

Asia 3R Conference

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Presentation on Current Status Of Waste Management In Cambodia

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Solid Waste and Hazardous

Substance Management Office

Ministry Of Environment



1. Overview of Solid Waste Management Legislation and Regulation

Environmental Law



Sub-Decree



**Declaration
Guideline
Prakas and other letters**

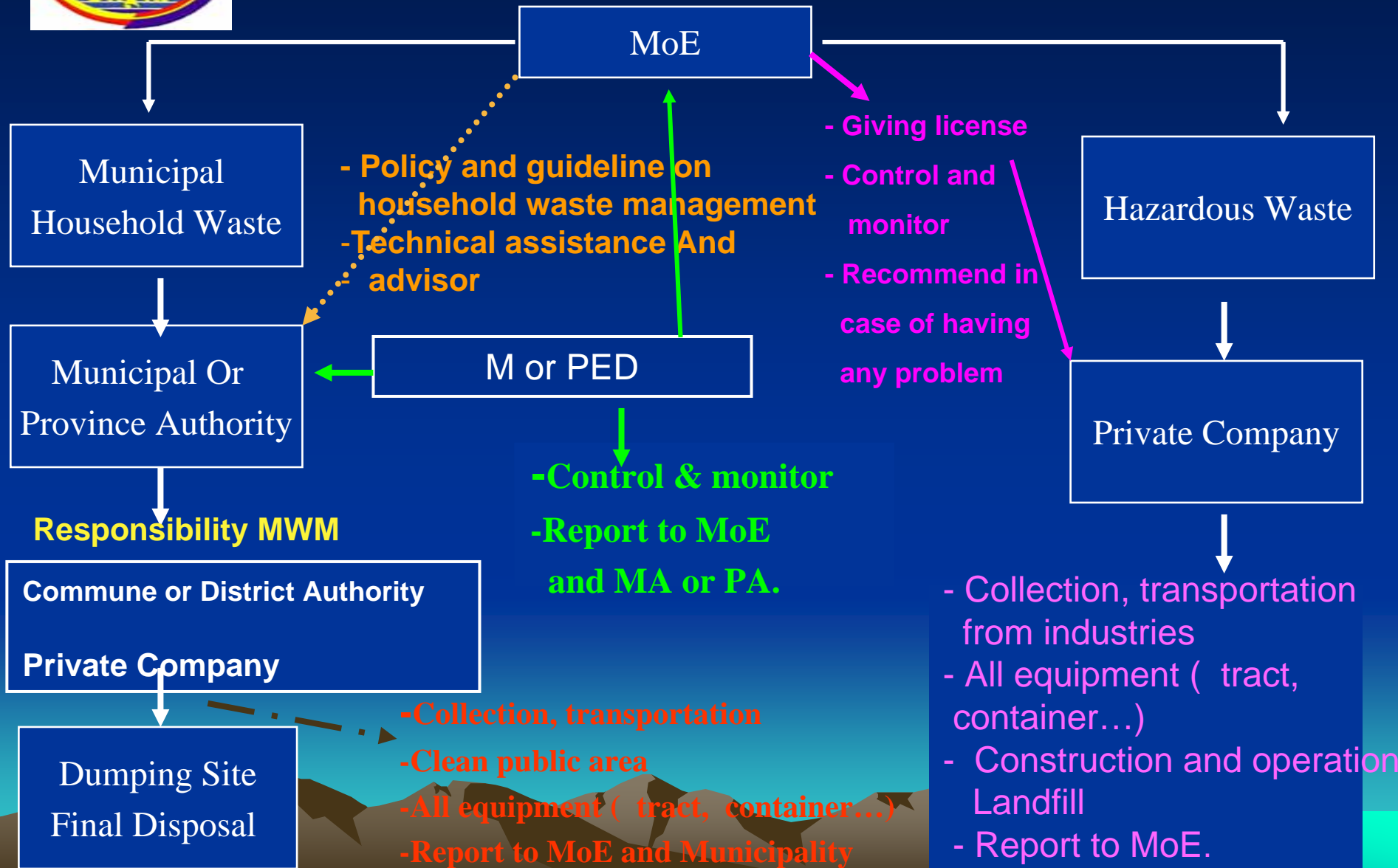
**Environmental Protection and Natural
Resource Management (approved in Dec. 1996)**

