

Food Residue Recycling Cases

What a waste! ... **「Merry's System」**
reduces CO2 emissions, and returns
leftovers and used chopsticks to farmlands

October 28, 2009
The Merry Corporation



The Merry Corporation:

Merry in making customers happy,
in contributing to society,
in doing good business.



Merry's System:



A cycle/peace* in which one
participates and is merry



* In Japanese, the characters for “cycle” 輪 and “peace” 和 are homophones pronounced as wa

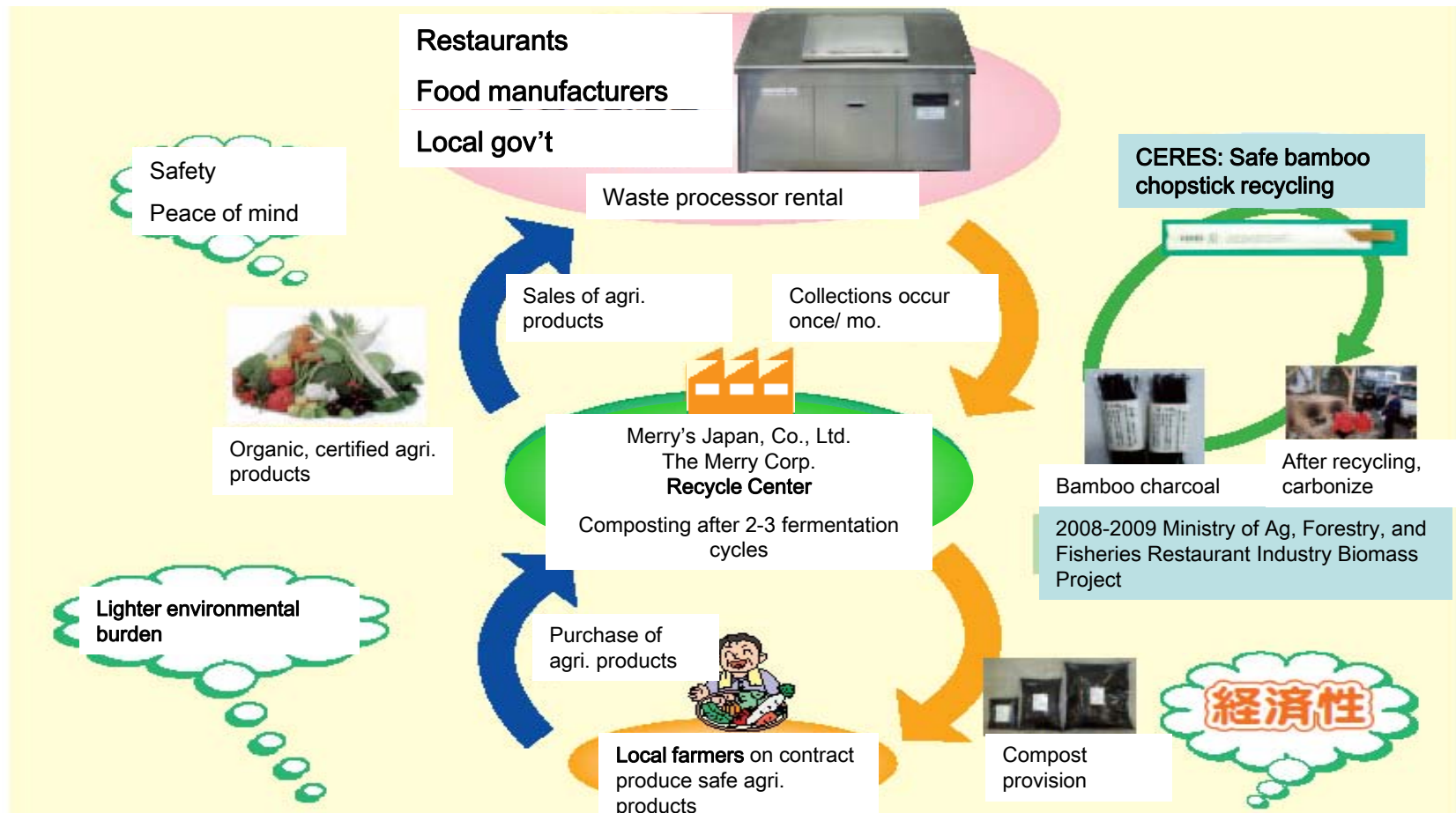
The Recycling Loop of Merry's System

Ministry of the Environment: Stop Global Warming "One Village One Product" Campaign, 2009 National Special Award "All-Regional Partnership"
Minister's Award

