

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.

Santo Village, Haiti


Compost-Based Toilet System

5th International Dry Toilet Conference
Tampere University of Applied Sciences

19th – 22nd of August, 2015

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EcologicalSanitation.com




Nature
suggests that we
bury odorous things.


The background of the slide is a dark, muted green color. It is decorated with various silhouettes of leaves and plants in a lighter shade of green. These silhouettes are scattered around the edges, with a higher concentration on the left and right sides, framing the central text. The leaves vary in shape, including some with distinct veins and others that are more rounded or lobed.

We bury corpses.

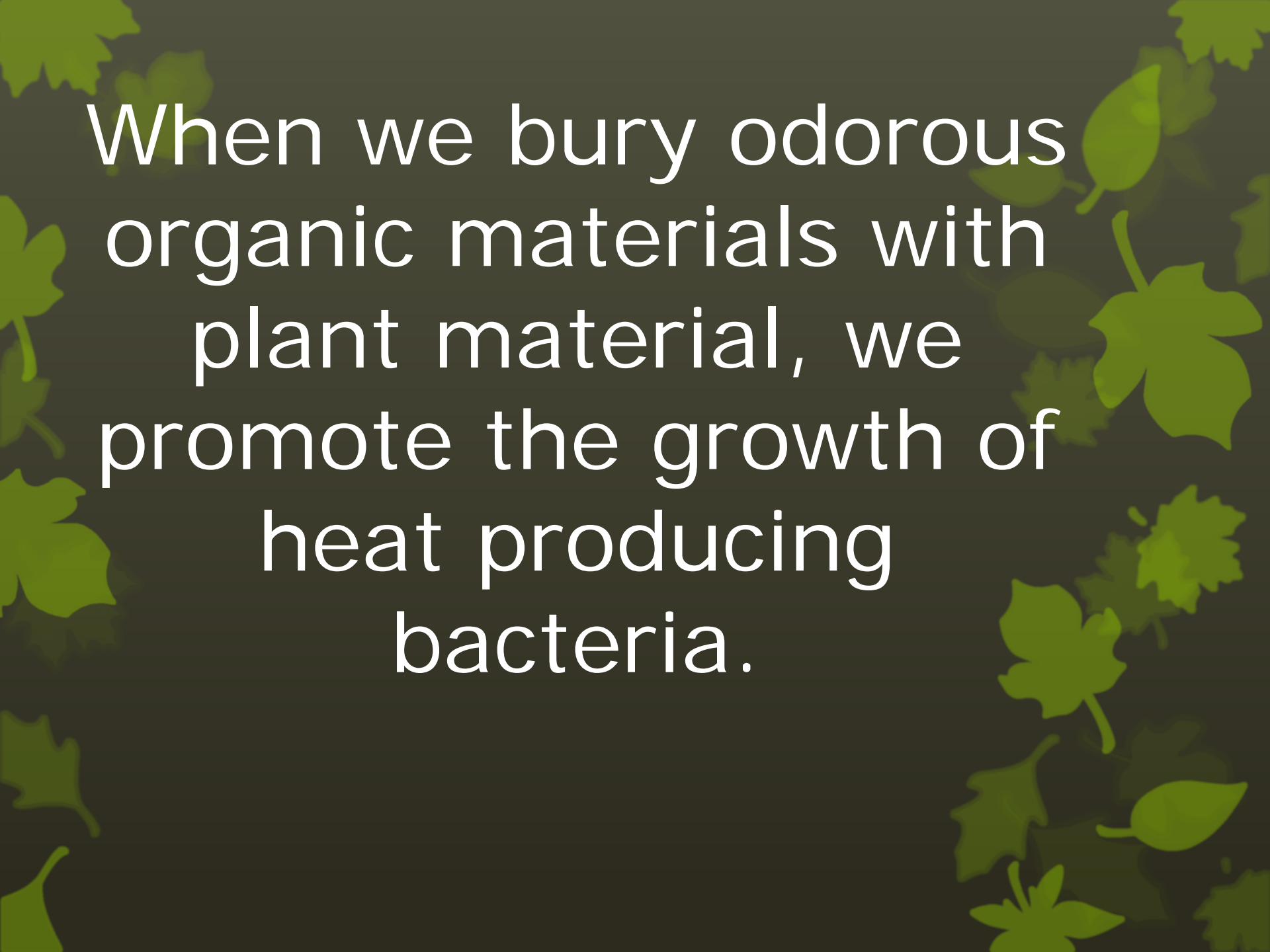
We deposit fecal material
into holes in the ground.