Solid Waste Management

1. Inter-Ministerial Declaration on SWM in Cities and Provinces
2. TG. on Landfill design and operation
3. Environmental Guideline
4. Draft of Guideline on SWM in Community



2. Solid Waste Management System





3. Overview of Recycling Activity

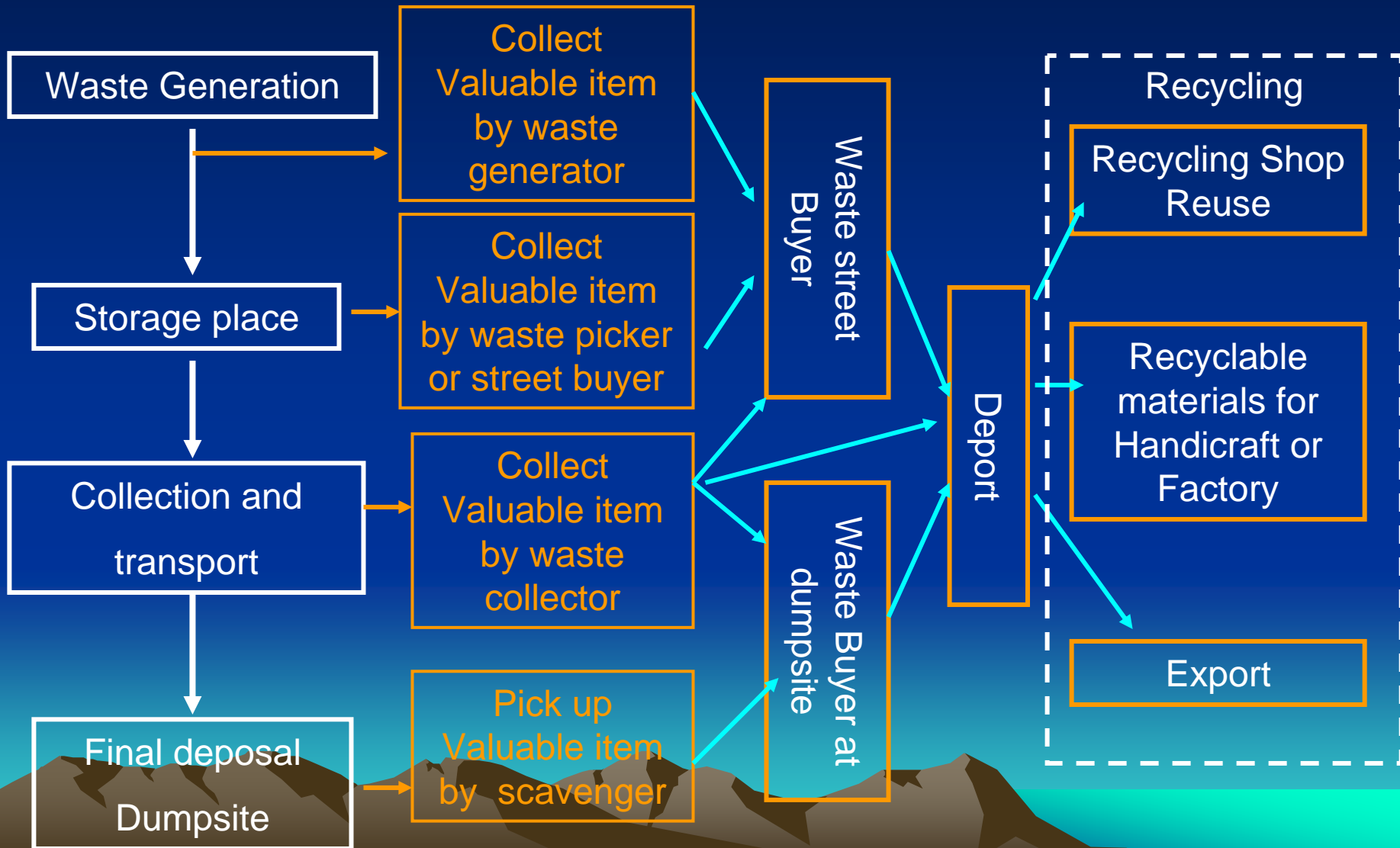
Generally, recycling is done by self help groups of people such as waste generator, street waste picker, street buyer, waste collector, and waste picker at the dumpsite and deport owners.

Beside of that, it also is done by community groups of people, NGOs etc...that involved or get the profit with waste.



