


COMPOST-BASED SANITATION

**in Post-Earthquake Haiti
in Urban and Rural Locations**


Dry Toilet 2012, Tampere, Finland

Joseph Jenkins, Inc.


CompostSanitation.com

A decorative border of various green leaves and foliage surrounds the central text. The leaves are in different shades of green and are scattered around the edges of the slide.


Mother Nature
tells us to
cover odorous
organic material.




We bury our
dead because
rotting corpses
smell.




Human
excrement
smells until
we bury it.

The background of the slide is a dark green color, framed by a decorative border of various green leaf silhouettes. The leaves are scattered along the top, bottom, and sides of the frame, creating a natural, organic feel. The text is centered in the middle of the slide.


Humans use
pit latrines to
bury their
excrement.

The background of the slide is a dark, muted green color. It is decorated with numerous silhouettes of various types of leaves and plants, including maple leaves, oval leaves, and star-shaped leaves, scattered across the edges and corners. The text is centered in the middle of the slide in a white, sans-serif font.

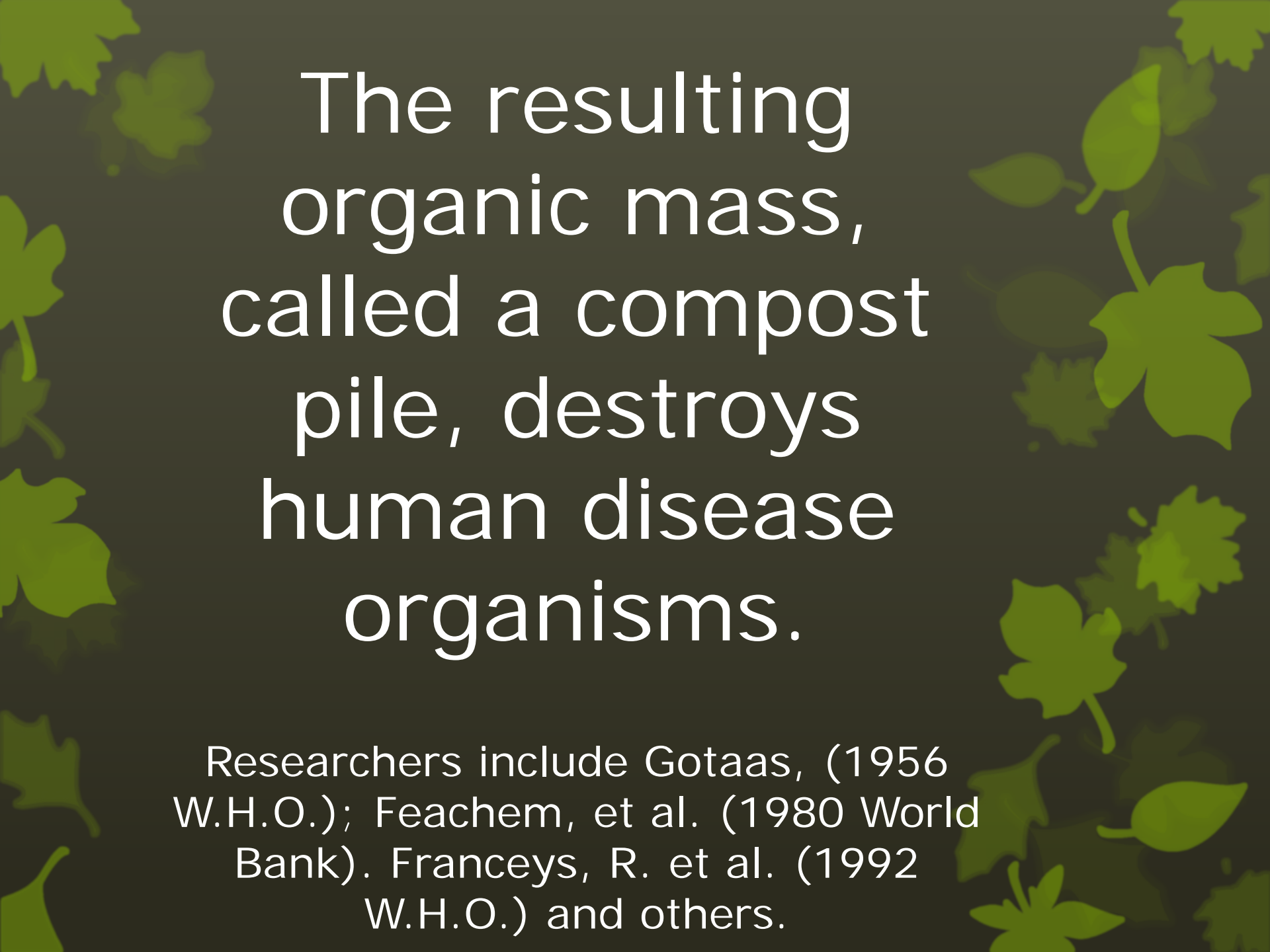
Science has now
shown us a new
way to “bury”
organic material.

