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CAWST, the Centre for Affordable Water and Sanitation Technology, is a nonprofit organization that provides training and consulting to organizations working directly with populations in developing countries who lack access to clean water and basic sanitation.

One of CAWST's core strategies is to make knowledge about water common knowledge. This is achieved, in part, by developing and freely distributing education materials with the intent of increasing the availability of information to those who need it most.

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This presentation is used with
Lesson Plan 2: Global and Local Water and
Sanitation Issues in the Biosand Filter for
Project Implementers Trainer Manual.

Available at www.cawst.org/resources



Global Water and Sanitation Issues



Learning Expectations

1. Discuss the local and global issues involved with access to safe water and sanitation.
2. Discuss how unsafe water and poor sanitation is connected to and causes the cycle of poverty.

Drinking Water

Think About It

What water issues have you seen?



Think About It

What can be done about it?

What is being done about it?



What kind of water sources are not good?

- Sources that are less likely to provide safe water, may be unreliable, or environmentally unsustainable include:
 - Unprotected well
 - Unprotected spring
 - Rivers or ponds
 - Vendor-provided water
 - Tanker truck water
 - Bottled water*



River



Unprotected well



Pond

What is an “improved water source”?

- Sources that are more likely to provide safe water include:
 - Borehole well
 - Protected dug well
 - Protected spring
 - Rainwater collection
 - Household connections
 - Public standpipe



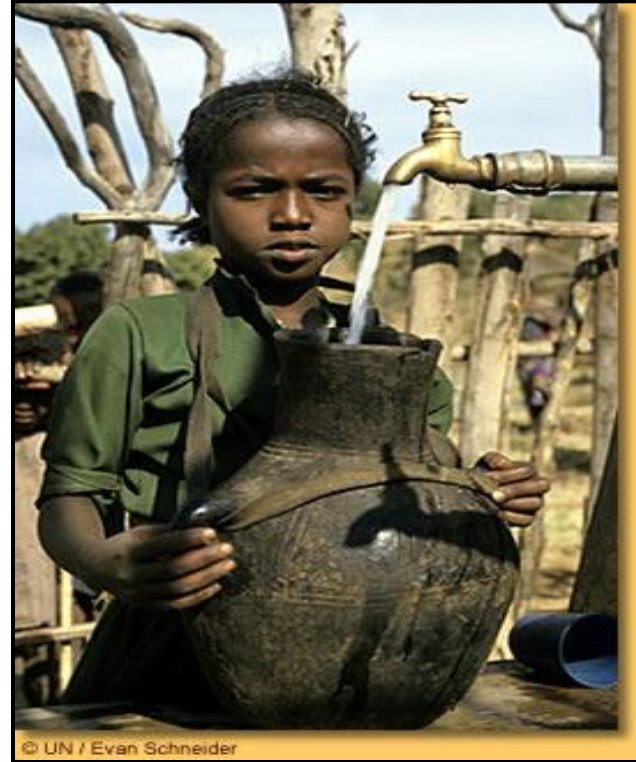
Hand pump



Rainwater collection



Protected well



Stand pipe

Think About It

Why do people not have safe, convenient water sources?



WHY?

Lack of:

- Funding
- Resources
- Infrastructure
- Maintenance
- Knowledge
- Awareness
- Skills
- Motivation
- Priority

Basic Sanitation

Think About It

What sanitation issues have you seen?



Think About It

What can be done about it?

What is being done about it?



What is unsafe sanitation?

- Latrines and defecation practices that are more likely to cause people to come into contact with excreta (in the latrine, or in the environment). Unsafe latrines include:
 - Open defecation
 - Open pit latrine (no slab, messy or unsafe)
 - Bucket
 - Hanging latrine (drops into water)
 - Public or shared latrine (- debate)



Open defecation



Open toilet area

(source:guardian.co.uk/commentisfree/2009/nov/19/world-toilet-day-sanitation)

Unimproved pit latrines



(source: Flickr, photo by K Tayler)



(source: defeatdd.org/blog/sustainable-sanitation-peru)



(source: labspace.open.ac.uk)

What is safe sanitation?

- Latrines and practices that are less likely to result in any contact between humans and excreta or pollute the environment

Examples:

- Pour-flush latrine (with slab)
- Simple pit latrine (with slab)
- Ventilated improved pit latrine (slab)
- Connection to a public sewer
- Connection to a septic system



Ventilated Improved Latrine (VIP)



Pour-flush Latrine

Think About It

Why do people not have safe sanitation facilities?



WHY?

Lack of:

- Funding
- Resources
- Infrastructure
- Maintenance
- Knowledge
- Awareness
- Skills
- Motivation
- Priority

Consider...