3. Overview of Recycling Activity cont...

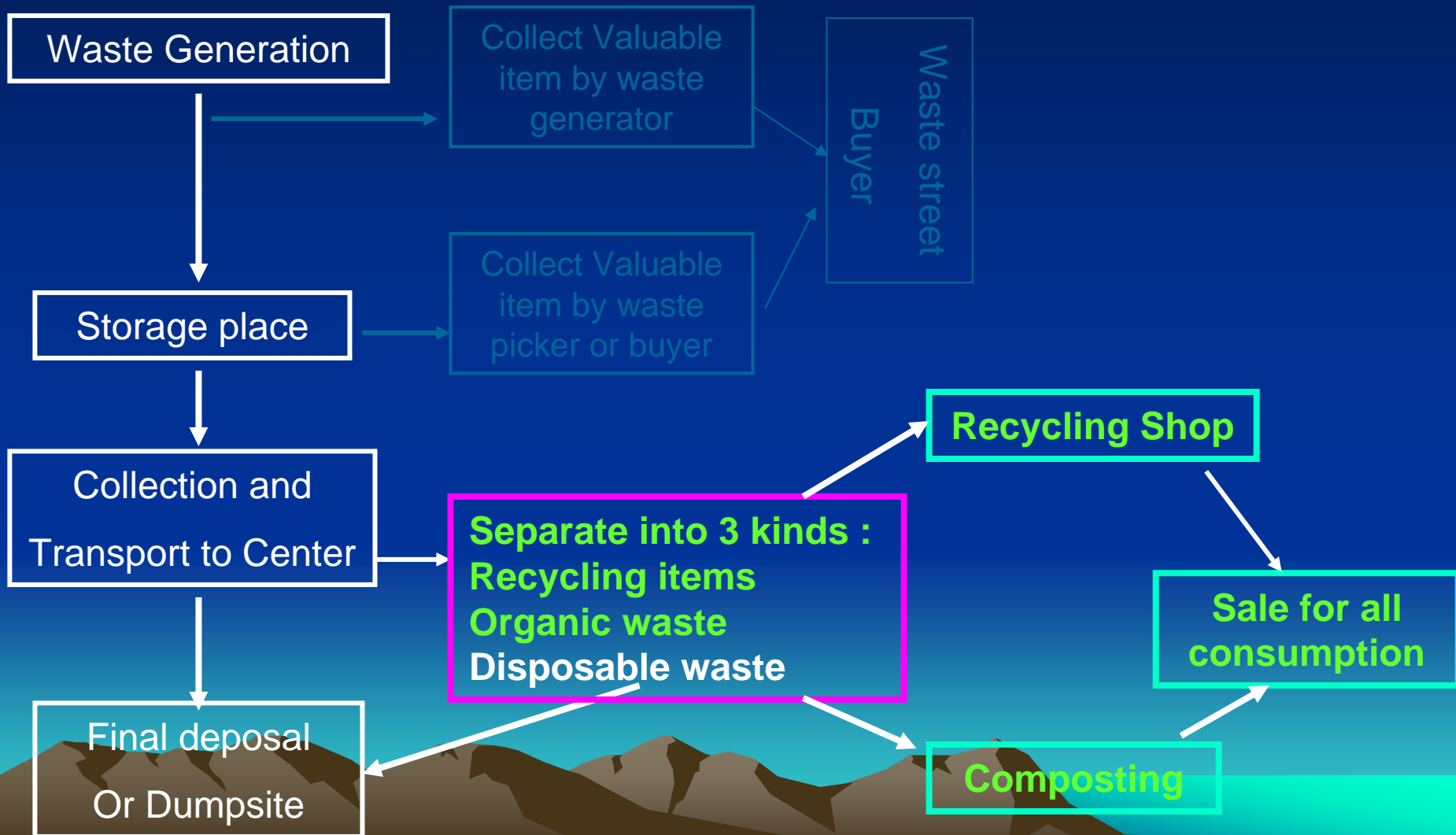
The General Flow of recycling activities