A decorative border of various green leaf shapes surrounds the central text. The leaves are in different shades of green and are scattered around the edges of the slide.

Instead of burying
with dirt, we can
bury with carbon
materials derived
from plants.


The background of the slide is a dark green color with a pattern of lighter green leaf silhouettes scattered around the edges. The text is centered in white.

When we use a
carbon-based
“cover material,”
we spark the growth of
heat producing
bacteria.

The background of the slide is a dark grey or black color, decorated with various green leaf silhouettes of different shapes and sizes scattered around the edges. The main text is centered and written in a white, sans-serif font.

The resulting
organic mass,
called a compost
pile, destroys
human disease
organisms.


Researchers include Gotaas, (1956
W.H.O.); Feachem, et al. (1980 World
Bank). Franceys, R. et al. (1992
W.H.O.) and others.

The background of the slide is a dark green color with a pattern of lighter green leaf silhouettes scattered across it. The leaves vary in shape and size, some resembling maple leaves and others more like simple ovals.

This is the
essence of
“sanitation,”
which is the
promotion of
public health.



“Composting”
by definition,
is a process that is
controlled,
aerobic,
and produces
internal biological
HEAT.

The background of the slide is a dark grey color with a decorative border of various green leaf silhouettes. The leaves are scattered around the edges, with some overlapping. The text is centered in the middle of the slide.

Most “composting”
toilets do not
compost, as no heat
is generated. They
dessicate, dehydrate,
and decompose the
toilet material.

How Do We Create Hot Compost Sanitation Systems?

- Simply:
- 1) COLLECTION
- 2) COVERING
- 3) COMPOSTING



“Collection” Toilets collect toilet materials before they come in contact with the environment.

Here, a 20 liter receptacle under the toilet seat collects the toilet material (feces, urine and paper). Urine separation is not necessary.



The contents are covered with the carbon-based material, which acts as a biofilter to prevent odor. The receptacle is easily removable.



This is a 60 liter receptacle. This is about the maximum size that can be easily handled without machinery.



The toilets are inexpensive to construct.



They can collect toilet material in almost any location, indoors or out.



They can be in a separate building.



This toilet utilizes a chute through the floor.



60 liter drums collect the toilet material underneath the stalls



One drum is being filled while an empty one waits to replace it.



Hand washing stations are located at every toilet stall.



The collected material is composted nearby. It is always covered.



Sugar cane bagasse, a waste product in Haiti, is a good carbon based cover material.



Sawdust is another waste product free for the hauling.



The toilet contents are added to a depression in the compost pile.



The toilet material is covered with clean bagasse.
No flies, no odor.



High temperatures are consistent and prolonged.
This is 60 degrees C.



After 6 months, temperatures were still at 55C. Only 3 days at this temperature is required for pathogen elimination.



Food scraps are also added to the compost bins. A variety of organic materials can be recycled using this system.



After a year of aging, the finished compost is suitable for food gardens.



Public education helps to improve acceptance of this revolutionary sanitation system.



The toilet stalls are painted with ecological messages.



Instructions are posted inside each toilet.

