Waste management in Japan.

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Outline

- 1. Japanese waste management.
- 2. Environmental law in Japan
- 3. Outline of Environmental NGO's

- 4. Outline of Compost
- 5. Making Compost methods
- 6. Conclusion





We Can Reduce the Amount of Waste by Efforts of the Individuals

3R (REDUCE REUSE RECYCLE)

Examples

- 1. DIVIDING
- 2. RECYCLING
- 3. COMPOSTING



EEE (Environmental & Economical Effects)

DIVIDING WASTE COLLECTING MAP OF KAMIKATU TOWN





USEFUL RESOURCES COULD BE RECYCLED

VOLUNTEER ACTIVITIES PROMOTED BY LAWS



LAWS CONCERNED ABOUT RECYCLING





GARBAGE CAN BE TURNED INTO FERTILIZER





What is Important for Waste Management in Japan?

Overview of the history of waste management in Japan

Introduction

During the 60s and 70s, Minamata disease happened in Minamata city, Southern Japan, due to mercury poisoning.

Minamata disease symptoms include spinal disintegration, loss of sight and death.

Why Minamata disease happened?

Factories released poisonous mercury into the river and sea, polluting the water. Unaware of the pollution, people drank the polluted water. Why factories released mercury into the river and sea?

Dues to the lack of waste management in Japan at that time.

The idea of the waste management spread in Japan starting from this disease.

Example:Four most serious pollution disease

Name of disease	symptom
Minamata disease	Mercury poisoning
	• causes bodily damage
Itai-Itai disease	•Cadmium pollution.
	loss of calcium in bone and easily
	broken.
Yokkaichi asthma	Air pollution.
	•Many people developed asthma
Niigata Minamata disease	Mercury poisoning
	•causes bodily damage
	(this happened in Niigata prefecture)

The formation of environmental law



Recommendations

If people who lived in Minamata had awareness about the environment they could have avoided getting the disease.

I think it is important not only to make the environmental law but also to know our neighborhood environment.

3.What is an Environmental NGO? Definition:Non-Governmental Organization which plays an active part for the environment.

The surrounding situation of environmental NGOs



Situation of Japanese E-NGO

- In Japan, there are 11,075 organizations which are targeting environment or its related things.
- 55.11% of organizations publish periodicals.
- 34.21% of have their own homepages

Number of members	Construction ratio
0~10 people	17.60 %
10~100 people	50.84 %
100~1000 people	26.67 %
1000~10000 people	3.73 %
More than 10000 people	1.15 %

The ratio of construction people

Quoted:2004 Environmental Restoration and Conservation Agency

Japanese E-NGOs activities

•A lot of NGOs are doing practical activities. It is important for the governments to support local organizations to conduct practical



Japanese E-NGOs activities

•Many organizations are targeting nature protection mainly.



4 . compost

What is composting?

blending waste with organic matter and microorganisms

fermentation

good fertilizer

Why is the compost necessary?

- It is good for soil
- The rate of the food garbage is high



Types of the compost



sinking in the yard
putting on the ground
(Styrene foam box ,bucket ...)
using earthworms
composting toilet







5. Compost

- Our Compost Plan
- 1. Bucket compost
- 2 . Styrene foam box compost
- 3 . Earthworm compost

5 - 1 . Bucket compost

<Material>

• Air tight container with bamboo basket inside acting as a drainer × 1 or 2

- line with newspaper (prevents moisture build up)
 Mix waste material with rice bran or microorganism material
- ·Garden bag or Styrene foam box

5 - 1 . Bucket compost







5 - 2 . Styrene foam box compost

- <Material>
- · Soil
- Styrene foam box $\times 2$







5-3. Earthworm compost

No special box is needed

<Materials>

- Eisenia fetida 500g ~ 1000g
 Use red worms, red wrigglers
- Coconut and palm fiber(or Peat moss)
- Newspaper
- Earthworm box × 1
 The container should be 30~45cm should be opac with holes.

WASTE MANAGEMENT SYSTEM OF MUSASHI INSTITUTE OF TECHNOLOGY

WASTE MANACEMENT SYSTEM OF MUSASHI INSTITUTE OF TECHNOLOGY

A Brief Preview

Manoj Shrestha

6.The first eco-college in Japan (ISO14001 Redg.) Mi-tech.

- Mi-tech is the first ever college to be declared as an eco-friendly college by ISO (International Organization for Standardization) in Oct 1998.
- Mi-tech is dividing the waste in eight different ways.
- Mi-tech is also taking crucial steps to lessen global warming .

Division of waste in eight ways

- Combustibles
- Steel
- Aluminum
- Plastic bottles (PET bottles)
- Glass bottles
- Compost (garbage)
- Chemical products(plastics)
- Paper recycle
- Organic waste



Mi-tech's further steps for dividing wastage.







Mi-tech is dividing the wastage in many ways to transform the wastage into resources by using the idea of 3R(Reduce, recycle and reuse)

Wastages are Resources

- The Japanese people and Government sees the wastage as resources. There are many other example such as The Malt's Beer company which produce Zero-waste.
- Mi-tech is giving emphasis in reducing global warming by saving energy. Setting air coolers not less than 28 degree and switching off the electricity after use.

7. Conclusion

- If every one will take responsibility, the garbage will decrease and problems can be solved.
- The most important thing in order to solve environmental problems is to raise people's environmental awareness.
- Taking action before problems develop is critical. This is one of Japan's downfalls.
- One of the best ways to ensure environmental protection is through community and grassroots action.