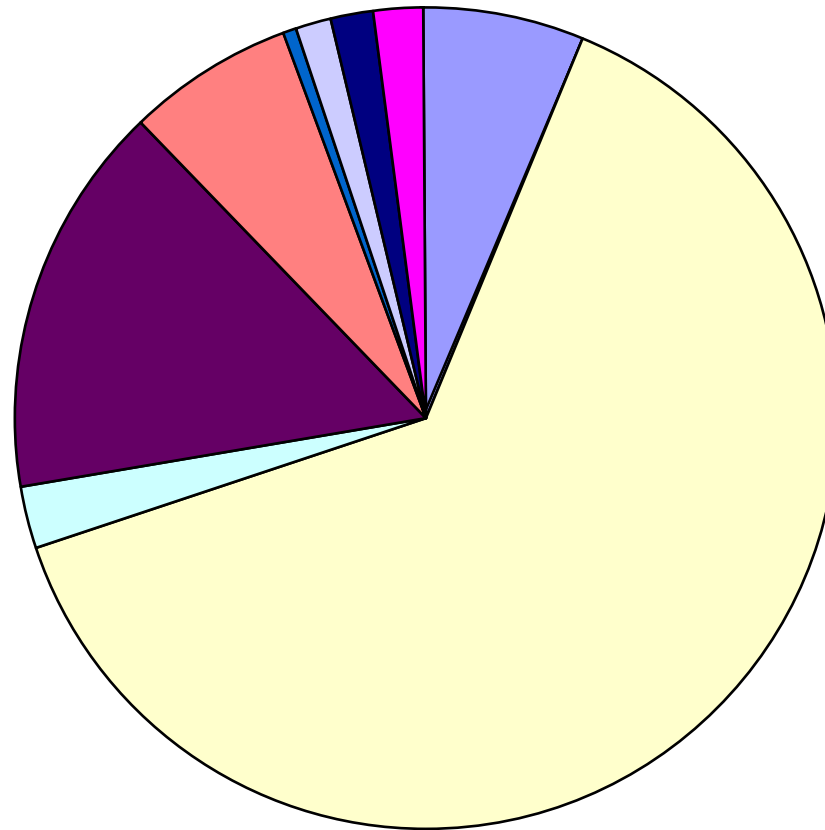
3. Overview of Recycling Activity cont...