The background of the slide is a dark, muted green color. It is decorated with various silhouettes of leaves and plants in a lighter shade of green. These silhouettes are scattered around the edges of the slide, with a higher concentration on the left and right sides, framing the central text. The leaves vary in shape, including some with distinct veins and others that are more rounded or pointed.

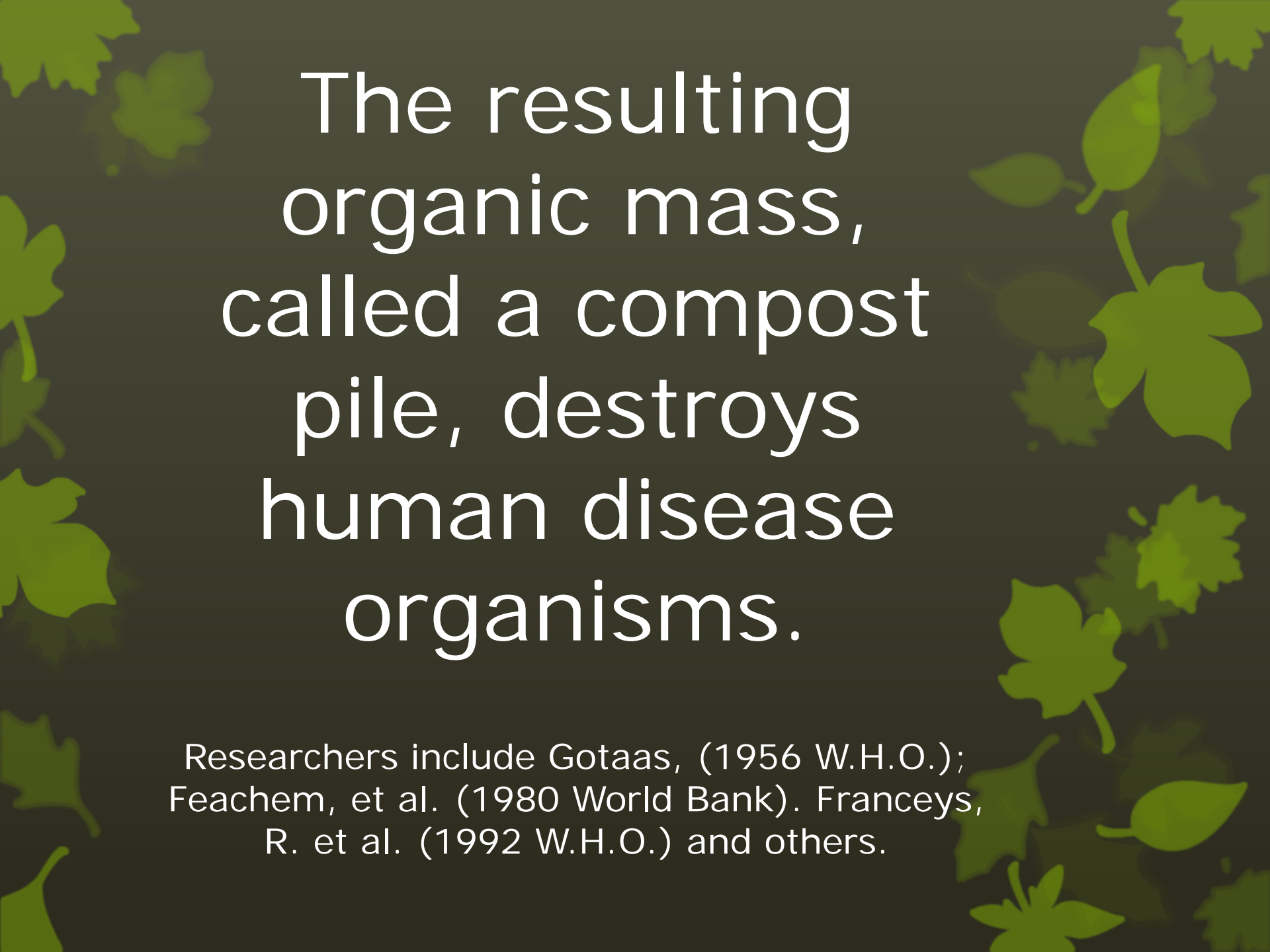
Science shows
us a new way
to bury organic
material.