Merry's System

A Merry Cycle (Peace) that Cuts Waste, Expenses, and CO2

By renting waste processors, quickly reduce waste at the waste production site without odors



Key Features of Merry's System

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Merry's System

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Impact on Environmental Burden

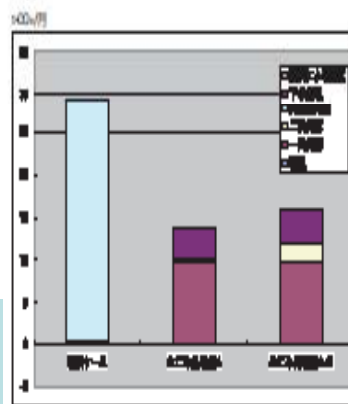
2008 Reductions in CO2 (8000 ton reduction in kitchen waste)

- 1) Collection/Incineration: 604 tons CO2 emitted
- 2) Merry's System
346 tons CO2 emitted

Reduction Impact (1-2)

= 258 tons CO2 (130,000 m3) reduced

Life Cycle Assessment (LCA) of CO2 emissions Kitakyushu City University Prof. Matsumoto



Carbon Offset

Merry's System: 346 tons CO2 emitted over the year

Carbon Offset:

JPY 1,211,000 / year

JPY 100,917 / month

Over the year, 604 tons CO2 reduced; realization of "Carbon Free"

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Economic Merits (with Rental)

- Cost reduction
- No need for initial investment
- No need for asset capitalization/ lease-based accounting
- No need for asset maintenance expenses or processing costs