The Flow of recycling activities in community





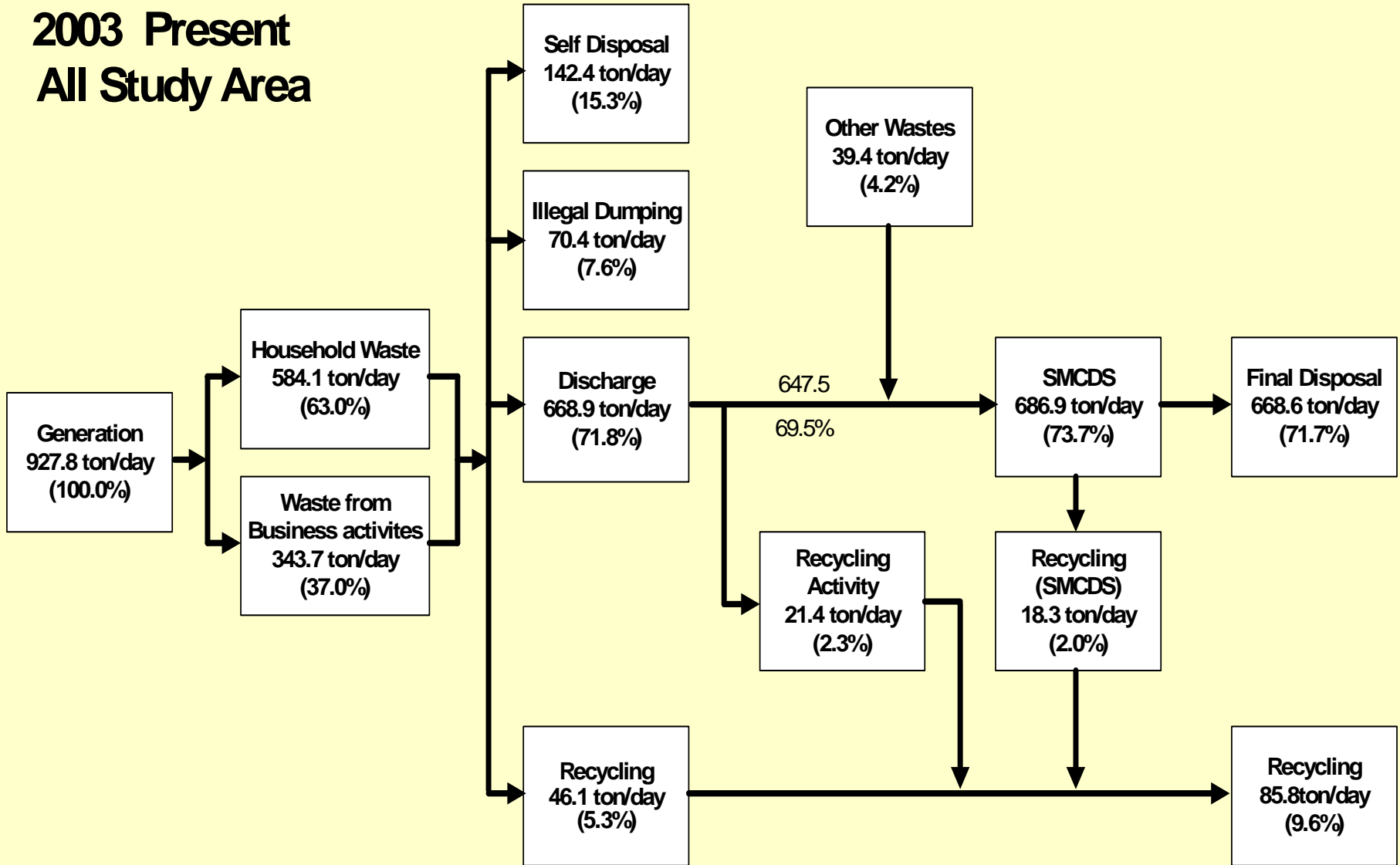
Waste Composition



Paper	6.4%
Rubber and Leather	0.1%
Kitchen Waste	63.5%
Textile	2.5%
Plastic	15.5%
Grass and Wood	6.6%
Metal	0.6%
Bottle and Glass	1.3%
Ceramic and Stone	1.6%
Others	2.1%

Waste Flow

2003 Present
All Study Area





3. Overview of Recycling Activity cont...





3. Overview of Recycling Activity cont...

Waste collector pick up available items





3. Overview of Recycling Activity cont...

Scavenger pick up recycle or valuable materials at dumpsite.





3. Overview of Recycling Activity cont...





3. Overview of Recycling Activity cont...





3. Overview of Recycling Activity cont...



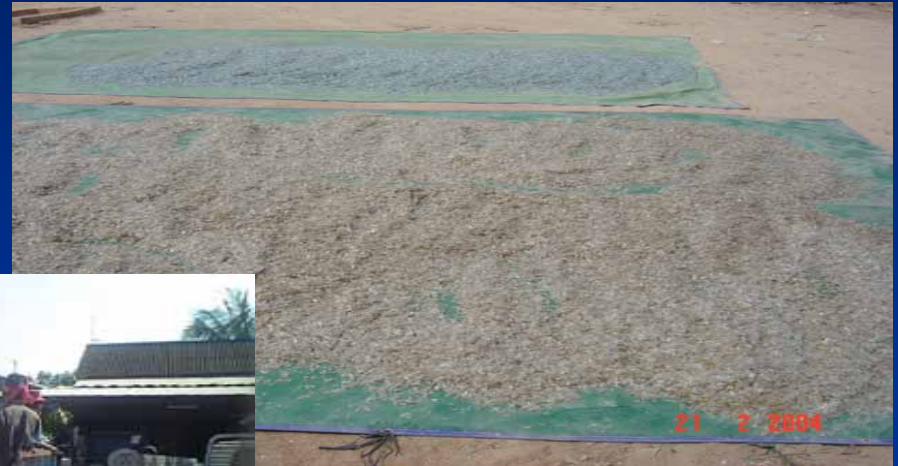


3. Overview of Recycling Activity cont...





3. Overview of Recycling Activity cont...





3. Overview of Recycling Activity cont...



Composting place is operate by Cambodian Education and Waste Management Organization. It can produce more than 200 t / year.





Composting in Community



They can produce 600 kg/month of composting product.





