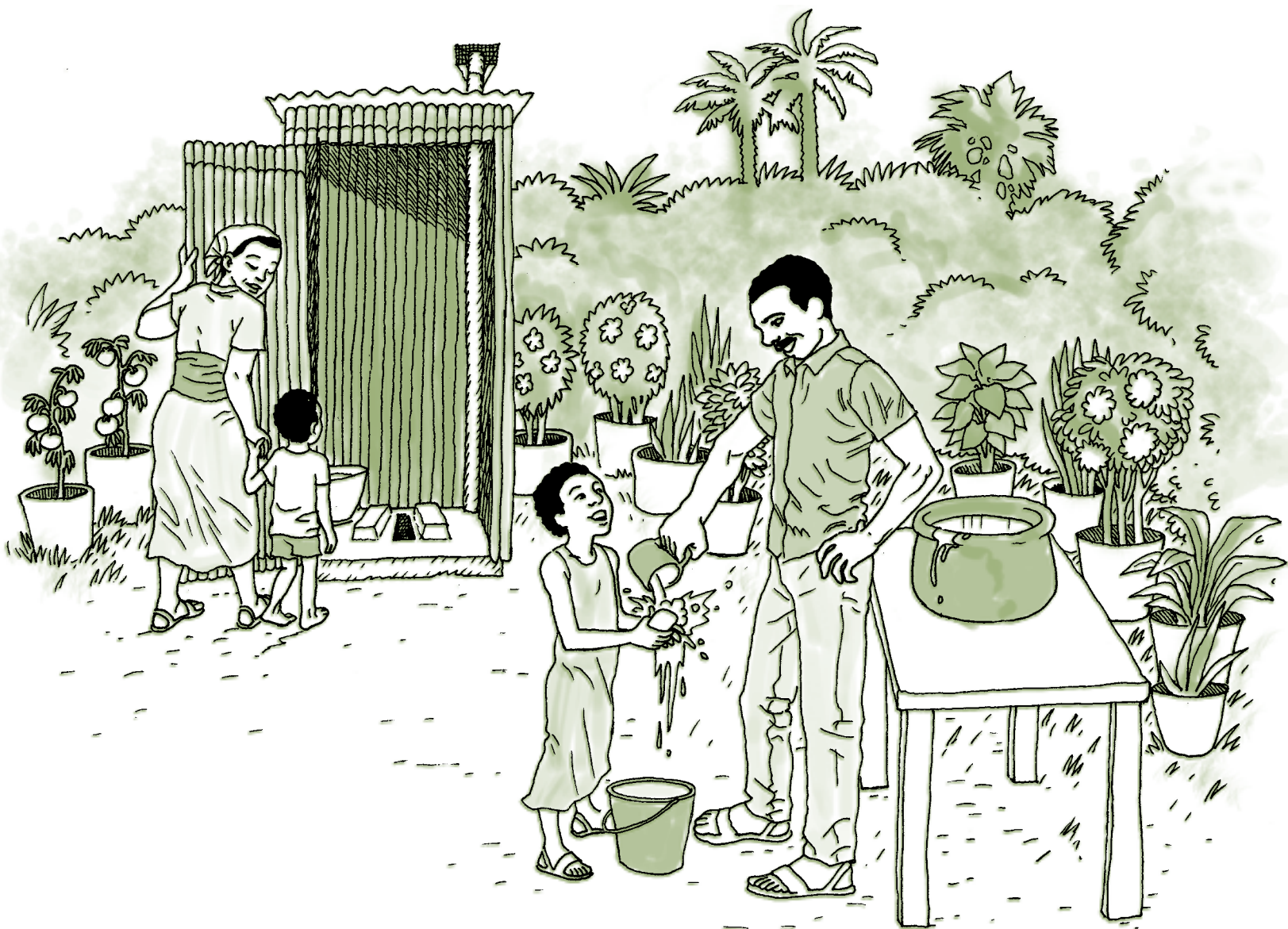


Sanitation and Cleanliness for a Healthy Environment



The Hesperian Foundation in collaboration with the United Nations Development Programme

Every year some 3.4 million people, mostly children, die from diseases associated with inadequate water supply, sanitation, and hygiene. Over half of the hospital beds in the world are filled with people suffering from water- and sanitation-related diseases.

