation: In Medinipur district of West Bengal, 82 villages have latrines in every household and 100,000 latrines are constructed yearly, thanks to a project that has cut latrine costs and involved entire communities. The latrines are manufactured largely by local masons — many of them women — and are paid for by community members. Youth and women's groups play a major role in planning and implementation of the programme, which promotes latrine use and good hygiene through exhibitions, promotional materials, home visits and motivational seminars.



Projects work best when community members plan and manage them. Here, Bangladeshi women produce latrine components in their community as part of a government sanitation programme.

BANGLADESH develops an innovative advocacy campaign: The benefits of sanitation, safe water and hygiene are being promoted widely in primary schools, in communities and on television and radio. Flyers, posters and other promotional materials are being sent to the local masons who produce latrine components. Their shops are becoming 'sani-marts', making health and hygiene information available alongside latrine models. Similar education efforts have begun in India, Indonesia and Nigeria.

A time to act

In 1990, leaders attending the World Summit for Children agreed to achieve several key development goals by the year 2000, including sanitation for all. UNICEF has made environmental sanita-

tion a centrepiece of its Programme Priorities initiative, an effort to accelerate fulfilment of World Summit goals and to strengthen the groundwork for a rights-based agenda for children. UNICEF also strongly supports the 20/20 Initiative, a global drive to increase the percentage of governments' budgets and donor assistance allocated to basic social services, including sanitation.

Providing everyone with access to environmental sanitation will

require partnerships among community members, government officials at all levels, non-governmental organizations (NGOs), health and education workers, donors, business leaders and civil society. One key partnership is the

Global Environmental Sanitation Initiative (www.wsscc.org/gesi), which works to raise awareness about the issue and to extend sanitation coverage to all. Launched in 1997, the

Initiative involves donors, UN agencies, NGOs and professionals from developing countries.

Backed by adequate resources and political commitment, nations can reverse one of this century's public health disgraces and lay a firm foundation for development. Yet the best of intentions will fail if old approaches are employed. What is required is a new mindset that considers environmental sanitation the business of society as a whole,

not just the task of engineers, and as a way of life, not just a technological fix. In this new thinking, installing latrines is just one part of a larger effort to ensure an environment conducive to health and well-being for all.

The best of intentions will fail if old approaches are employed.

Suggested further reading

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SANITATION FOR ALL

VIIIagers in Togo carry bricks to build latrines.

UNICEF

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January 2000 Printed on recycled paper

Front cover photograph: A Filipino girl washes her hands in a stagnant stream strewn with garbage. (UNICEF/97-0998/Horner)