1
Kaka epi jete papye a nan twalèt la!
Tanpri pa lage Plastik ladan'!

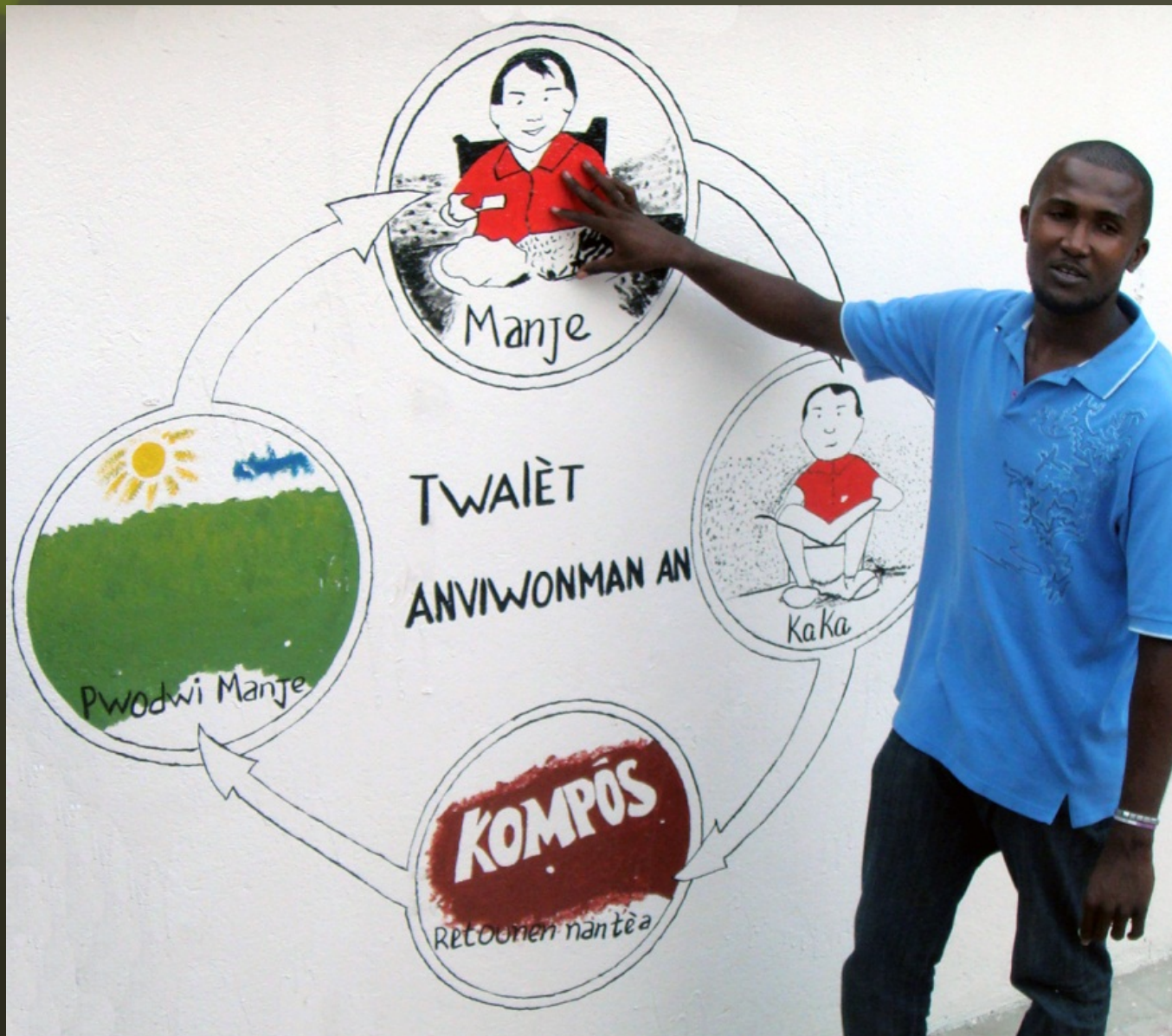
2
Metè poud pwa sou kaka a!

3
Pa blye fèmen kouvèti a!

4
Aprè lave men'w!

www.Giv...

The toilets are recycling toilets.
There is no waste, no pollution, no disposal.



Questions?

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CompostSanitation.com

Haiti toilets were created by GiveLove.org:

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And SOIL (OurSoil.org): Sasha Kramer