In 2002, participants in the World Summit on Sustainable Development in Johannesburg, South Africa, made a commitment to reduce by half the proportion of people without access to basic sanitation by the year 2015. The United Nations Development Programme (UNDP) believes that this target can only be achieved through empowering individuals, households, and communities to take charge of their own development. For this purpose, UNDP has launched the Community Water Initiative (CWI) with initial support from the Swedish Government, through the Swedish International Development Cooperation Agency (Sida). CWI provides technical assistance and small grants to communities to improve their water supply and sanitation.

This booklet addresses the different sanitation and hygiene needs of women and men. It gives communities information about how significant sanitation improvements can be made by better use of indigenous skills and local resources. Communities are offered a choice of affordable, safe, and environmentally sound sanitation alternatives. This booklet is designed to be an important part of the Community Water Initiative, stimulating communities to take charge of their sanitation development for a better life.

— *Ingvar Andersson, Senior Water Policy Adviser, UNDP*

UNDP is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. We are on the ground in 166 countries, working with them on their own solutions to global and national development challenges. As they develop local capacity, they draw on the people of UNDP and our wide range of partners.

For more information please contact:

United Nations Development Programme (UNDP), Bureau for Development Policy,
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Sanitation and Cleanliness for a Healthy Environment

by Jeff Conant

The Hesperian Foundation is a non-profit publisher of health materials seeking to empower communities and individuals to take more control of their own health as part of building a more just world. As co-conveners of the U.S. Circle of the People's Health Movement, we demand "Health for All, NOW!"

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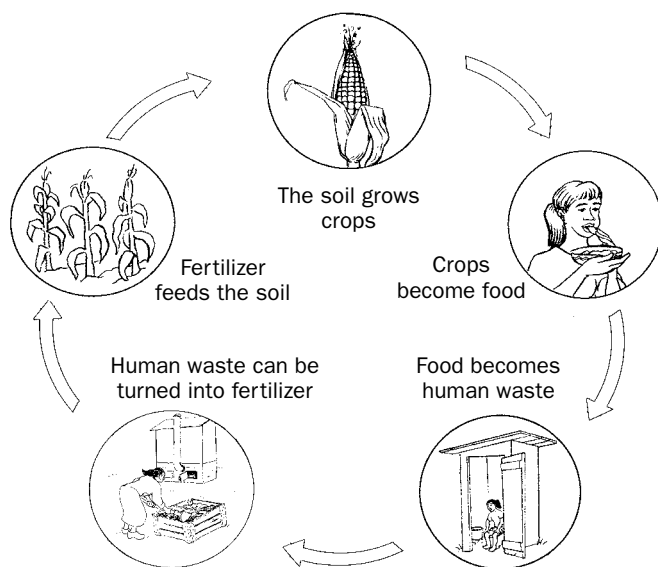
Sanitation and Cleanliness for a Healthy Environment

Keeping clean and disposing of human waste (feces and urine) are necessary for good health. If they are not taken care of in a safe way, our feces and urine can pollute the environment and cause serious health problems, such as diarrhea, worms, cholera, and bladder infections. Many of these problems can be prevented through:

- personal cleanliness (*hygiene*) — washing hands, bathing, and wearing clean clothes.
- public cleanliness (*sanitation*) — using clean and safe toilets, keeping water sources clean, and disposing of garbage safely.

This chapter has information about both personal and public cleanliness including instructions on how to build safe toilets. All of the toilets described in this chapter will dispose of human waste so it does not cause health problems. Some of the toilets have the added benefit of turning this waste into fertilizer for farmers to use in their fields. This is called *ecological sanitation*.