The background of the slide is a dark, muted green color. It is decorated with numerous silhouettes of various types of leaves and plants in a lighter shade of green. These silhouettes are scattered across the frame, with a higher concentration along the left and right edges, creating a decorative border effect. The central text is white and stands out clearly against the dark background.

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


The background of the slide is a dark, muted green color. It is decorated with numerous silhouettes of various types of leaves and plants in a lighter shade of green. These silhouettes are scattered across the frame, with a higher concentration along the right and bottom edges, creating a natural, organic feel.

When we bury odorous
organic materials with
plant material, we
promote the growth of
heat producing
bacteria.

The slide features a dark grey background with a decorative border of various green leaf silhouettes, including maple and oak leaves, scattered around the edges. The main text is centered and reads:

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 image features a dark green background with a decorative border of various green leaf silhouettes. The leaves are scattered along the top, bottom, and sides, creating a natural, organic frame. The text is centered in the middle of the page.


This is the basis
of sanitation and
the promotion of
public health.

“Composting”
by definition, is

1) Managed

2) Aerobic

3) Produces 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 “dry toilets” are erroneously called “composting” toilets, but they do not compost. They dessicate, dehydrate, and decompose the toilet material.



Organic materials,
including toilet materials,
are composted simply by:

- 1) COLLECTING IN CONTAINERS
- 2) PILING IN COMPOST BINS
- 3) COVERING WITH PLANT MATERIAL



Compost toilets collect all toilet materials, including urine and toilet paper.

Here, a 20-liter receptacle under the toilet seat collects the feces, urine and paper.

Urine separation is not necessary when the collected material is being composted.



