



Introduction to Waste Management Principles

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Outline

- Introduction
- What is waste?
- Types of wastes.
- Impacts of wastes.
- Samoa's Plastic Bans
- Importance of Waste Audit and Samoa's Waste Accounting.
- Way forward for waste reduction
- Conclusion
- Group discussion



Introduction

- Waste Management (WM) – collecting, treating, and disposing of wastes.
- WM is essential in today's society to assist with the proper management of wastes that reduces the effect of waste on the environment, health, etc.
- The increasing of wastes quantity is a global issue that needs to be addressed at the earliest.
- Tourism sector has contributed to the increasing of wastes globally.

Waste Management Process

1. Generation

- Generation of solid waste at households/ commercial
- Sorting waste



2. Collection

- Scheduling of compactors or trucks for waste collection
- Providing bins for recycling



3. Transport

- Transportation of waste to sites for transfers, recovery, or disposal



4. Recovery/ Treatment

- Secondary sorting of waste, e.g. plastic, glass, paper, aluminum
- Treatment and recovery of other waste stream



5. Disposal

- Landfilling or incineration
- Environmental management



What is waste?



Solid wastes



Hazardous wastes



Liquid waste



Impacts of Waste





Samoa's Plastic Bans

- Waste (Plastic Bag) Management Regulation 2018 – to assist in managing plastic problem in Samoa with commitment to protect the oceans and marine environment.



Importance of Waste Audits and Samoa's Waste Accounting

- Waste Audit – carried out in 2020 (Upolu and Savai'i) to collect information on the waste stream composition and quantities for different waste stream.
- Samoa's Waste Accounting – focused on the collection and management of solid waste for three financial years 2013-2016.

Samoa – Waste Audit 2020 (The World Bank)

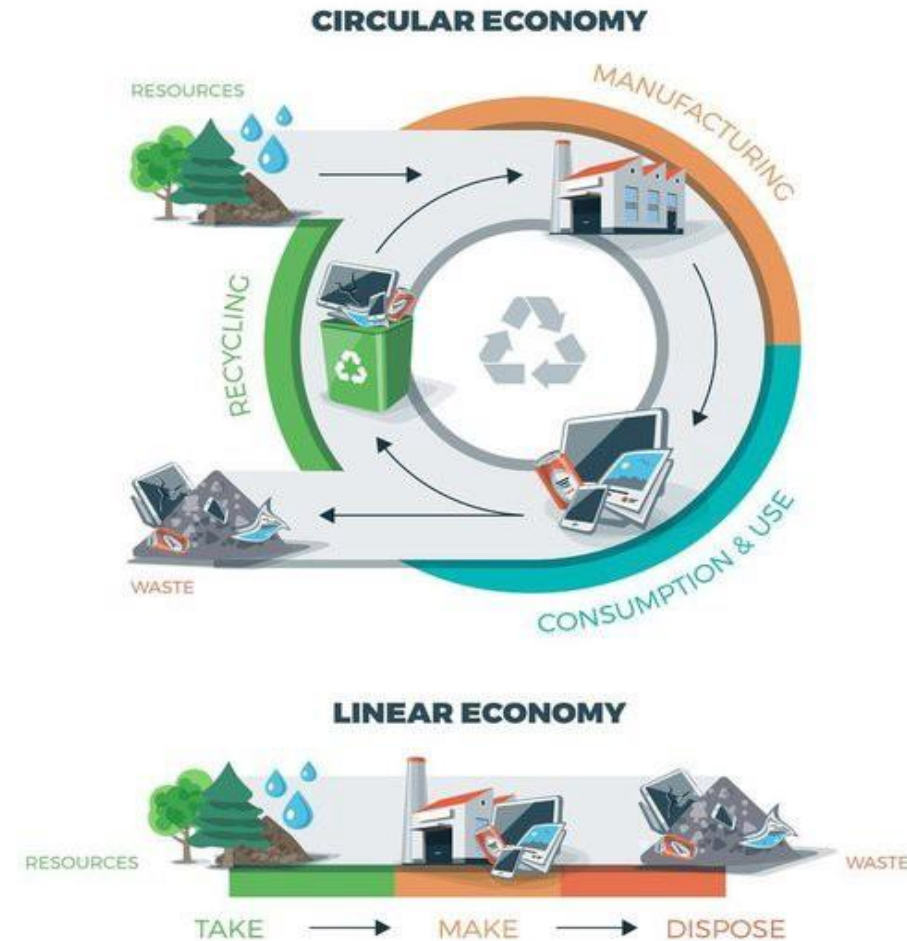
Location/site	Waste Generated annually	Waste Generated per person	Waste Generated per Household	Waste disposed (Tafaigata Landfill)
Samoa	Approx. 27,057 tonnes	0.28kg/person /day	1.9kg/HH/day	0.27kg/person /day
Upolu	22,888 tonnes			
Savai'i	4,094 tonnes			

REGIONAL WASTE GENERATION (ANNUALLY)



Way forward to reduce waste generation

► Circular Economy



LINEAR ECONOMY



RECYCLING ECONOMY



CIRCULAR ECONOMY



Reduce plastic wastes



Reduce plastic wastes



Reduce organic wastes



Reduce organic wastes





Fakafetai lasi and Thank you!



Group discussion

- 1.What are the challenges you faced in managing wastes?**
- 2.How to deal with waste problems in Samoa?**