Santo Village, Haiti

Compost-Based Toilet System

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Nature
suggests that we
bury odorous things.

We bury corpses.

We deposit fecal material into holes in the ground.

Science shows us a new way to bury organic material.

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

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

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.

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

“Composting”
by definition, is

1) Managed

2) Aerobic

3) Produces biological heat

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.

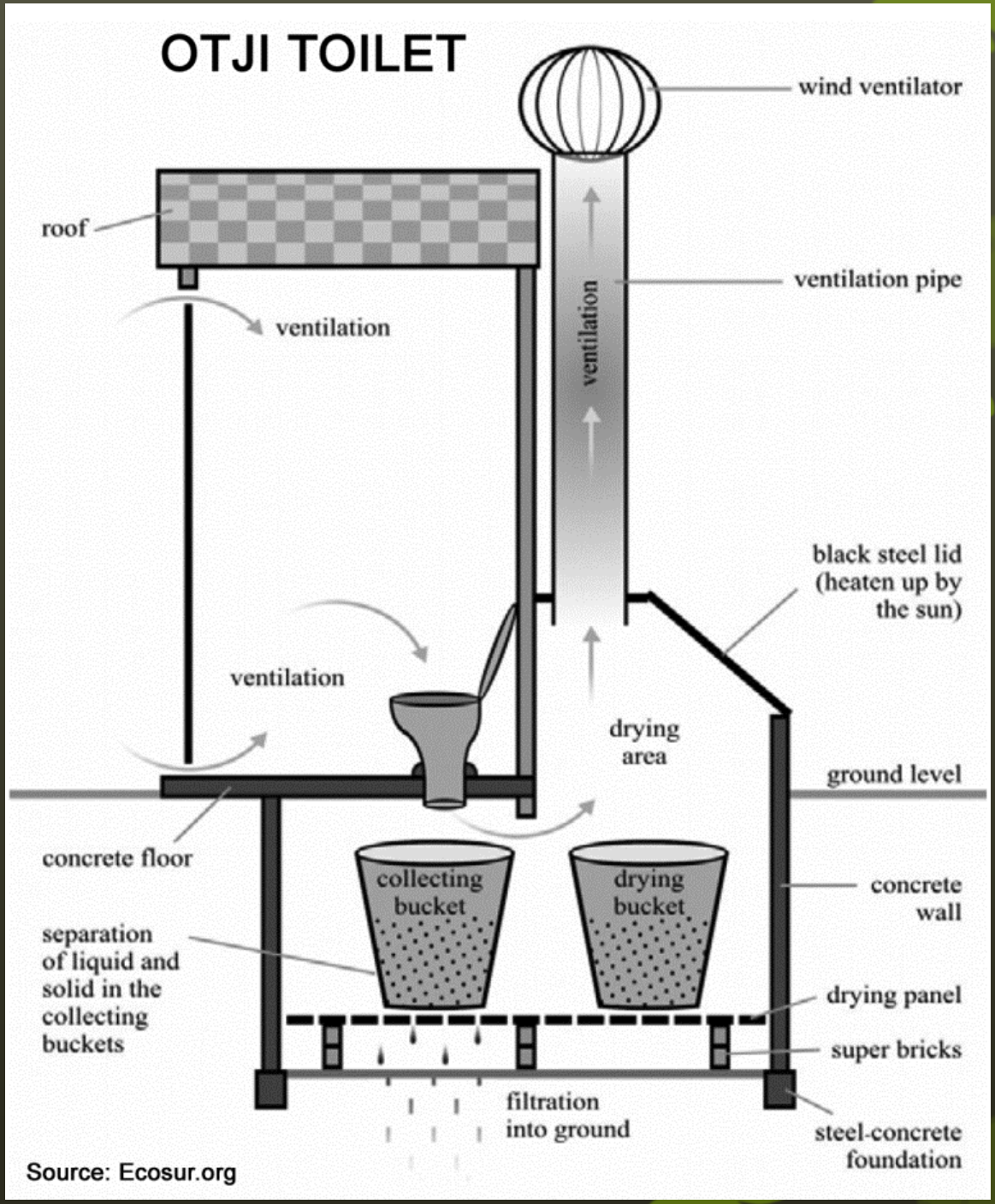
Urine separation is not necessary when the collected material is being composted.