Waste Recycling through participation in Merry's System

Decreasing food waste

Cutting CO2 emissions

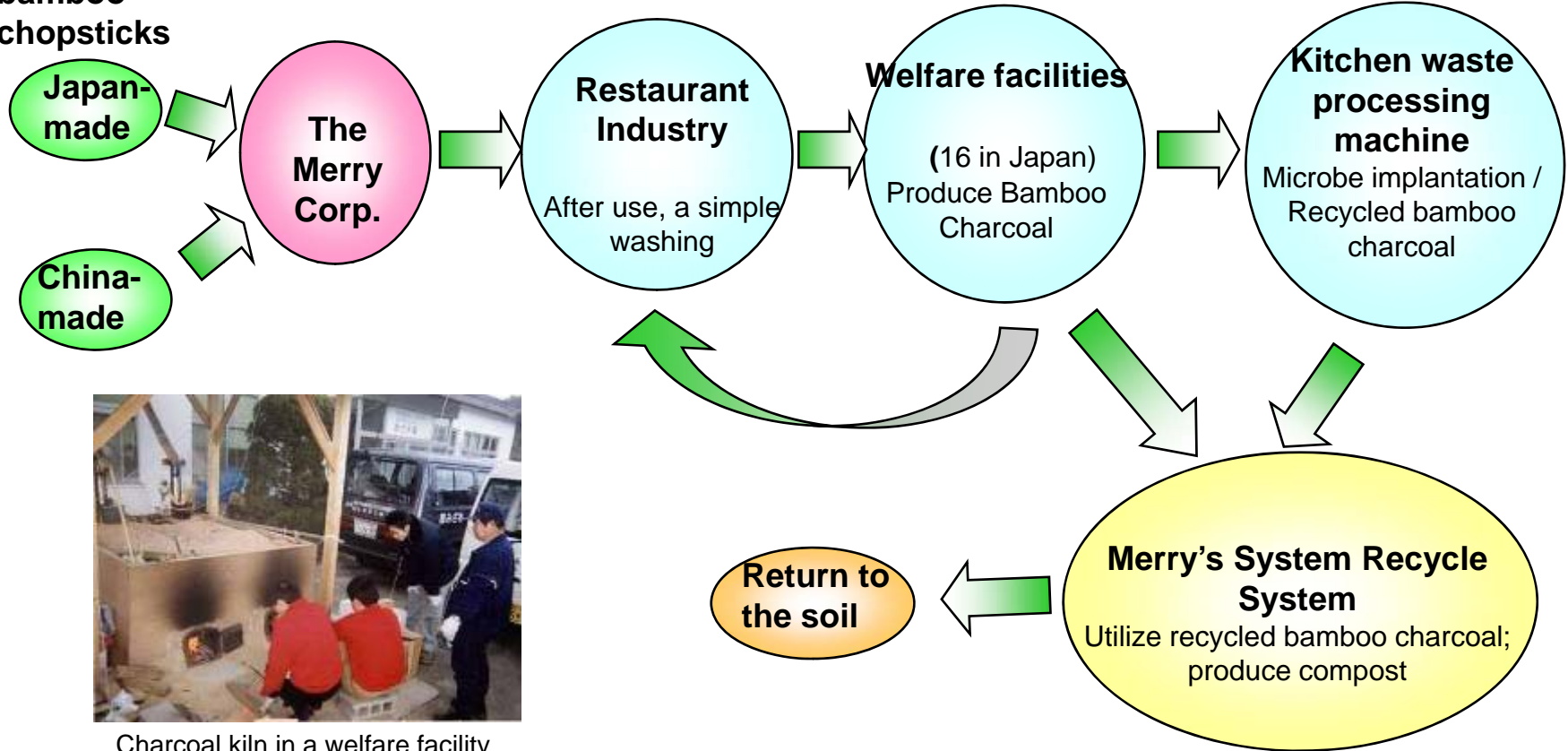
Reducing costs

A safe food cycle

An Earth that is also pleased

Partnerships with welfare facilities for safe chopsticks recycling

Disposable bamboo chopsticks



2008: Provided 400,000 pairs of chopsticks
Hokkaido Toyako Summit

Looking ahead: Composting with Merry's System

With continued aerobic fermentation, foul odor is broken down

- The odor emitted when composting mostly comes from mixing the composted substance

- The easy-jet sends air at 50x pressure of a blower into the compost, and the oxygen penetrates into the interior. Thus, mixing is not necessary

- Organic materials ferment aerobically and ammonia breaks down into odorless nitric acid salts. The compost produced is also odorless.

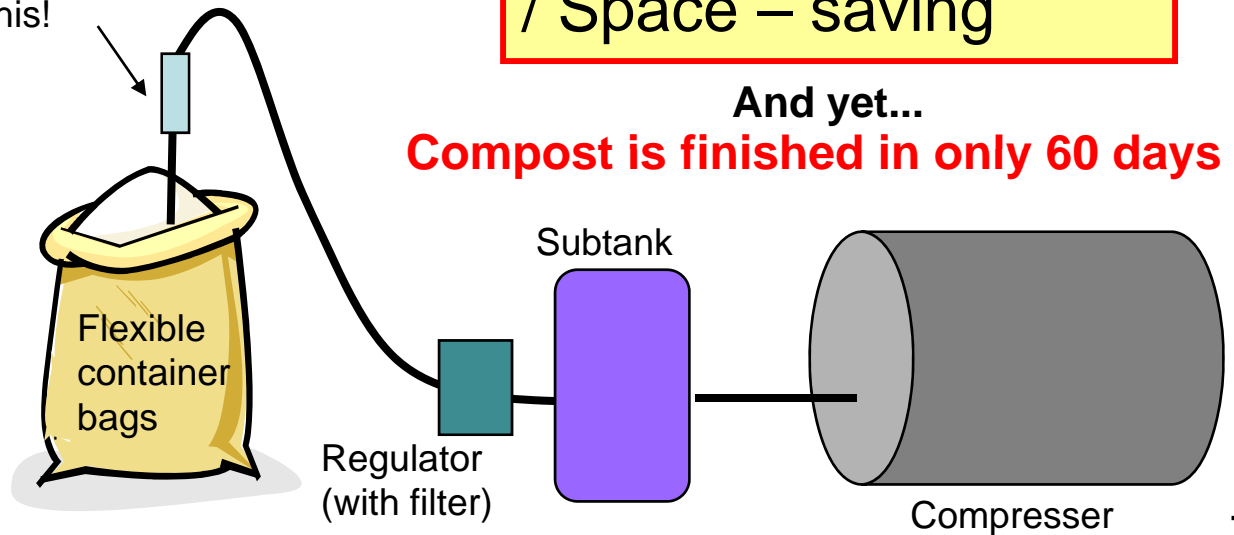


Labor / Energy / Cost / Space – saving

And yet...