Recycling in Community





Recycling in Community





Recycling in Community





Recycling in Community





Recycling in Community





Textile Waste Recycling





E-waste

Import of TV sets, computer and telephone

Item Year	TV sets (kg)	Computer (kg)	Telephone(kg)
2003	2,526,568.51	615,000.00	12,944.2
2002	2,820,025.96	146,000.50	26,616.13
2001	2,723,029.41	185,000.50	20,973.93
2000	2,974,777.92	1,386,000.00	9,283.07
1999	3,484,005.18	5,750,581.08	256,183.05
1998	2,408,776.42	80,546.20	206,920.44
1997	802,530.79	22,825.67	65,097.42
1996	1,059,307.7	7,653.00	535,513.52
1995	849,818.76	20,453.00	96,189.30



Television sets shops





Computer shops





Telephone shop





Scrap yards





Battery Waste

Import of Lead, Acid and Batteries

Item year	Lead (t)	Acid (l)	Battery (t)
2000	10,930	139,276	5,289,627
2001	110	1,999,770	4,663,883
2002	2,000	1,808,067	3,122,493
2003	10,109	965,280	4,126,590
Total	23,148	4,912,393	17,202,593

Estimated number batteries available for recycling (unit)

1999	2000	2001	2001
7,559	7,733	9,202	7,143



Battery Recycling



MPP's 5 collection vehicles before August, 2006

SH: Secondhand



New: Skip loader truck with 5m³ container



SH Compactor truck 4m³ donated by Hiroshima City



SH Compactor truck 18m³ donated by NORAD



SH Compactor truck 4.5m³ donated by NGO

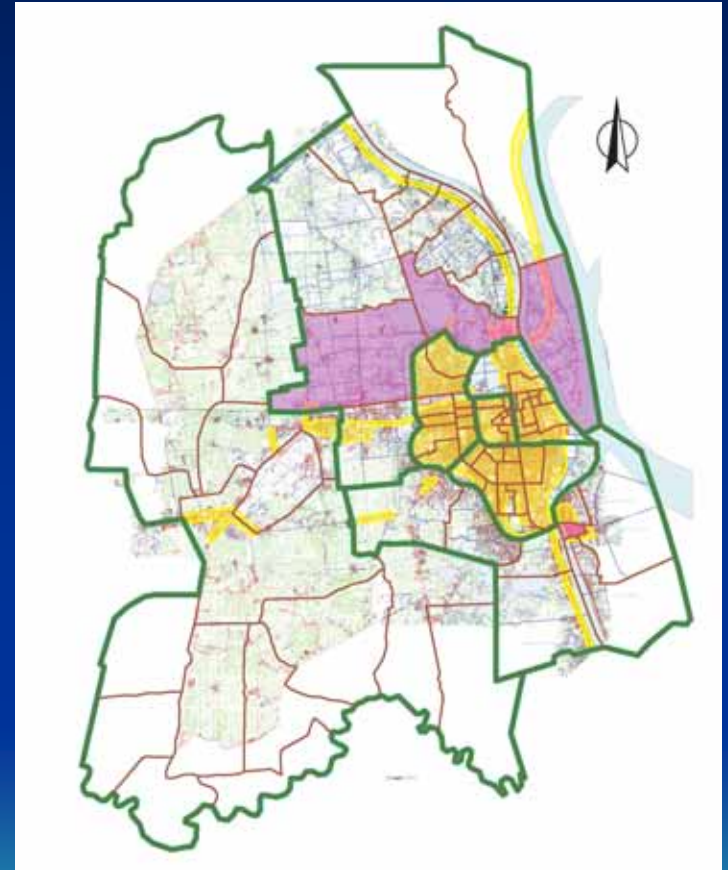
10 Secondhand waste collection vehicles donated by Osaka City





Current situation of waste collection in Phnom Penh

- Private sector provides waste collection service to the area colored yellow
- Municipality provides waste collection service to 4 sub-districts colored red by using 5 trucks.
- Municipality has a plan to expand service to the area where the private sector can not do it because of financial unfeasibility.





4. *Medical Waste Management System*

In practical of medical waste management divided in to 3 categories:

General Waste



Municipal waste



Shape Waste



Burning in incinerator



Body Part Waste

Burning in brick incinerator
or burring in land





5- Constraint of waste recycling

- Lacking of data/information on solid waste recycling.
- National action plan/program of 3R is inadequate.
- Insufficiency of related to facilities and finance for implementing and developing 3R programs throughout the country.
- Public awareness and capacity building are limited.
- Insufficiency of legal instrument related to 3R



6- Conclusion

- To improve and strengthen capacity building and public awareness
- To promote and encourage recycling activities
- To expand the field of solid waste recycling
- To develop legal instruments
- To accomplish these countermeasure, Cambodia still requires assistance the international donors both financial and technical support on 3R approach.



THANK YOU

FOR YOUR

ATTENTION