What is the effect on a community if access to safe drinking water is improved but there is still a lack of basic sanitation?

What does this mean for me?

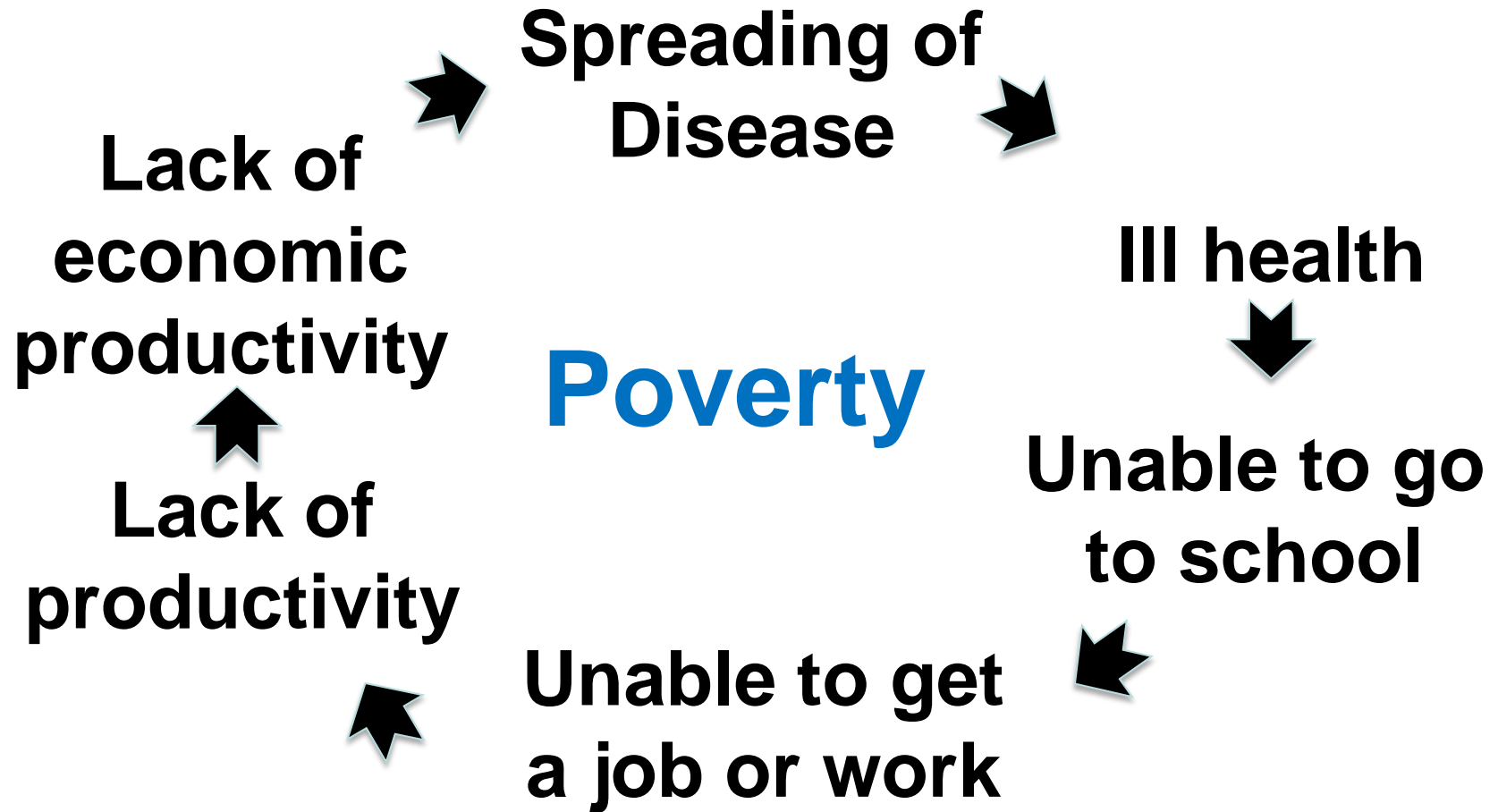
The important thing is to get
ALL PEOPLE EVERYWHERE:

- ✓ Safe water that is accessible (not too far) and affordable
 - ✓ Sanitation facilities that stop the transmission of disease and that can be used by everyone
 - ✓ Safe hygiene practices

Cycle of Poverty

Why does unsafe water and poor sanitation cause the cycle of poverty to continue?

Cycle of Poverty



Review

What can be done to stop the cycle of poverty?

Review

What can be done to improve access to safe drinking water and basic sanitation?