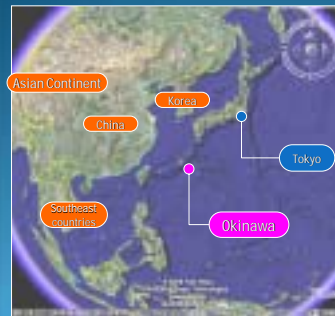


ENVIRONMENTAL POLICY FOR SOLID WASTE MANAGEMENT IN THE U.S. AND JAPAN

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My Hometown: Okinawa



Shuriyo Castle

OVERVIEW

- 1) "Mottainai" Seishin (Spirit) / Wangari Maathai
- 2) Solid Waste Management in Japan and U.S.
* Site Visit: Landfill in Prince William County
- 3) Status Quo in Japan and U.S.
- 4) Comparison between Japan and U.S.
- 5) Conclusion

"Mottainai" Seishin (Spirit)

- Mottainai = What a waste! in English.
- Mottainai Seishin is Japanese Spirit or Virtue to care for everything from the heart.



Wangari Maathai (Kenya)



- Born in Kenya, 1940.
- In 2004 the first African woman to receive the Nobel Peace Prize for the Environmental activism.
- Advocate the idea of Mottainai to promote sustainable development.

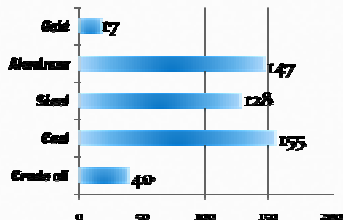
Solid Waste Management in Japan

- 1) Under the national law, **local governments** collect and properly dispose of solid waste.
- 2) The national government **supports local governments** with technical and financial assistance when necessary.
- 3) Japan strongly promotes **3R movement** (Reduce, Reuse and Recycle) for sustainable society.

Why do we need 3R?

1) To use limited resources effectively.

Example: The Number of years remaining before we deplete the earth's natural resources.



Why do we need 3R?

2) To decrease the amount of waste.

Example: How many baseball stadiums (Tokyo Domes) are full with household waste per year in Japan?



The answer is about **136 baseball stadiums**.

1. Reduce the amount of waste

- How can we reduce the amount of waste?

Example: Use your own bags instead of plastic bags when you go shopping.



In Japan we use **300 plastic bags/person** in a year. If we can reduce this number, we can save **1,200 25meter pools of crude oil**(=420,000kg liters) in a year.

2. Reuse materials again and again

- How can we reuse materials?

Example: Use "My Hashi" (chopsticks) even in restaurants instead of disposable ones.



3. Recycle:

Process used materials into new materials

- How can we recycle?

There is an easy rule for recycling: separate waste properly. But is it worth recycling? Yes!



1 ton of Minerals → 3~5 g of Gold
1 ton of Used Cellular → 400 g of Gold

We can produce about **100 times more gold** from used cellular than from raw minerals.

Solid Waste Management in the U.S.

- 1) **Each states** enacts laws and guidelines concerning solid waste management.
- 2) The responsibility of waste management is left up to **counties or municipalities**.
- 3) Generally **private corporations** properly collect and dispose of solid waste.

Site Visit:

Landfill in Prince William County

- Population of PWC: 380,000, Area: 350 sq mi
- Located in Manassas, VA
- Size: 800 Acres With 250 Acres of buffer
- Processed 367,000 tons last year or 1,020 tons each day



Interesting Points of This Landfill

- 1) Convenience center for dropping off trash and recyclables. "The too good to waste place."
- 2) Residents can bring most waste at no charge but they do pay a "Solid Waste Fee".



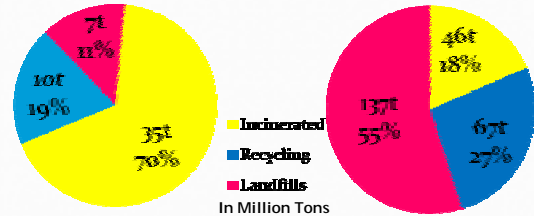
★ Each county has huge powers to implement solid waste management.

So far, I have discussed solid waste managements in Japan and the U.S.

And the consequences are.....

Status Quo in Both Countries

- Japan in 2006 Total: 52.7 million tons A Person: 1.1 kg /day
- The U.S. in 2006 Total: 251 million tons A Person: 2.8kg/day



Comparison between Japan and the U.S.

- 1) The U.S. exhausts about 5 times as much solid waste as Japan. About 2.5 times per person.
- 2) In Japan 70% (35 mil tons) ⇒ Incinerators
In U.S 55% (137 mil tons) ⇒ Landfills



Ariake Incinerator in Tokyo



Chubou Landfill in Tokyo

Conclusion:

What can we learn from each other?

The U.S.

- 1) Mottainai Spirit
- 2) 3R Movement



Japan

- 1) More governmental control at the local level
- 2) Affirmation of Japan's innovative environmental policies

Implications

- Examining solid waste issues forces us to preserve our environment.
- To maintain the health of mother nature is our duty.
- Will the 2012 post Kyoto Protocol include new participants? New innovations?



Ocean View in Okinawa



Conference of Parties in Kyoto, 1997

Sources

- Environmental Protection Agency (<http://www.epa.gov/>)
- Ministry of the Environment, Japan (<http://www.env.go.jp/en/>)
- Ministry of Economy, Industry and Trade (<http://www.meti.go.jp/policy/recycle/>)
- Mainichi-Shinbun Newspaper
- Biocycle Magazine for Environment
- Council of local Authorities for International Relations (CLAIR) Report

Consciousness Survey about Waste Management in D.C

- Do you care about the Environment?
If so, what do you care about the most?
- What do you do to help the Environment?
- Do you know where your trash goes?