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



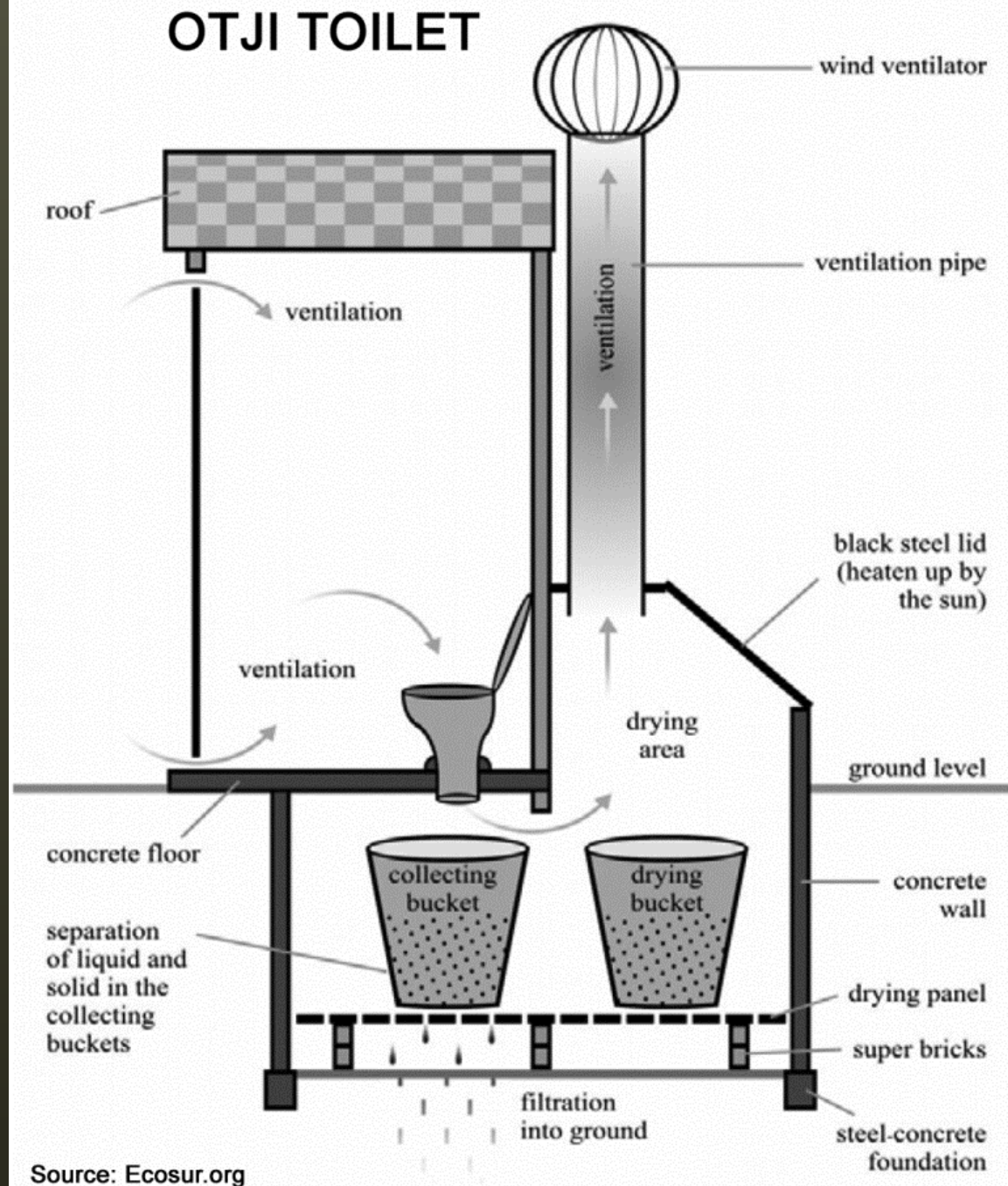
The Santo Village in Leogane, Haiti, was a Habitat for Humanity planned Village for displaced families.



Jimmy Carter even worked at the site.



Their first sanitation choice was the Otji dry toilet, a urine separating, dehydrating toilet.



Source: Ecosur.org

The expensive OTJI system failed, primarily due to odors, management issues, and environmental threats.

GiveLove.org then set up a true compost sanitation system in the Village.



True Composting

Step 1: Collect the organic material.



Step 2: Obtain appropriate cover material.



Step 3: Pile the organic material in bins. Start by training.



Bins can be built with recycled pallets.
Begin with a “biological sponge.”





Facts on Compost Pile

Bin ID: S₂P₁₀

Bin Capacity: 8m³

Pile constituents:

- EXCRETA MIXED UP WITH SUGAR CANE BAGASSE
- BAGASSE
- H₂O
- URINE

Open Date: August 20th 2013

Date Closed: Sept 17th 2013

Date of Harvest: June 17th 2014

Posted date: November 13, 2013

Each compost bin
had its own label.

Toilet material is layered by the trained team, using bagasse as cover material.



Compost receptacles need to be rinsed.
The water is deposited into the bins.



250 households fill a 10 cubic meter bin every month.



The village has two compost sites;
both are fenced and locked.



Toilet material is collected twice a week. Users bring their full receptacles to the compost yards and swap them for clean ones.



This compost system requires no turning.



Figure 22

A compost shed at each site stores tools and equipment.



After a minimum of nine months, a beautiful, sanitary compost is produced. There is no odor.



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



Instructions are posted inside each toilet.