Compost is finished in only 60 days

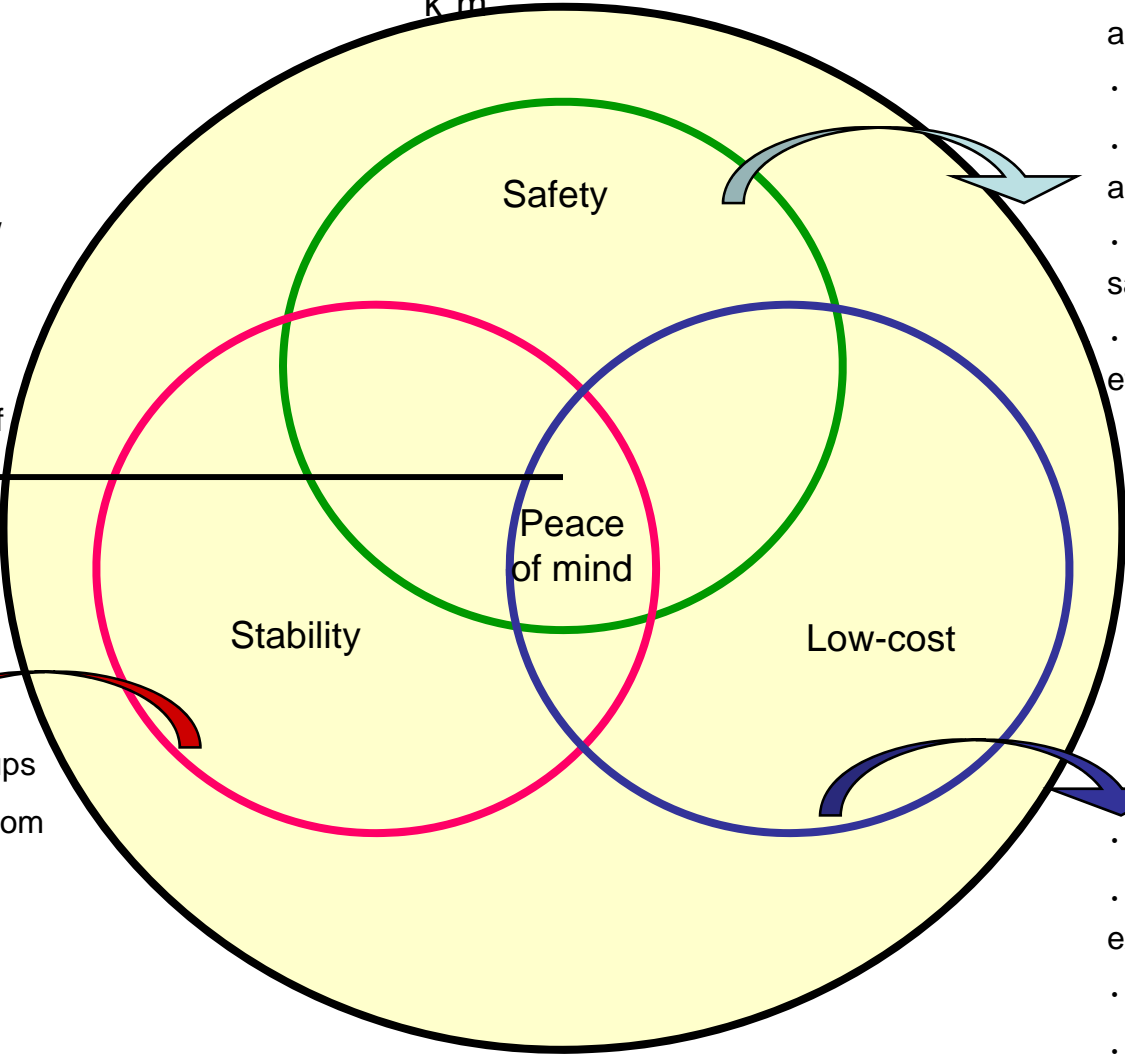
Just replace this!



A Small Regional Cycle



←————— Within 20 ~ 30 km —————→



- Tested in partnerships; recycling where you know your neighbors
- Recycling with visible CO₂
- Recycling with peace of mind

- Organic, low-fertilizer agricultural products
- Unheated
- Bad odors stopped by an aerobic environment
- Labor and energy saving
- Space saving and efficient

- Support of expert groups
- Detaches “reducing” from “reusing”; always invigorating microbes

- No shipment cost
- No need for investing in expensive equipment
- Cost and energy saving
- Space saving and efficient



A merry cycle/ peace that reduces waste, expenses, and CO2

Merry's System



Composting kitchen waste through the action of microbes and using chopsticks as charcoal, the Merry's System, which cycles healthy agricultural products created on farmland and in turn stores up carbon in that farmland, is an "all happy" mechanism that shares merits in accordance with established rules and roles among all participating "hummingbirds." The "Merry" of Merry's System is that of "Merry Christmas" and "Merry-go-round"; it will happily continue to invigorate and harmonize the economy, environment, and social welfare, and in the process, greatly reduce CO2 emissions.