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.



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.

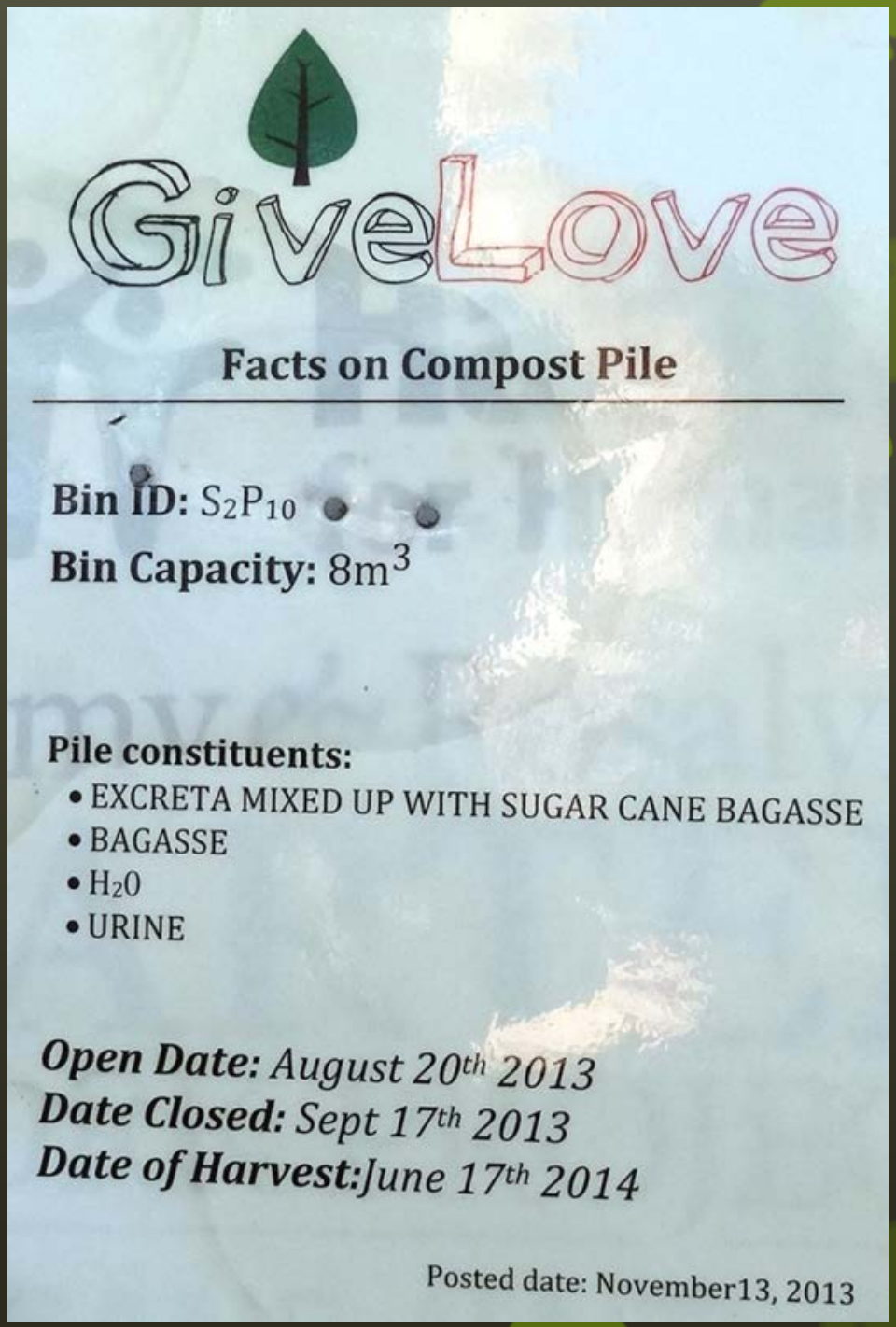
True Composting
Step 1: Collect the organic material.