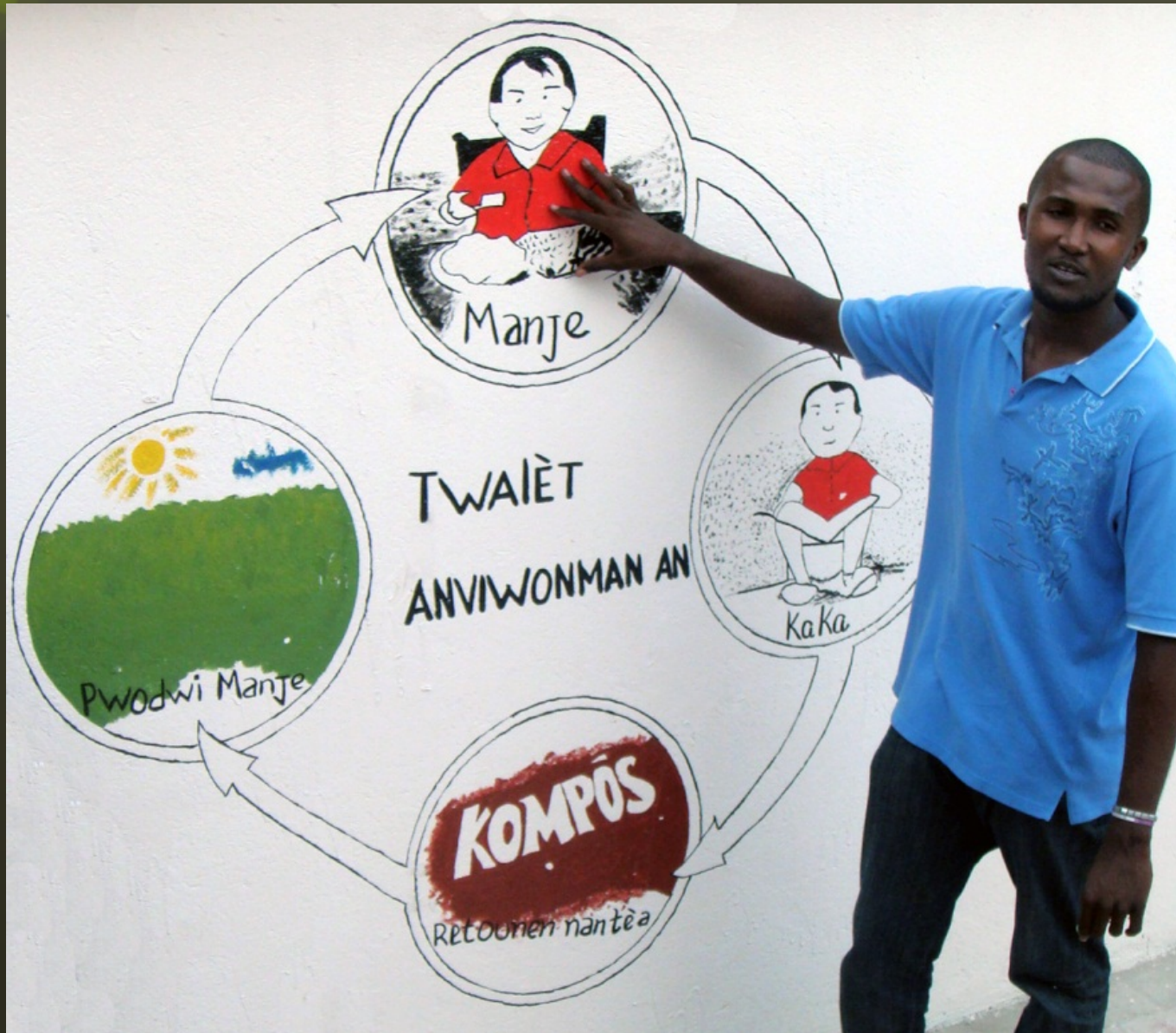
1 Kaka epi jete papye a nan twalèt la!
Tanpri pa lage plastik ladan'!

2 Mete poud pwa sou kaka a!

3 Pa blye fèmen kouvèti a!

4 Apré lave men'w!

Composting recycles organic material.
There is no waste, no pollution, and no disposal.



The Santo Village project was created by
GiveLove.org:

Patricia Arquette (Founder),
Alisa Keeseey (Program Director),
Jean Lucho (Compost Instructor)

GiveLove.org is now working in
Nicaragua and India.

Download the full, illustrated paper on the Santo Village compost sanitation project:

humanurehandbook.com/downloads/Santo_Paper.pdf

QUESTIONS?

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