When people handle animal waste to make fertilizer, care must be taken or it can cause sickness. Human feces and urine can also fertilize the soil. But like animal waste, human waste carries harmful germs and must be managed carefully.



**Ecological sanitation turns
waste into a resource.**

Promoting sanitation

Many diseases are spread from person to person by *germs* in feces. Some experts believe health problems from poor sanitation can be prevented only if people change their personal habits, or “behaviors,” about staying clean. But this idea often leads to failure because it does not consider the barriers that people face in their daily lives, such as poverty or lack of access to clean water. Then when behavior does not change, people are blamed for their own poor health.

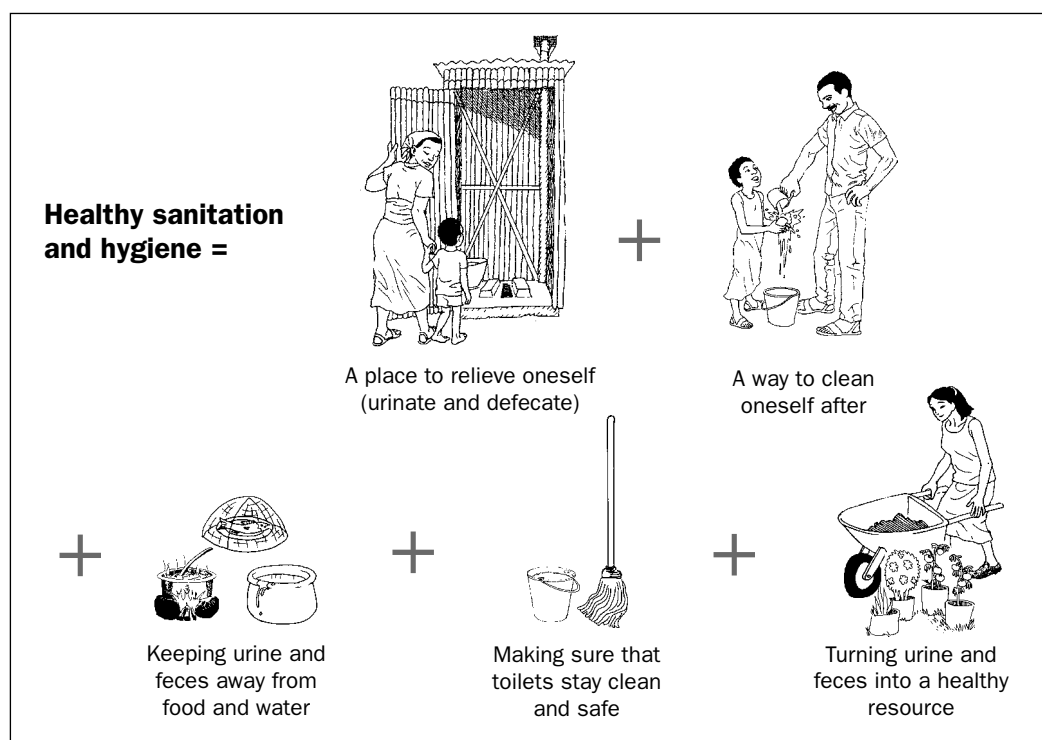


Other experts look for technical solutions, such as modern toilets that flush water. Technical solutions often come from outside a community and may not fit the traditions or conditions of the community. Sometimes they create more problems than they solve!

The diseases caused by germs from poor hygiene and sanitation will not be prevented if people are blamed for their own poor health, or if only technical solutions are promoted. To improve health in a lasting way, health promoters must listen carefully and work together with people in the community.

When communities use hygiene and sanitation methods that fit their real needs and abilities, they will enjoy better health.

What people want from toilets



Health is not always the main reason why people want to have clean toilets, better water supplies, or improved hygiene. Other needs may include:

Privacy: A toilet can be as simple as a deep hole in the ground. But the need for privacy makes it important for a toilet to have a good shelter. Making a door or enclosed entrance to a toilet, or building it away from where people usually walk, will make it nicer to use. The best shelters are simple and are built from local materials.