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.”

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.

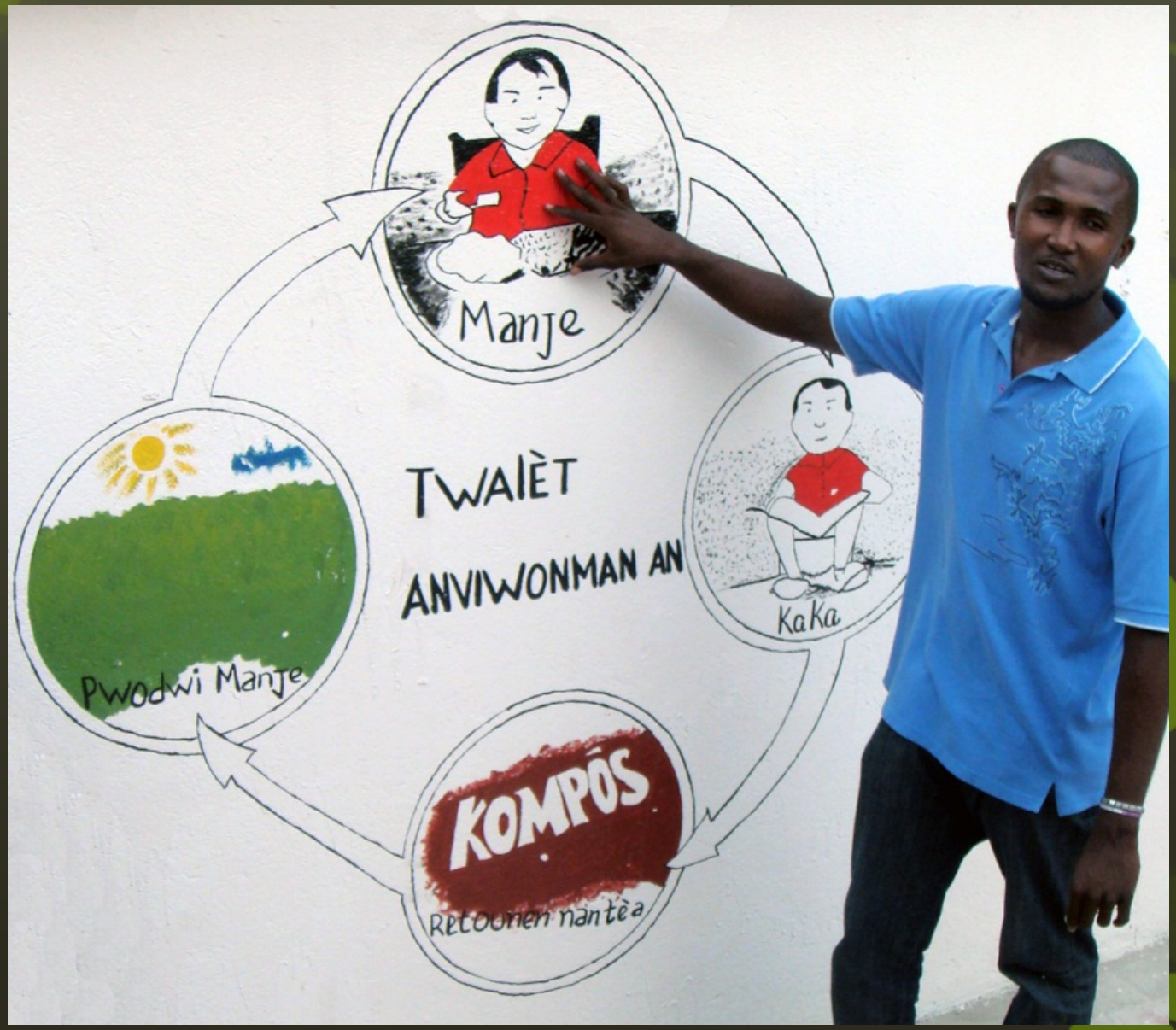
A compost shed at each site stores tools and equipment.

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.

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 Keesey (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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