Safety: If a toilet is badly built it can be dangerous to use. And if it is far from the home, women may be in danger of sexual violence when they take care of their sanitation needs. For a toilet to be safe it must be well-built and in a safe place.

Comfort: People will more likely use a toilet with a comfortable place to sit or squat, and a shelter large enough to stand up and move around in. They will also be more likely to use a toilet that is close to the house and that gives protection from wind, rain, or snow.

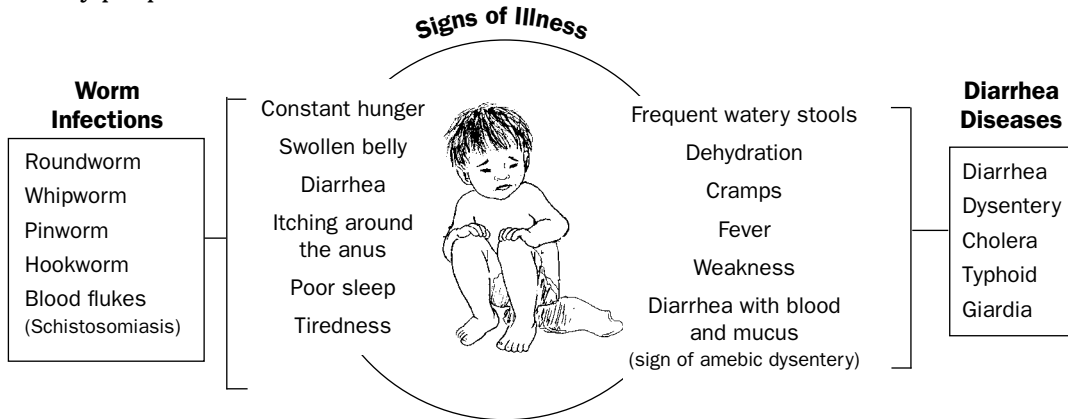
Cleanliness: If a toilet is dirty and smelly, no one will want to use it — and it may spread disease. Sharing the task of cleaning or paying for cleaning with money or other benefits will help to ensure that toilets are kept clean.

Respect: A well-kept toilet brings status and respect to its owner. Often this is a very important reason for people to spend the money and effort to build one.

Safe water for washing and drinking is also important for health. So are other kinds of cleanliness such as ensuring that women have a way to keep clean during monthly bleeding. (For more about how women are hurt by poor sanitation, see pages 21 to 22.)

How does poor sanitation lead to health problems?

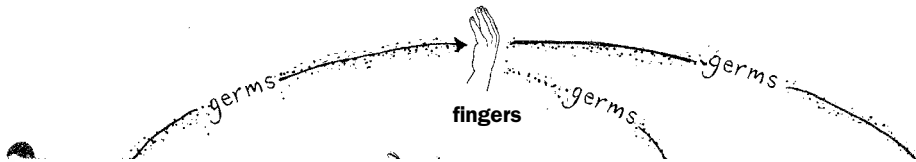
Illnesses caused by germs and worms in feces are a constant source of discomfort for millions of people. These illnesses can cause many years of sickness and can lead to other health problems such as *dehydration*, anemia, and malnutrition. Severe sanitation-related illnesses like cholera can spread rapidly, bringing sudden death to many people.



To learn more about treating diarrhea diseases and worm infections, see Chapters 12 and 13 (especially pages 131 to 161) in the book *Where There is No Doctor*.

How germs spread disease

Many illnesses are spread from person to person by germs. Germs are tiny living things that cause sickness. Sometimes it is easy to know where germs are — in feces, rotting foods, and other dirty places. But sometimes, germs are in places that look and smell clean. Germs can pass directly from person to person through touch, and sometimes through the air with dust or when people cough or sneeze. They can spread through food and drinking water. Or they can be carried by flies and animals. Germs that cause diarrhea travel on these paths:



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